IBM

User Interface Guide
VisualAge Pacbase WorkStation

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Foreword

Operation of the VisualAge Pacbase WorkStation requires at least the installation of the Repository module and of Personalized Documentation Manager (its extension) on the host. The reader should be familiar with these products.

For complete information, refer to the following VisualAge Pacbase Documentation:

- Character Mode User Interface Guide
- Data Dictionary Manual
- Personalized Documentation Manager Manual

The WorkStation operates on PCs connected to the VisualAge Pacbase host. There several platforms for the host part.

The WorkStation runs under:

- WINDOWS 98, 2000
- WINDOWS/NT
- WINDOWS for Workgroups
- WINDOWS XP.

A good working knowledge of the operating environment is therefore required.

Note : The WorkStation is a 16 bits application, so take care that the WorkStation is installed on a computer compatible with this type of applications.

Organization of the WorkStation Documentation

The installation of the WorkStation is described in the *Installation Guide VisualAge Pacbase,* chapter *'Installation of Client Components'.*

The *WorkStation Manual* is divided into five sections:

- The first section, entitled **General Principles**, provides a general presentation of the WorkStation and its functionalities. This introduction presents an overall picture of the product.

- The second section, entitled **Navigation in the WorkStation**, describes how to connect to and disconnect from the WorkStation. This section also describes the WorkStation Manager window and navigation in the WorkStation.

- The third section, entitled **Description of the WorkStation Windows**, provides a full description of each window in the WorkStation. Each window is described in a separate section.

  NB: The description of all dialog boxes related to a given window constitutes a specific subchapter.

  > The Business Components window (semi local) specific to Folder and Folder View entities, run exclusively by Pacbench Client/Server, is documented in the Developer's Documentation–*eBusiness Applications: Business Logic.*

- The fourth section, entitled **Appendices**, contains three subchapters describing the correspondence between the VisualAge Pacbase WorkStation commands and the host commands, the keyboard and mouse shortcuts in the Logical Screens, the error messages and the localisation of your local data files. It also provides information on how to parameterize keys equivalence and on start-up procedures.

The following typographic norms are used in this manual:

- Titles of manuals are shown in *Italics.*

- Titles of Chapters, subchapters, sections and paragraphs are indicated by "Quotation Marks".

- WorkStation menu and command names are in **Bold**.

SECTION 1   GENERAL PRINCIPLES

Chapter 1   Introduction

Objectives of WorkStation

Productivity of application development requires that the entire application life cycle be considered as a whole from the design phase up to the maintenance phase Today, applications cannot be designed without a methodology.

System designers and analysts need a user-friendly data processing tool used throughout the development process: their work must be continually re-used from one phase to another.

It is essential to establish good communication between the people in the Data Processing Department. It is also important to establish good communication with the end-users in order for these people to participate efficiently in the project.

The methodological approach relies on the building of models and graphs. As these models and graphs are validated, a detailed image of the project emerges.

To achieve these objectives, you must use a unique and integrated software in order to cover the entire life cycle of an application. This software will:

- Provide design support

- Guide and facilitate the methodological approach

- Be fully integrated with the development software, thus allowing programmers to use the work of designers and analysts immediately

- Be user-friendly so that all participants, end-users included, can be truly involved in their respective phases

Functionalities

The WorkStation is a software product which operates simultaneously on a host and connected PCs.

With its modules (Pacdesign and VisualAge Pacbase), the WorkStation covers the design, analysis, production and maintenance phases of an application. It provides complete logistical and methodological support, integrating models associated with different design methodologies such as MERISE, SSADM, YSM, OMT or IFW.

The WorkStation benefits from all VisualAge Pacbase functionalities, making them accessible from a PC via a GUI.

The system designer or analyst has online access to the Specifications Database for consulting or updating. During subsequent phases, the programmer accesses the same information. As a result, the vocabulary used is consistent throughout the entire application life cycle, thus facilitating communication between all participants.

The WorkStation also facilitates:

- The construction, local printing, and validation of graphs with respect to the design methodology,

- Processing and local printing of texts,

- Local printing of complete design documents containing graphs and texts together (refer to chapter "The WorkStation Manager Window", subchapter "The Menu Bar of the WorkStation Manager Window"),

- The possibility of working in draft mode (purely local processing: drafts need not to be defined in the Specifications Database)

- Local Screen Mapping and Simulation

- Semi-local management and processing of Segment Calls

- Semi-local management and processing of Business Components Calls (Folder and Folder View)

- Specific coding of Programs and Screens

Occurrence descriptions are entered locally and modified under the GUI. When desired, they are uploaded into the Specifications Database.

The WorkStation offers an integrated methodological tool which enables you to visualize managed entities for each module at each design and development phase.

Using the WorkStation, a company Management Information System is fully consistent. The VisualAge Pacbase functions provide total data integration to ensure perfect continuity from the application design phase through to the maintenance phase.

Division of Tasks

Since the WorkStation operates on both a host and PCs, tasks are divided as follows:

Host
- Checks and ensures data consistency

- Allows data sharing

- Ensures integrity of the Specifications Database

PC

- Manages the GUI and offers a user-friendly tool with multi-windowing, mouse, colors and graphic functions

  For example, a toolbar is available in almost all windows. The icons which constitute this toolbar vary according to the window and facilitate access to some of the menu commands they represent. Generally, this toolbar is not documented since you can activate tooltips that explain each icon's functionality.

- Manages access to the host making access transparent to the end-user

- Temporarily stores those elements not affecting the integrity of the Specifications Database

Information Distribution and Consistency

Since the Specifications Database is updated by both the host and the PC, data consistency is required.

All occurrences are defined in the Specifications Database and consist in:

- A definition which includes basic information (code, name, keywords, etc.)

- Descriptions which make up an occurrence

- Comment lines

- Cross-references with other occurrences, automatically maintained online by the system

Elements which affect data consistency (definition, some descriptions, cross-references and general documentation) are stored in the Specifications Database only.

Elements which do NOT affect data consistency (i.e. some descriptions) may be automatically downloaded and temporarily stored on a PC. However, for security reasons, the Specifications Database remains the primary data storage space.

Data consistency is ensured because:

- It is impossible to create two occurrences with the same code for a given entity (in the same library)

- An occurrence cannot be deleted if it is cross-referenced to other occurrences

Management of entities is illustrated in the following diagram:

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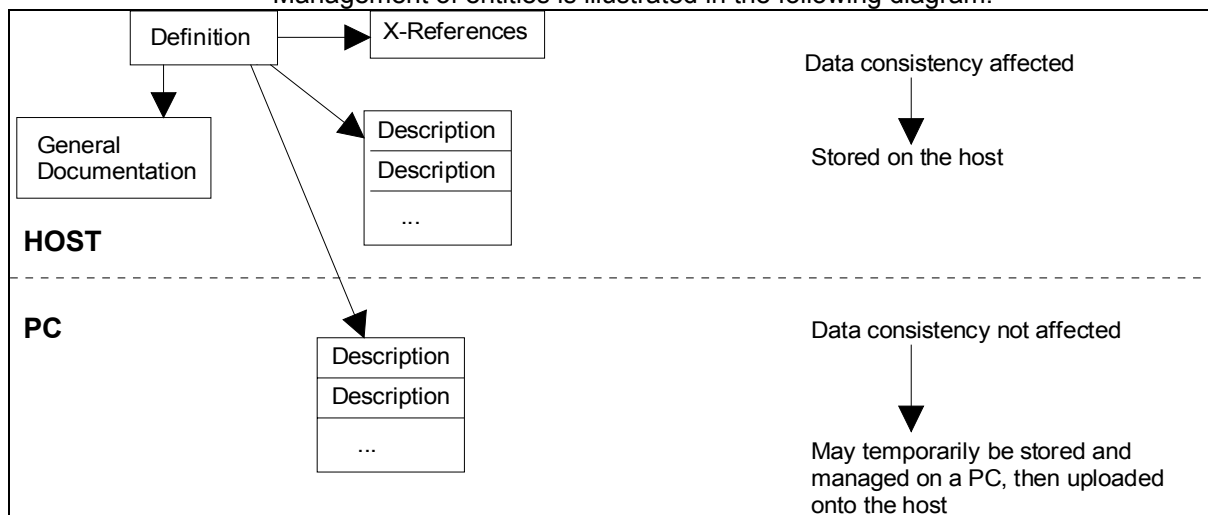
Data Sharing and Consistency

All data managed by the Specifications Database can be shared.

In order to ensure consistency in the Specifications Database, simultaneous updates of locally managed descriptions (text, graph, etc.) must be prohibited.

To achieve this goal, each update must pass an Update Lock Test, performed at two different levels:

1. The host level, or the Logical Lock (organizational order), may be requested by users for any occurrence.

   This lock applies to the occurrence as a whole: only the occurrence owner, the user who locked the occurrence, can update it.

   For complete information, see the *User Interface Guide*, chapter "Online Access Language", subchapter "Entity Update Lock"

2. The WorkStation level, or the Technical Lock, is automatically applied to each description downloaded on a PC for update.

You can do the following:

- Locally update a description:
  - If the occurrence has NOT been assigned a Logical Lock, its description is automatically assigned a Technical Lock under the user's code and is downloaded

    This description may only be updated on the PC which it has been downloaded to. The local file cannot be deleted by the user unless it is unlocked.
  - If the occurrence has been assigned a Logical Lock under another user's code or if the description already has a Technical Lock from another user, it can be downloaded

    The local file may be deleted by the user.

- Locally consult a description:
  - The description can be downloaded for consultation. The local file may be deleted by the user

- Upload the description into the Specifications Database, once work is completed:
  - If the description owner releases the Technical Lock, other users may consult or update it. The description in the local file is not automatically deleted. It can be kept for consultation and deleted later
  - If the description owner does not release the lock, he/she can continue to update it locally while other users consult the most recent host update of the description
  - If the description owner decides to re-assign ownership to another user, only the new owner may update the description on the same local base on the PC

- Unlock the description without upload: the host description is not updated and the local description is automatically erased

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NOTE   You cannot locally download host descriptions that have an occurrence code containing characters listed in chapter "Definition", subchapter "Functionalities", paragraph "Occurrence Name and Code Restrictions".

For complete details on Description Download and Upload, refer to chapter "The Local List Window".

Data Integrity

The host is the primary place for storing information permanently. The VA Pac batch procedures:

• Freeze the contents of the Specifications Database during a given session, in order to keep the image of the session for viewing or updating purposes

• Archive the Journal File created by update transactions (ARCH procedure)

• Backup the entire Specifications Database (SAVE procedure)

Refer to the *Administrator's Procedures and Developer's Procedures* manuals for complete information on these procedures.

Data storage on the PC is temporary. We recommend uploading locally modified descriptions onto the host so that the Specifications Database contains current descriptions when the above mentioned procedures are run.

Architecture - the Modules

The entry point into the WorkStation is the WorkStation Manager window. When the WorkStation starts, the WorkStation Manager performs the host (Specifications Database) connection and checks access to the selected module. It then provides a graphic display of the entities managed by the Module in use (see next chapter).

From the metamodel displayed, you can view the contents of the Specifications Database and access the definition and various descriptions that make up an occurrence.

The WorkStation contains two Modules geared towards data processing professionals: Pacdesign and Pacbench, which cover the entire life cycle of applications.

- The Pacdesign Module is the system analyst/designer's workstation. It provides complete logistic and methodological support during the analysis and design phases, and integrates models associated with different design methodologies and validates them

- The Pacbench Module is the system analyst/designer's workstation. It integrates VisualAge Pacbase functionalities, and is geared towards the implementation and maintenance of systems

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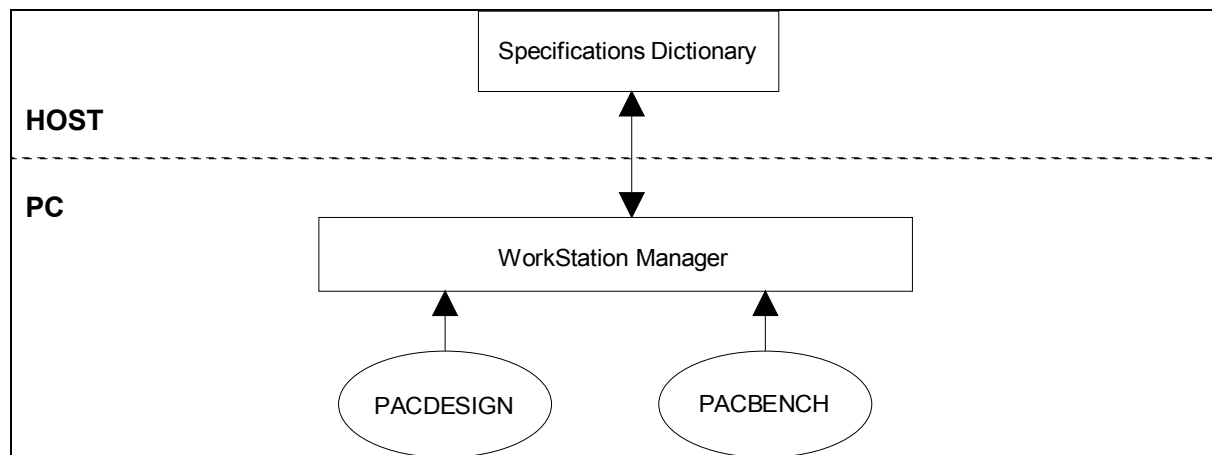
Chapter 2   Metamodels

A Complete Methodological Support

The WorkStation offers a complete methodological support by integrating several design methodologies.

- With the Pacdesign Module, the systems analyst/designer has access to the complete metamodel associated with the methodology used

- With the Pacbench Module, the programmer and maintenance programmer have access to the VisualAge Pacbase metamodel appropriate to the metamodel of the methodology used

These metamodels are presented as Entity-Relationship diagrams. They include all the entities managed by each module and the relationships between these entities (and in some cases their occurrence ranking).

Complete metamodels are too large to be represented in a single schema on the screen. They are therefore divided into sub-schemas.

This division into sub-schemas reflects the logical process of application design and development:

- Distinguishing between the different levels of application design: conceptual, logical and physical
- Differentiating between data and processing

Some entities are common to all sub-schemas: Text, Document, Free Entity. They are described in the on-line help.

Methodological Help

The WorkStation has methodological help.

The methodological documentation gives access to WinHelp-type files, with hypertext links for browsing between the various help pages. Links are shown as green underlined text.

Navigating in the methodological help:
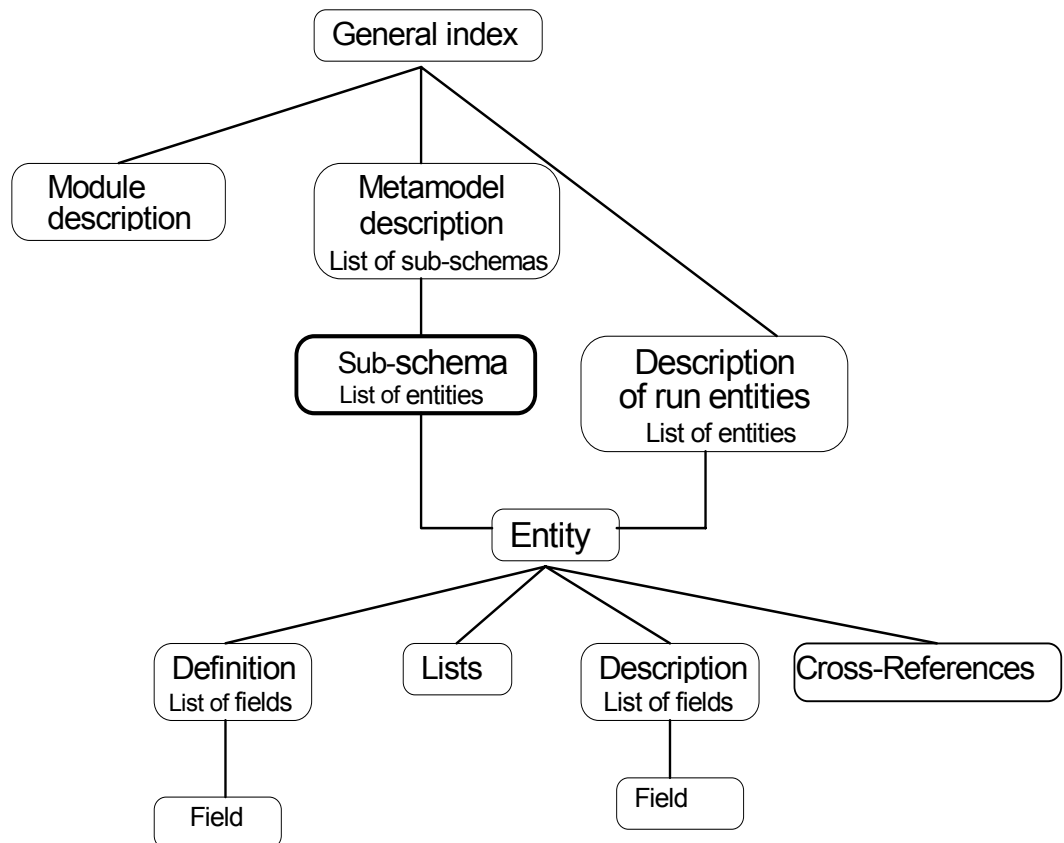
The main entry point to the methodological help is the sub-schema. To access the Help window, first select the required sub-schema from the Metamodel menu in the WorkStation Manager. Then choose **?=F1** from the WorkStation Manager menu bar, or press F1. The corresponding help page appears.

```
┌─────────────────────────────────────────────────────────────────────┐
│ ─              PacDesign MERISE Documentation                  ▼  ▲   │
├─────────────────────────────────────────────────────────────────────┤
│ Fichier   Edition   Signet   Aide                                     │
├─────────────────────────────────────────────────────────────────────┤
│  Index  │ Rechercher │ Précédent │ Historique │   <<    │    >>   │   │
├─────────────────────────────────────────────────────────────────────┤
│ Conceptual Data Modeling                                              │
│                                                                  ▲    │
│                           Back to: Merise Metamodel Description       │
│                                                                       │
│                                                                       │
│  Purpose            Investigate all data manipulated by a Business    │
│                     System:                                           │
│                                                                       │
│                     -  establish data significance and format         │
│                                                                       │
│                     -  suppress ambiguities in language, such as      │
│                        homonyms and synonyms                          │
│                                                                       │
│                     -  define general concepts of information         │
│                        (objects) pertaining to a                      │
│                        specific business system                       │
│                                                                       │
│                     ─────────────────────────────────────────        │
│                                                                       │
│  Principle Entity   Conceptual Data Model.                            │
│                                                                       │
│  Other Entities     Object.                                           │
│                     Relationship.                                     │
│                     Attribute.                                        │
│                     External Entity.                                  │
│                     Business System.                                  │
│                     Process.                                     ▼    │
└─────────────────────────────────────────────────────────────────────┘
```

It consists of three items:

- The Object item which describes the sub-schema object

- The Entity item which specifies the main entity as well as the other entities in the sub-schema

- The Description item which describes the sub-schema links

In the top right of each help page is a hypertext link which returns you to a help page at a higher level where possible.

N.B.:   A different type of online help is available. This is Input Help which is accessible from the Definition and Formatted Description windows. For more information, see the corresponding chapters.

Conventions Used with Metamodels

ENTITIES

Property ◄——— Entity name

CDM   Entity with graphic description(s)

RELATIONSHIP

Gives ◄——— Relationship name

0,n

parent

Project

0,1
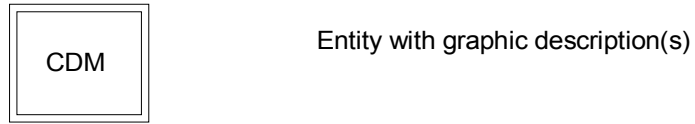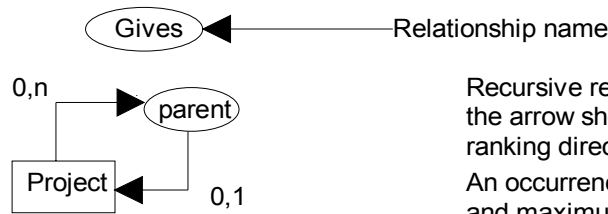
Recursive relationship:
the arrow shows the occurrence
ranking direction.
An occurrence ranking is the minimum
and maximum number of occurrences
which can exist for a given relationship.
Example: a project may be decomposed
into 0 to n sub-projects.
Reciprocally, a project is linked
to 0 or 1 parent projects.

LINKS

1,n
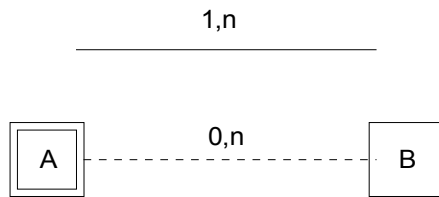
Link with an occurrence ranking

0,n
A - - - - - - - - - - B

This type of link is used in
sub-schemas to show the entities
that can be drawn in a graphic
description.
B can be drawn in the graphic
description of A.

NOTE: This example corresponds to the Merise methodology. For information on
               other methodologies, refer to the appropriate documentation.

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WorkStation Navigation Guide

The metamodel facilitates navigation within the WorkStation and facilitates data viewing in the Specifications Database.

To access a sub-schema, select an option from the **Module** menu, then select an option from the **Metamodel** menu. Once the selected sub-schema is displayed, open an Entity dialog box:

• Double-click on the desired entity icon

• Or click on the desired entity icon, then choose **Entity...** from the menu bar.

NOTE: You do not need to have a sub-schema displayed in order to access the Entity dialog box of an entity. For complete details, refer to chapter "Navigation in the WorkStation".

Types of Description Windows

There are various types of description windows. These types are not to be confused with the specific titles given to description windows. Each entity is made up of a combination of these description windows.

- The Formatted Description window displays an ordered sequence of formatted lines. This window is available for a number of entities (i.e. Event, Object, Relationship). This window has specific titles depending on the entity being described (i.e. "Attributes/Data Elements Featured" is the Formatted description for the entity Event).

- The Non-Formatted Description window provides a free-form textual description area. This window is available for entities specific to the WorkStation: Business System, Project, Process, Task/Rule, etc.

- The Graphic Description window is used for Conceptual Data Models, Conceptual Process Models, Organizational Charts, etc.

- The Textual Description window is specific to the Text entity. This window offers standard text processing facilities.

- The Data Extraction window is used to constitute a local repository by extracting Attributes/Data Elements required by the Local Mapping.

- The Screen (local & host) Mapping and Simulation Description windows allow you to build and simulate screen maps.

- The Local Specific Code window is a local word processor window for the different Program and Screen specific processing lines.

- The Call of Segments (semi-local) window is used to describe the segments called in occurrences of the Screen entity (Online Systems Development Function) or occurrences of the Business Component entity (Pacbench Client/Server).

- The Call of Data Structures window is used to describe the Data Structures called in occurrences of the Program entity (Batch Systems Development Function).

- The Business Components window (semi-local) is used to process semi-locally the "Business Components" descriptions of the Folder and Folder View entities of Pacbench Client/Server.

- The Chart Facility Description window is used for the Free Entity. This window is used to enter tables, charts, etc.

NOTE: All examples correspond to the Merise methodology. For information concerning other metamodels, refer to the on-line help.

```
                          ┌──────────────────────┐
                          │    SPECIFICATIONS     │
                          │      DICTIONARY       │
                          └──────────────────────┘
                                     ↕
   HOST ·····················································································
   PC
                                     ↕

 ┌──────────────────────┐
 │ Generation-Print     │
 │ window               │
 │  ┌─────────────────────┐
 │  │ Keyword search      │
 │  │ window              │
 └──│  ┌────────────────────┐      ┌──────────────────────┐      ┌──────────────────────┐
    │  │ List of Journalized│ ←──→ │    WORKSTATION        │ ←──→ │ Data Extraction window│
    └──│ Trans. window      │      │   MANAGER WINDOW      │      └──────────────────────┘
       │  ┌───────────────────┐    └──────────────────────┘
       │  │ Library/Session   │         ↙      ↕      ↘
       └──│ window            │                            ┌──────────────────────┐
          └───────────────────┘                           │   X-Ref. window       │
                                                           │  ┌─────────────────────┐
          ┌──────────────────────┐        ┌──────────────│  │ Local Lists window  │
          │                      │        │ Host Occurrence└─│                     │
          │  Definition window   │ ←────→ │ List window      └─────────────────────┘
          │                      │        └──────────────────────┘
          └──────────────────────┘
                 ↘      ↕      ↙
```

DESCRIPTIONS								
Graphic	Text	Non-formatted	Formatted & General Doc.	Chart Facility	Screen Mapping & Simulation	Local Specific Code	Call of Segments	Call of Data Structures

SECTION 2   NAVIGATION

Chapter 3   WorkStation Connection

The Connection Dialog Box

The Connection Dialog Box

To start the WorkStation, you can:

- From Windows' desktop, menu "Start", "Programs" choice, select "VisualAge Pacbase Components" section, "WorkStation " sub-section, and then "WorkStation NNN" (NNN corresponds to the release number).

- Or double-click on the PEXEC.EXE file that is installed by default under: c:\Program Files\ibm\VisualAge Pacbase\SPAC\NNNL (NNN corresponds to the release number and L corresponds to the language code chosen at the installation time).

User   Enter the **User Code** and the **Password**. The user code, password and access rights are validated by the host. A new user must perform a host connection when first connecting.

For a password modification, a host connection is required. If you want to change your password, select the **Modification** option and enter the **New Password** in the "New password" field and confirm the new password. (If you select the Modification option and do not enter a new password, or if you enter blanks, and click on "OK", your new password is left to blank but only if defined in the User Parameter Management .)

If it was established at installation that a middleware identification is requiered for a connection to the host, when you click "OK", a dialog box opens and you are asked to enter the user code and password you usually use for a connection to the host system.

Module   This list displays the modules which can be accessed by the WorkStation. To select a module, click one of the choices in the dropdown menu.

If the context is memorised, the module is already selected, otherwise, this is the first module in the list which is selected by default.

The connection is revoked if the licenses used on site and those required to be able to connect to the module are not compatible.

Databases   This list indicates databases available via the WorkStation. Select a database by clicking on the desired line.

NOTE   If the Database you are willing to connect to is not displayed in this list, you need to add the code of the database in the **bases.ini** file in the installation directory (..\..\common\bases.ini). For details on how to load the list, refer to the *VisualAge Pacbase Installation Guide*, Chapter "Installation of Client composants ".

Library   Enter the Library code (required) in one of the following ways:

- Enter the library in the edit box located to the left

- Click in the list located to the right and select a library from the displayed list. (For information concerning how to load this list, refer under "Library and Session List Loading".)

The Inter-Library code ******* can only be used during Emulator processing. (See chapter "The Emulator Window".)

Session   Enter the Session number (optional) in one of the following ways:

- Enter the session in the edit box located to the left

- Click in the list located to the right and select a session from the displayed list. (For information concerning how to load this list, refer under "Library and Session List Loading".)

If the session is entered, select the type: **Frozen** or **Current/Test**.

If the session is not entered, the current session is selected by default.

You can carry out an implicit search of the session code by entering a session code (complete or incomplete) in the edit box located to the left and click in the list located to the right:

in the list box to the right:

- If the code exists in the list, the corresponding label is displayed

- If the code is incomplete, the session selected is the first with a code similar to the incomplete code entered

- If the code does not correspond to any code in the list, an error message will be displayed at the time of connection

Connection   Select **Local** or **Host** connection. (See the following paragraphs for details concerning the host and local connections.)

NOTE   In some cases, this part is not available (the local connection mode is not available).

DSMS Checkpoint   When the database is under DSMS control, enter a **Product code** (3 characters maximum) and a **Change number** (6 characters maximum). (See the *DSMS Manual* for complete information.)

OK / Cancel   Select the **OK** button to start the connection procedure or the **Cancel** button to close the Connection dialog box.

If the connection procedure ends normally and the user parameters pass validation, the Connection dialog box closes and the WorkStation Manager window opens.

Local Connection

Local connection allows the system to operate on the local descriptions only. In this mode, all host-related commands are disabled. A local description can be:

- A draft, which may be updated (see chapter "The Local List Window".)

- A downloaded description: the way this description has been downloaded determines access to it (consultation or update).

In the case of a local connection, the Library entered must exist in the local library list.

Host Connection

The host connection is used for online access to the Specifications Database (in addition to local descriptions) for consulting, updating, and downloading/uploading data sections.

Defining an occurrence and initializing its descriptions requires a host connection, even for locally managed descriptions, so that they be locked at the host level when downloaded.

The first connection to a new database (and a new database user) requires a host connection.

If a user already connected tries to connect a second time, a Host message warns him of the dupplicate connection and requests a confirmation. If the user confirms the second connection, then the first connection is no longer valid and disconnects the WorkStation.

Automatic Opening

You can memorize a connection context (user code, database, library, session, connection site, DSMS control, and any module or sub-schema) when you exit the WorkStation.

For more details, refer to chapter "The WorkStation Manager Window", subchapter "The Menu Bar of the WorkStation Manager Window ", paragraph "The Preferences Menu".

Switching from a Local to a Host Connection

To switch from a local connection to a host connection, choose **Host Connection** from the **Host-Access** menu in the WorkStation Manager or click the corresponding button on the toolbar.

Interrupting a Host Connection

If the host connection is interrupted (because of host malfunction or because the period of inactivity has been exceeded), all windows in communication with the host close, the WorkStation automatically switches to local mode and the **Host Connection** in the **Host-Access** menu in the WorkStation Manager is reactivated together with the corresponding button.

Library and Session List Loading (Initial Connection and Connection to a New Database)

The first time you connect to the WorkStation or to a new database, you must connect to the host. A dialog box asks you if you want to load the library and session lists locally.
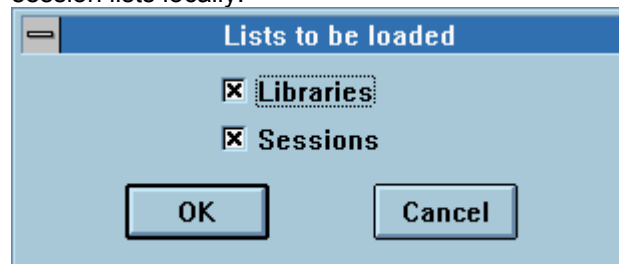
When library and/or session lists are loaded, you can work locally on any of the libraries and/or sessions in the lists.

When library and/or session lists are not loaded, only the connected library and/or session is available.

For details about how to refresh local library and session lists, refer to chapter "The Library/Session Window", subchapter "The Menu Bar of the Library/Session Window"under The **List** Menu.

Disconnection

To exit the WorkStation, close the WorkStation Manager window via the System menu. A confirmation message is displayed and all windows close: the WorkStation Manager automatically performs the host disconnection.

NOTE   For security and integrity reasons related to the Specifications Database, you will not be allowed to close the WorkStation if an information exchange with the host is in progress.

A utility enables you to close all applications that could remain open after a sudden interruption of the WorkStation. When using a PC, external problems may always cause an interruption. In this case, use the KILLP.EXE utility in the SPAC*NNNL* directory .

Context

WorkStation Context

At a given moment, the WorkStation runs in a given context.

The Context... command in the System menu of the WorkStation Manager window opens up this dialog box:
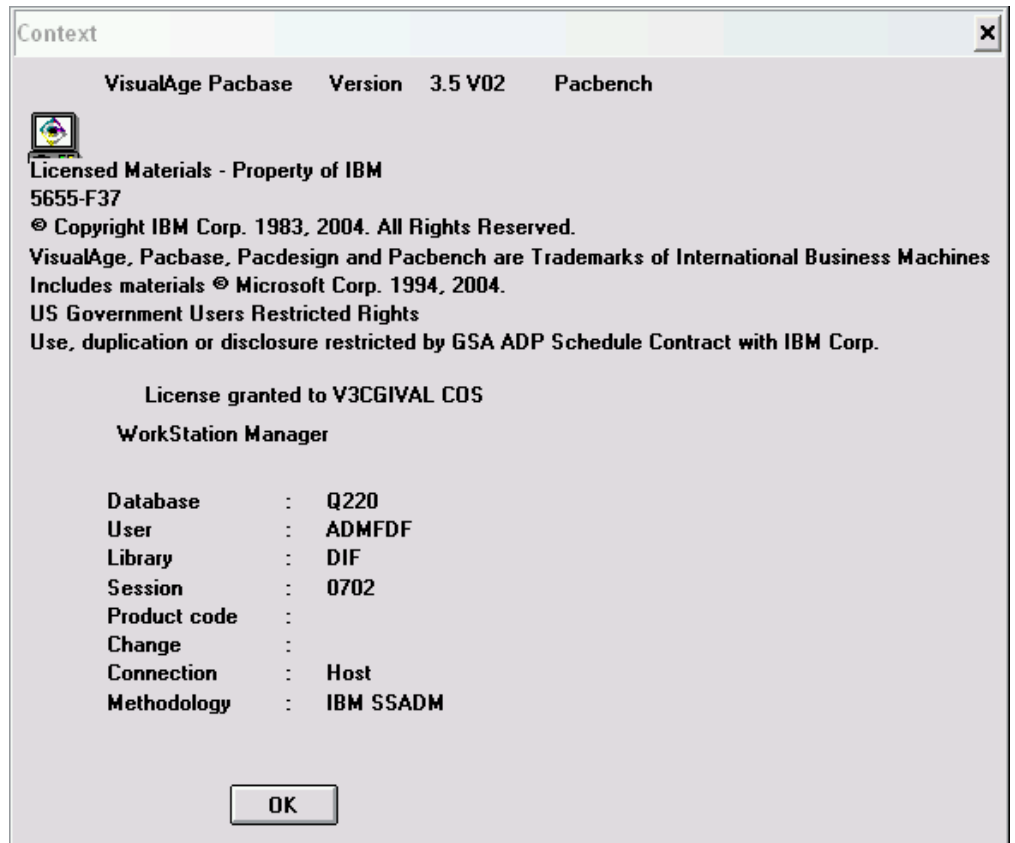
In descending order, the information displayed represents:

– Module called (Pacbench in the example)
  – Database   (x)
  – User   (x)
  – Library
  – Session
  – DSMS Product Code
  – DSMS Change Number
  – Connection Mode
  – Methodology   (x)

Items marked with an (x) cannot be modified during a work session. You will have to re-connect to modify them.

Changing the WorkStation Context

Changing the module

To change the module, select another in the Module menu of the WorkStation Manager window

Changing the library

To change the library, session, DSMS product code or DSMS change number, select the **Library-Session** command from the **Host-Access** menu in the WorkStation Manager window. (If you change the context via the Emulator, it will also change the WorkStation context.)

Changing the connection mode

To change the connection (from local to host) choose **Host Connection** from the **Host-Access** menu in the WorkStation Manager window.

NOTE   Refer to the previous page to see which items require re-connection before modification.

See chapter "The Library-Session Window" for more information about changing context.

Changing the methodology

To change for another methodology (if several methodologies are installed on your workstation), you need to disconnect and reconnect then. From the connection window, select in the Databases list, the line corresponding to your choice (its label must be as explicit as possible). If you have any doubt on which line is to be selected, ask your administrator.

NOTE : This line may include a file name (with the `.dat` extension) between

"<" and ">".

If the Databases list does not contain the line expected, you must modify the value of the "Methodology" parameter in the PACBASE.DAT file located in \SPAC\NNNL (where NNN corresponds to the session number and L to the language code of the release installed).

Example of PACBASE.DAT file :

```
001 WorkStation release              [300A]
002 Host                             [PACBASE]
003 Communication board             [MWCOM]
004 Communication parameters        [MWCOM]
005 Operating system                 [WINDOWS]
006 Methodology                      [MER]
007 Load-module disk drive          [C]
008 Default load-module disk drive   [C]
009 System data disk drive           [C]
010 User data disk drive             [C]
011 Connection execution mode        [E]
```

The value of "Methodology" parameter consists in three characters between brackets […] whose position is free.

PARAMETER VALUE	METHODOLOGY
MER	MERISE
DON	YSM
FAA	IFW
ADM	SSADM (Only in English)
OMT	OMT

Current Context

A window inherits the current WorkStation context at the time the window is opened. The context for an open window is **not** modified when the WorkStation context is changed. This feature enables you to work simultaneously in different contexts.

For each window, the **Context...** command in the System menu indicates the context specific to this window. The **Context...** command in the System menu of the WorkStation Manager window indicates the current WorkStation context.

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Chapter 4   *The WorkStation Manager Window*

Functionalities

The WorkStation Manager window is the WorkStation entry point. The WorkStation Manager:

- Allows you to select a WorkStation module (Pacdesign, Pacbench)

- Displays the list of entities managed by the selected module

- Is a methodological aid that displays the metamodel of a selected module in a specific methodology. (A metamodel is a series of sub-schemas where the entities and their relationships are graphically presented.)

- Is the entry point to all WorkStation windows, ensuring access to occurrences in the Specifications Database and local access to downloaded occurrences. It allows you to:

  - Access the Specifications Database contents through occurrence lists or cross-references related to specified occurrences

  - Expand the Specifications Database contents by updating definitions and descriptions of occurrences

- Allows you to access open WorkStation windows

- Extracts Data Elements from the Specifications Database in order to proceed to local screen mapping

- Interrogates the Specifications Database for keyword search purposes and consultation of the Journalized Transactions

- Allows you to switch from local to host connection and to connect to another context

- Allows you to write JCL lines and submit Generation-Print (GPRT) jobs

- Allows you to access the host Emulator

- Allows you to change the Library-Session

- Allows you to convert documents generated by VisualAge Pacbase in RTF format.

- Allows you to activate or cancel Deferred Upload/Download requests

- Allows you to change the colors of the Entity dialog box or the revamped host screens

- Allows you to set options, colors and formats of graphs

- Allows you to set options for the downloading of Texts, Non-Formatted descriptions and Screens

- Allows you to memorize the current context, module and sub-schema

- Allows you to edit Documents locally

- Allows you to set automatic save options

Getting to the Window

The WorkStation Manager window is displayed when you connect to the WorkStation. For complete information about how to connect, refer to chapter " WorkStation Connection".

You access this window by choosing the Pacbench module from the **Module** menu.
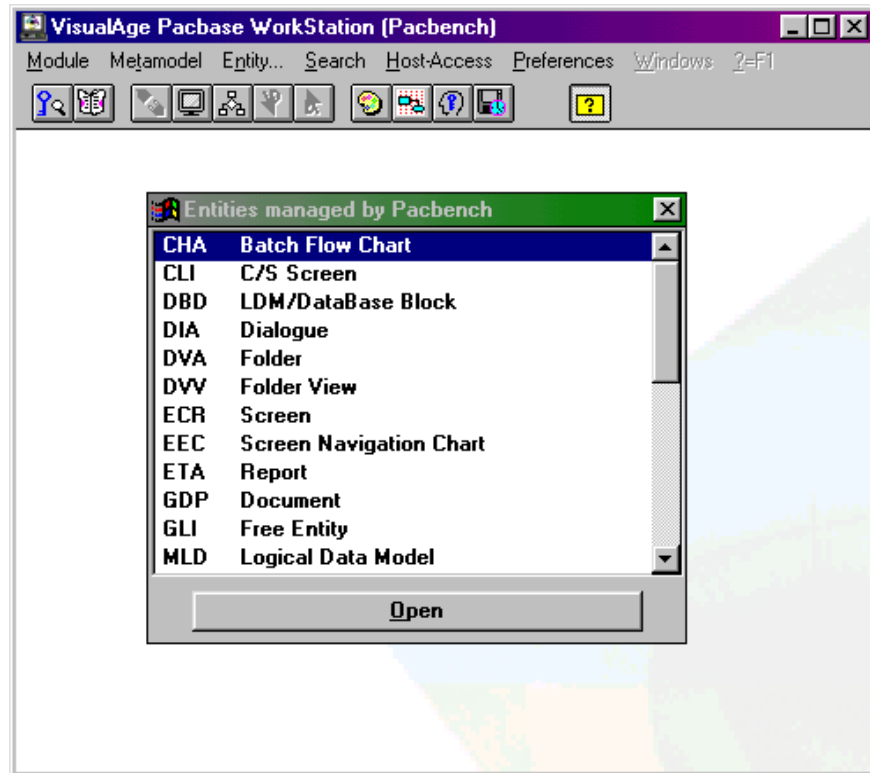
You will be able to reactivate it later during your work by clicking on it in the WINDOWS Task List , opened via CTRL+ESC.

The Menu Bar of the WorkStation Manager Window

Module   This menu contains commands that allow you to connect to a module.

Metamodel   This menu contains commands that allow you to access sub-schemas specific to the selected module in the methodology installed.

Entity...   This command leads you to the Entity dialog box.

Search   This menu contains commands that:

- Search keywords

- List Journalized Transactions

Host-Access   This menu contains commands that:

- Connect or reconnect the host

- Access the Emulator

- Access the Library-Session window

- Extract data from the host Specifications Database for local screen mapping purposes

- Access the Generation-Print window

- Print Documents generated by VisualAge Pacbase in RTF format

- Activate or cancel Deferred Upload/Download request of local descriptions onto or from the Specifications Database

Preferences   This menu contains commands that allow you to:

- Define colors, fonts and character sizes for Logical Screens

- Set preferences for graphic descriptions

- Set options for downloading Texts, Screens and Non-Formatted descriptions

- Memorize the context, module and sub-schema

- Set options for automatic save

Windows   This menu lists the currently open WorkStation windows, thus allowing you to display them when they are hidden or iconized.

System Menu   In addition to its standard commands, this menu contains a command that allows you to consult the WorkStation context.

For information concerning the context, refer to chapter "WorkStation Connection", subchapter "Context".

The Module Menu

Module   **Pacdesign**
                    Pacbench

                    This menu displays the commands that allow you to access modules (installed modules only).

Pacdesign   Adapts the contents of the **Metamodel** menu to the sub-schemas associated with the Pacdesign module and displays the list of entities which can be accessed from this module.

                    For a complete description of Pacdesign entities, refer to the online help.

Pacbench   Adapts the contents of the **Metamodel** menu to the sub-schemas associated with the Pacdesign module and displays the list of entities which can be accessed from this module.

                    For a complete description of Pacbench entities, refer to the online help.

The Metamodel Menu

Metamodel   *List of Sub-Schemas*
                    ————————————————
                    List of Entities

List of Sub-Schemas

This is the list of all sub-schemas of the installed methodology pertaining to the Module you have selected from the Module menu.

A sub-schema is part of the Metamodel. The list of sub-schemas is ordered according to the logical steps of the methodology. For a given step, a sub-schema displays all the entities included and their relationships in the Entity Relationship Diagram drawn according to the Methodology. (see chapter "Metamodels", for standards used in sub-schema displays.)

When a sub-schema is displayed, the list of entities managed by the module automatically closes. To reopen this list, click on the "List of entities" in the **Metamodel** menu.

The Entity dialog box of any entity can be accessed via a sub-schema in one of the following ways:

- select an entity and select the Entity... command on the Menu Bar

- or select an entity and ENTER

- double click on an entity

List of Entities   Displays the list of available entities. With a local connection some entities might be "grayed" because all their descriptions are local. These entities become available with a host connection.

To open the Entity dialog box of any entity:

- Select an entity and select **Entity...** in the Menu Bar

- Select an entity and click **Open**

- Select an entity and press ENTER

- Double-click on an entity

For a complete description of the Entity dialog box, refer to chapter "Navigation in the WorkStation".

The Entity... Command

Entity...   After you select an entity from the list of entities or in the sub-schema, this command opens the Entity dialog box.

For a complete description of the Entity dialog box, refer to chapter "Navigation in the WorkStation".

The Search Menu

Search   **Keyword Search**
                     List of Journalized Transactions

The following commands require a host connection.

Keyword Search

Allows you to search for occurrence codes by using keyword(s) as search criteria.

These keywords can be implicit, explicit or synonymous. This window is fully described in chapter "The Keyword Search Window".

List of Journalized Transactions

List of Journalized Transactions

Opens the List of Journalized Transactions window and displays the last transactions entered in the Database to which you are connected.

This window is fully described in chapter "The List of Journalized Transactions Window".

The Host-Access Menu

Host-Access   Host Connection
                  Emulator

                  Library-Session

                  Data extraction

                  Generation-Print
                  Local Edition of Documents

                  Deferred downloads...
                  Deferred uploads...

Host Connection

Allows you to establish a host connection (this command is not available if you already have a host connection). If the connection request fails (due to a host communication problem or script failure), the connection mode remains local and this command is still active.

Emulator

Allows you to work in the Specifications Database in Emulation mode. (Enabled only in Host Connection mode.)

This window is fully described in chapter "The Emulator Window".

Library-Session

Opens the Library-Session window, which allows you to switch to another Library, Session, DSMS Change number and/or DSMS Product code.

This window is fully described in chapter "The Library-Session Window".

The following commands require a host connection

Data Extraction

This command allows you to extract Data Elements from the Host Specifications Database in order to proceed to Local Screen Mapping.

This window is fully described in chapter "The Data Extraction Window".

Generation-Print

Used to view and update Generate-Print commands as well as the startup JCL for the GPRT procedure, then to submit the job after validation of the JCL line and GPRT commands.

This window is fully described in chapter "The Generation-Print Window".

Local Edition of Documents

Information about local editions are gathered under subchapter "Local Edition of Documents".

Deferred Download...
Deferred Upload...

These commands are active when at least one deferred download or upload has been requested.

For details about requesting deferred download/uploads, see chapter "The Local List Window".

These **Deferred Download/Deferred Upload** commands open the Deferred Download/Upload Requests dialog box. For a complete description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The Preferences Menu

Preferences   **Logical Screens...**
                         Graphs...
                         Downloads   ➔   **Text...**
                         ━━━━━━━━━━━━━━━━━━━━━━━━   **Non-Formatted Description...**
                         Context memorization   **Screen...**
                         Automatic save...

Logical Screens   This command opens the Logical Screens dialog box in which you set the fonts, character sizes and colors used in the Logical Screens. For a detailed description of this dialog box, refer to the subchapter "Auxiliary Dialog Boxes".

Graphs...   This command opens the Preferences dialog box in which you set the default options regarding colors, format and parameters used in the Graphic Description window. (However, the WorkStation supplies initial default options.)

                         For a detailed description of the Preferences dialog box, refer to chapter "The Graphic Description Window", subchapter "Auxiliary Dialog Boxes".

Downloads   ➔ **Text...**
                         Non-Formatted Description...
                         Screen...

                         These commands lead you to dialog boxes in which you specify the following downloading options for Texts, Non-Formatted descriptions and Screens:

                         ▪ Request confirmation of downloading options

                         ▪ Set default conversions, formats and font

                         For a detailed description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Context memorization

                         Saves the current connection context for each user (database, library, session, connection mode, DSMS control, and any module and sub-schema) **when you exit the WorkStation**. At the next connection, the WorkStation automatically opens in the context corresponding to the user code chosen in the list.

                         This command is not selected by default. If you do not activate it, the WorkStation opens by default in the last context you have saved. If no context has ever been saved, you will have to redefine your context at any new connection.

NOTE: The context which is memorized can be used for automatic opening only as long as you keep the same version of the WorkStation and the same methodology.

Automatic save...

This command leads you to a dialog box in which you indicate the time desired between saves, activate the automatic save command, and request the display of a confirmation message before each automatic save. This command is active for the following local descriptions:

- Texts

- Graphical Description

- Non-Formatted Description

- Chart Facility

- Screen Mapping

- Local Specific Code

NOTE: Automatic save is deactivated when you minimize your application. It is automatically reactivated when you maximize the application.

The Windows Menu

This menu lists all the currently open WorkStation windows (visible, hidden or iconized). Select a command from this menu to redisplay the corresponding window and to activate it.

Moving Between the WorkStation Manager Window and Sub-Windows

Use Ctrl+F6 to move in the direction indicated by the continuous-line arrows.
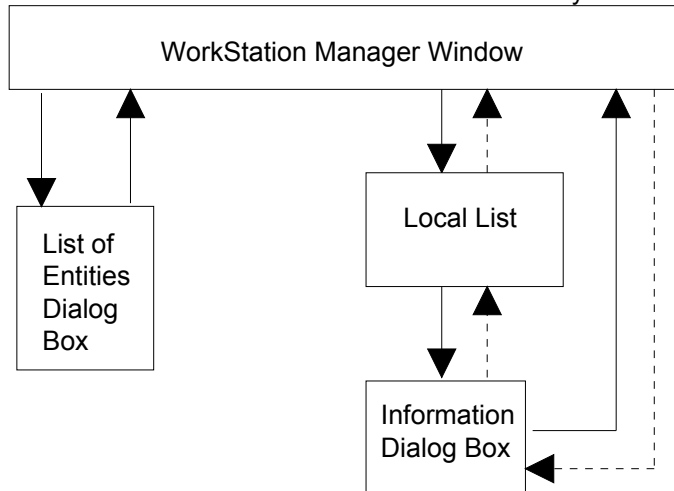
(Open via the Description
menu of the Local List window.)

Use Ctrl+Shift+F6 to move in the direction indicated by the dotted-line arrows.

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Auxiliary Dialog Boxes

The Logical Screens Dialog Box

This dialog box is displayed via the **Logical Screens** command in the **Preferences** menu.

With this dialog box you indicate the fonts and character sizes as well as the colors of the Logical Screens.
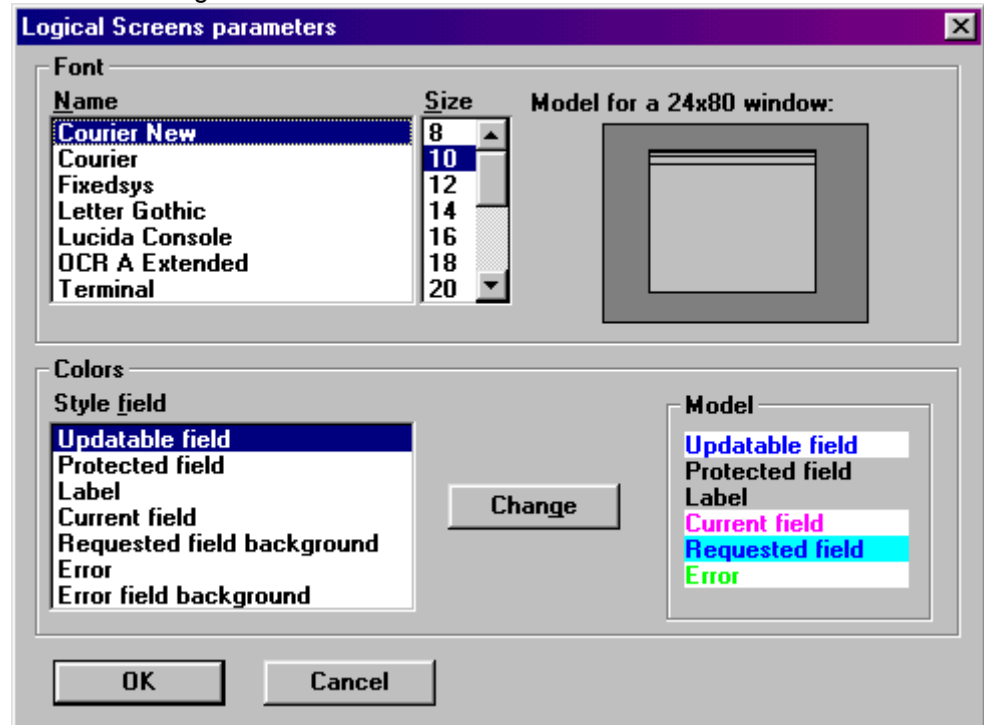
To change the character font in a Logical Screen, choose a character font from the list. One or more character sizes appear according to the font selected. Select the required size where this is possible. An example of a 24 x 80 window is displayed (the standard dimensions for a WorkStation window). The appearance of the window changes according to the font selected.

As regards the **Colors** group, only the colors of the Definition or Formatted Description Logical Screens can be modified.

To display the current color of a field, select the desired item from the **Field type** list. You will see the result in the **Model** part of the dialog box.

To change the color of an item, click Modify. A standard Windows dialog box opens. You can then select the color you require by choosing a default color or defining a customized color.

Restore cancels all modifications since the last **OK**.

Standard sets the colors to the default colors supplied at the installation.

The Download Dialog Boxes

The following dialog box is displayed via the WorkStation Manager Window (via the **Download→Text...** command in the **Preferences** menu). It is used to set options for the first download of texts that have originally been described on the host. In other words, the download parameters defined in this dialog box are not taken into account in the case of already downloaded or locally created text.
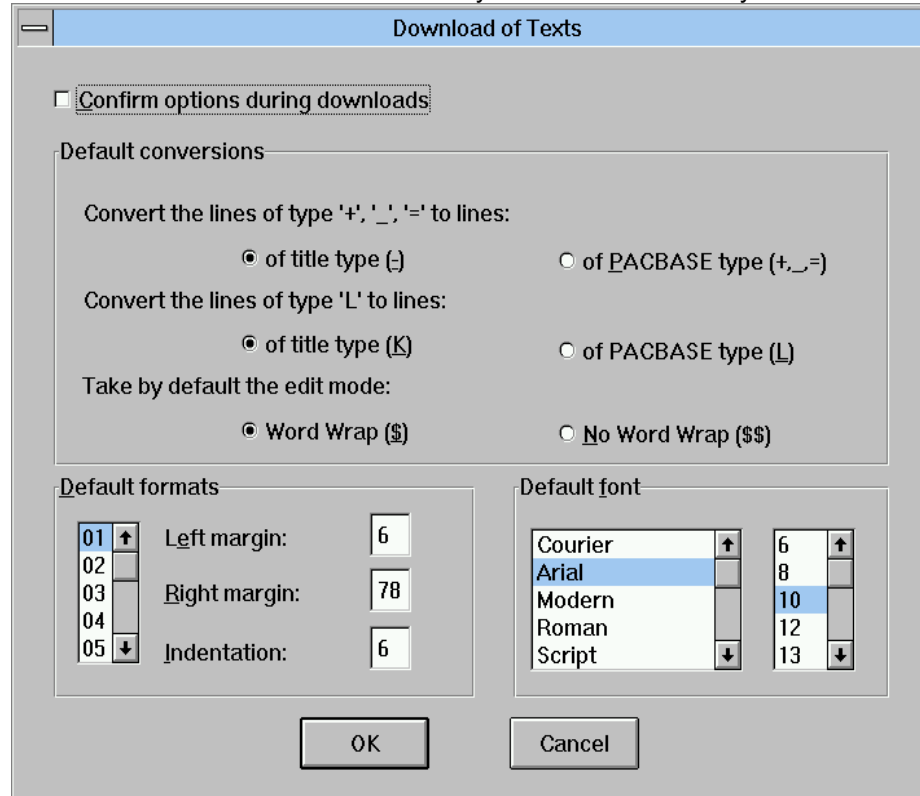
Download of Texts

☐ Confirm options during downloads

Default conversions

Convert the lines of type '+', '_', '=' to lines:

◉ of title type (-)   ○ of PACBASE type (+,_,=)

Convert the lines of type 'L' to lines:

◉ of title type (K)   ○ of PACBASE type (L)

Take by default the edit mode:

◉ Word Wrap ($)   ○ No Word Wrap ($$)

Default formats

01	Left margin:	6
02		
03	Right margin:	78
04		
05	Indentation:	6

Default font

Courier	6
Arial	8
Modern	10
Roman	12
Script	13

OK   Cancel

Confirm options during downloads

When this option is enabled, a confirmation box opens up each time you are downloading a text without layout option on the host.

Default conversions

When text occurrences originally described in the Specifications Database are downloaded onto the PC for the first time, certain adjustments need to be made (if the text does not contain alignment commands or if there are lines of type '+', '=' or '_').

The WorkStation manages only lines of type '-' and lines of type VisualAge Pacbase. You must convert lines of type '+', '=' and '_' into one of these line types.

You must also determine the default edit mode: Word Wrap or No Word Wrap. The selected edit mode is applied when you download a text with no layout option on the host for the first time.

- Word Wrap mode formats the text according to a defined or default format, with automatic carriage return.

- In No Word Wrap mode there is no automatic carriage return.

For more details on these two modes, refer to chapter "The Textual Description Window", subchapter "The Menu Bar of the Section Window", section "The Paragraph Menu".

Default formats

Define the default formats for the next texts you will download.

For more information on the different text formats, refer to chapter "The Textual Description Window", subchapter "Upload/Download and Data Element Cross-Reference", section "Download".

NOTE
If no format is defined, the default formats will be applied when you download texts with no layout option on the host for the first time. The formats defined in this dialog box can be modified in the Style dialog box (Table of Sections window) for all the sections of a text, or in the Define Formats dialog box (Section window) for the current section. For more details on these two dialog boxes, refer to chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

Default font

Select the font that will be used for the next texts you will download.

NOTE
If no font is selected, the font set by default will be used for any text downloaded for the first time. The selected font can be modified in the Style dialog box (Table of Sections window) for all the sections of a text, or in the Screen Fonts dialog box (Section window) for the current section. For more details on these two dialog boxes, refer to chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

The following dialog box is displayed via the WorkStation Manager Window (via the **Download→Non-Formatted Description...** command in the Preferences menu). It is used to set options concerning the first download of Non-Formatted Descriptions:
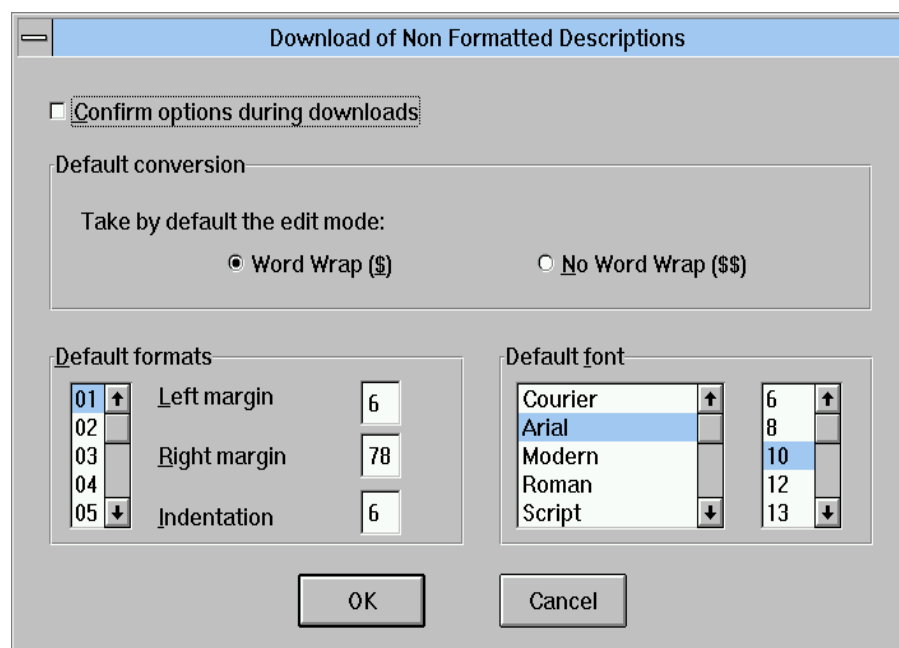
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Confirm options during downloads

When this option is enabled, a confirmation box opens up each time you are downloading a description without layout option on the host.

Default conversions

Determine the default edit mode: Word Wrap or No Word Wrap. The selected edit mode is applied when you download a description with no layout option on the host for the first time.

- Word Wrap mode formats the description according to the selected or default format, with automatic carriage return.

- In No Word Wrap mode there is no automatic carriage return.

   For more details on these two modes, refer to chapter "The Textual Description Window", subchapter "The Menu Bar of the Section Window", section "The Paragraph Menu".

Default formats

Define the default formats for the next descriptions you will download.

NOTE
If no format is defined, the default formats will be applied when you download descriptions with no layout option on the host for the first time. The formats defined in this dialog box can be modified in the Style dialog box (Non-Formatted Description window, **Options** menu, **Preferences** submenu) or in the Define Formats dialog box (Non-Formatted Description window, **Options** menu). For more details on these two dialog boxes, refer to chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

Default font

Select the font that will be used for the next non-formatted descriptions you will download.

NOTE
If no font is selected, the font set by default will be used for any non-formatted description downloaded for the first time. The selected font can be modified in the Style dialog box, or in the Screen Fonts dialog box (**Characters** menu). For more details on these two dialog boxes, refer to chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

The following dialog box is displayed via the WorkStation Manager Window (via the **Download→Screens...** command of the **Preferences** menu). It is used to set options concerning the downloading of Screens:

```
┌─────────────────────────────────────────────────────────┐
│ ─  │              Download of Screens                    │
├─────────────────────────────────────────────────────────┤
│                                                           │
│   □ Confirm options during downloads                      │
│  ┌─Default option──────────────────────────────────────┐ │
│  │  ☒ Download the associated Screens                   │ │
│  │                                                      │ │
│  └──────────────────────────────────────────────────────┘│
│                                                           │
│        ┌──────────────┐        ┌──────────────┐          │
│        │     OK       │        │   Cancel     │          │
│        └──────────────┘        └──────────────┘          │
└─────────────────────────────────────────────────────────┘
```
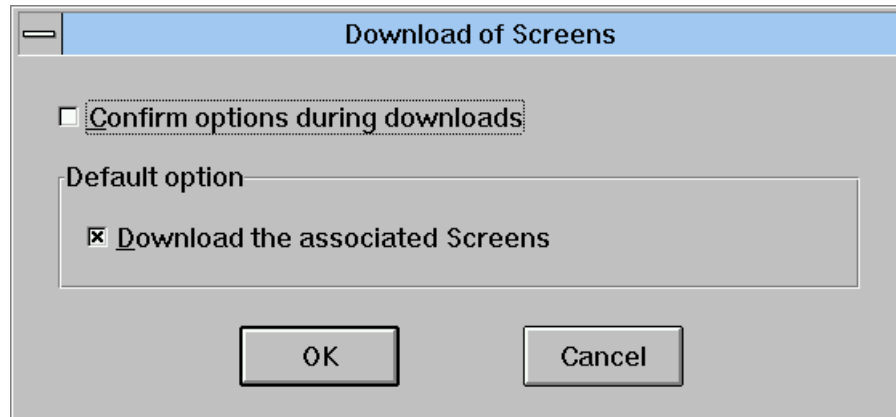
The Deferred Download/Upload Requests Window

The following window is displayed when you select the **Deferred Download/Upload** command from the **Host-Access** menu in the WorkStation Manager window.

```
┌──┬───────────────────────────────────────────────────────────┐
│──│        List of Deferred Download Requests                  │
├──┴───────────────────────────────────────────────────────────┤
│ Send!   Delete!                                               │
├──────────────────────────────────────────────────────────────┤
│ N°  Lib    Sess.   Ent    Code      Description               │
│┌─────────────────────────────────────────────────────────────┐
││01  MTA    1536    TXT    TEXTDS    Contents (Local Word-Processor)│
││02  MTA    1536    TXT    TEXTGE    Contents (Local Word-Processor)│
││                                                              │
││                                                              │
││                                                              │
││                                                              │
││                                                              │
││                                                              │
││                                                              │
││                                                              │
││                                                              │
││                                                              │
│└─────────────────────────────────────────────────────────────┘
└──────────────────────────────────────────────────────────────┘
```

The following information is displayed in this window:

- Download/Upload order number

- Library code

- Session (& status) of its last update

- Entity local code

- Occurrence code and description label

The menu bar of the window includes:

Send!   This command starts the immediate Download/Upload of all listed occurrence descriptions and closes the window.

Delete   This command deletes the selected request from the list.

If you decide to exit from the WorkStation prior to sending Deferred Download/Uploads, a message will ask you if you want to abandon the deferred download/uploads. If you answer yes, the requests will be deleted. If you answer no, the WorkStation will not close. You must send the requests or delete them in order to exit.

Local Edition of Documents

Introduction

You can convert Documents generated by VisualAge Pacbase into an RTF format adapted to a word processing (standard description format), and print/view them using any word processor capable of reading documents in RTF format.

You can edit some elements of the folder of entity occurrences stored in the VisualAge Pacbase repository using the functionalities of a PC word processor.

ILRTF LOCAL EDITING APPLICATION

The "ILRTF.EXE" local editing application is automatically installed with the WorkStation applications, and is stored in the SPAC*NNNL* subdirectory corresponding to the WorkStation subdirectory (English or French version).

ILRTF.PRO is the parameters file, located in the SPAC\BASE sub-directory.

If the word processor you are going to use is not an English one, you must specify, in **line 6** of the ILRTF.PRO file, the equivalent of the 'Titre' style in your word processor. This information is vital so that the word processor software recognizes this style and can number the titles in the document. If this line is missing the style name for titles is "Titre".

Otherwise and for your information, the ILRTF.PRO file contains information used by the ILRTF.EXE application. When using the application for the first time, the fields of the "Converting a PDM file to an RTF file" window are empty. Then on each use the files' paths entered in each field are memorized in the ILRTF.PRO file. The memorized files will be displayed in a drop-down list for each field in the application. If the drop-down list gets too long, you can delete file paths in ILTRF.PRO.

The following lines of the ILRTF.PRO file are loaded in the drop-down lists of the following fields:

- **Lines 1** contain the paths to the files entered in the "PDM source" field.

- **Lines 2** contain the paths to the files entered in the "Style sheet" field.

- **Lines 3** contain the paths to the files entered in the "Target" field.

- **Line 4** contains the path to the PACBASE.DAT file entered in the "Workstation Configuration File" field.

- **Line 5** contains the path to the word processor file used which was entered in the "Word processor used" field in the window which shows the results of the generation.

NB: **Line 7** indicates the titles' generation mode that was specified by using the window's two radio buttons:

> 1 indicates a standard generation.

> 2 indictaes a PDM generation.

- **Line 8** indicates the default font size in the page header. If you modify this font size in the page header, you must also do it on this line.

- **Line 9** indicates the default font size in the page footer. If you modify this font size in the page footer, you must also do it on this line.

FUNCTIONALITIES

Editing Documents locally allows you to:

Include graphs automatically

☞ Graphs are automatically printed according to the print options set by the user in the print layout (see chapter "The Graphic Description Window", subchapter "The Menu bar of the Graphic Description Window", section "Print Layout" of the File Menu. This print layout is memorized in the graph.

However, if the user chooses not to specify print options (the page layout set to 0), ILRTF considers the 'useful' dimension of the graph (height and width) to set the page orientation. Headers and footers are taken into account. The graph is printed on one page only.

☞ If the installed methodology (indicated in the WorkStation configuration file) is not compatible with the methodology in use to generate graphs, these graphs will not be generated in the RTF format. A dialog box proposes you either to continue or to quit the application.

- Respect the fonts and styles positioned via the WorkStation word processor

☞ The layout dedicated to the character fonts is not taken into account.

- Manage lists and charts generated by VisualAge Pacbase in RTF-format cellular tables

- Manage the Table of Contents and Index automatically

- Customize the style sheet in use.

HOW TO PROCEED

You must first generate the Document to be processed, with the C2 option (see chapter "The Generation- Print Window").

When generation is complete, a file created on the host and named PAC7G6 by the GPRT procedure (the external name depends on the coding used on your site) contains the elements required to create the RTF file. For more details on the GPRT procedure, refer to *the VisualAge Pacbase Operations Documentation*. Transfer this file onto your PC.

☞ This file must meet two criteria:

- It must contain ASCII-coded characters.
- The carriage returns must be CR/LF.

You can then submit the local edition request from the WorkStation General Manager Tool bar by selecting 'Local Edition of Documents' in the Host-Access menu.

You can now convert your PDM file into an RTF format.

CONVERSION OF A PDM FILE INTO AN RTF FORMAT:
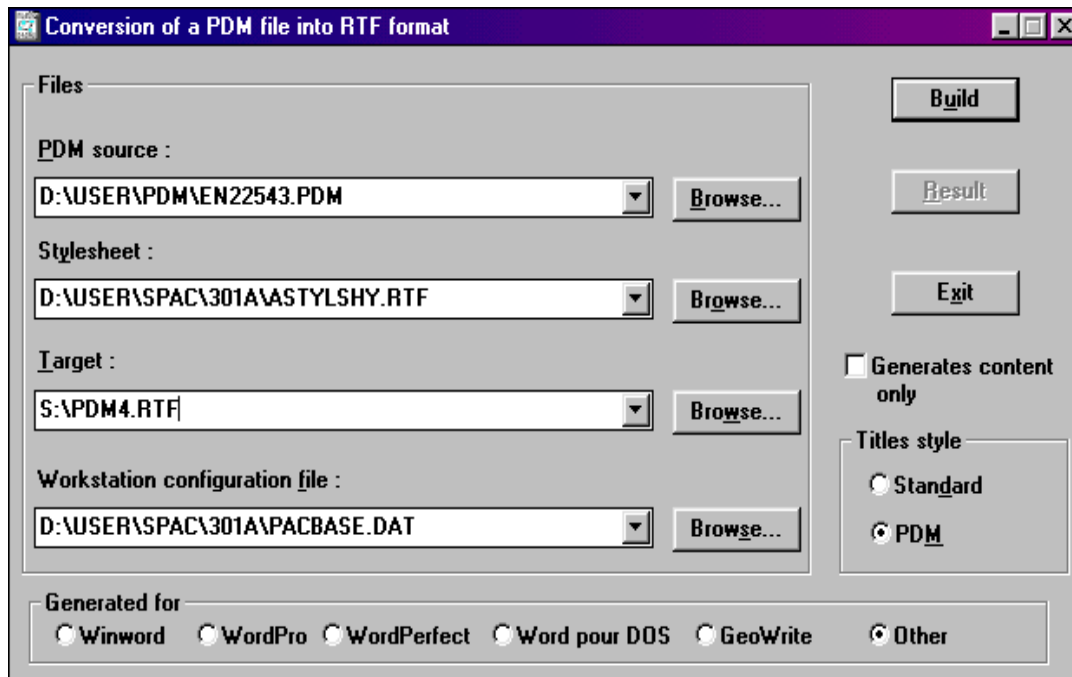
A/ Files used:

- In the " PDM Source" field, specify the local name of the transferred PDM file.

- In the "Stylesheet" field, specify the file of the style sheet from which the RTF output file will be created. A standard style sheet (ASTYLSHY.RTF) is provided at instalation time:

  FSTYLSHY.RTF for French,

  ASTYLSHY.RTF for English,

  DSTYLSHY.RTF for German,

  PSTYLSHY.RTF for Portuguese,

  SSTYLSHY.RTF for Spanish.

  The preset styles of the standard sheet (sizes and character fonts) will be applied to the Document. However you can modify styles and create your own customized style sheet. It will be taken into account in the next generation.

  The use of the style sheet varies according to the word processor in use.

- ☞ For users of Microsoft Word: the style sheet can be used with release 6 and higher only.

- In the "Target" field, specify the name of the RTF output file.

- In the "WorkStation Configuration File" specify the full WorkStation configuration file path (default name `PACBASE.DAT`). This file contains the name of the methodology used by the WorkStation which is required for generating graphs. If the Document to be generated does not contain any graphs, this information is irrelevant but the file must still exist in `PACBASE.DAT` format.

☞ When the "Convert PDM file into RTF format" window is opened for the first time, only the "Style Sheet" and "WorkStation Configuration File" files are indicated. Subsequently the last files used will be displayed, with the other files remaining on the drop-down list.

B/ Generates contents only:

This option enables you to generate the body of the Document without section skip.

Headers and footers are not managed automatically. You can then manage them in a customized way, according to your needs.

C/ Titles style:

- Standard

The Document titles from the Document description lines (type Tn) and the titles generated if this option is selected are printed in the body of the Document in the "titre" style.

☞ If the word processor you use is not in French, you must change a line in the parameters file. See 'WorkStation Manager Window', in 'ILRTF Local Editing Application' part.

You can automatically generate the Table of Contents from the Document description lines under your word processor.

Face pages, headers and footers, frames, title numbers do not keep their PDM formatting characteristics.

You can re-define these elements directly under your word processor as you wish.

- PDM

This generation mode reproduces PDM and WorkStation mapping characteristics (fonts and attributes). You can obtain an exact image of the generated Document under your word processor without specifying anything.

The map dedicated to fonts is not taken into account.

NB: the "Title" styles are special: "Titlengdp"

The following table associates the styles from the `ASTYLSY.RTF` stylesheet with the styles as they are defined in PDM.

RTF Styles	PDM Styles
content footer	Style used in the footers of the body of the generated Document
content header	Style used in the headers of the body of the generated Document
definition screen	Unused
fixed font list	Style applied to one-column Lists and Descriptions
fixed font list title	Style applied to the titles of one-column Lists and Descriptions
graph	Style applied to Graphs and to their labels.
heading page title	Style applied to the titles displayed in face pages
index	Unused
index entry	Unused
index footer	Style used in index footers
index header	Style used in index headers
list	Style applied to multi-columns Lists (without frame between columns)
list title	Style applied to the titles of multi-columns Lists (without frame between columns)
map	Style applied to Maps
nice sheet footer	Style used in face page footers
Nice sheet header	Style used in face page headers
normal indent	Unused
screen	Unused
style-Arial	Character-font style applied to text in Arial font
style-Courier	Character-font style applied to text in Courier font

RTF Styles	PDM Styles
style-Modern	Character-font style applied to text in Modern font
style-Roman	Character-font style applied to text in Roman font
style-Script	Character-font style applied to text in Script font
style-System	Character-font style applied to text in system font
style-Times	Character-font style applied to text in Times font
table	Style applied to multi-columns Descriptions
table title	Style applied to the titles of multi-columns Descriptions
title 1 ….title 9	Style applied to level 1 to 9 titles in the body of the Document generated with the PDM title option
tm footer	Style used in the table of contents footers
tm header	Style used in the table of contents headers
tm1 … tm9	Style applied to level 1 to 9 titles in the body of the table of contents.
wide map	Style applied to Maps whose width is more 82 char.

D/ Generated for…

The radio-buttons are used to indicate the target word processing for the generation, taking into account the specificities of the differents environments. The radio-buttons mainly allow a correct display of the graphics.

☞ All the information indicated in the "Conversion of a PDM File into RTF Format" window is contained in the ILRTF.PRO file.

Once you have entered all the information required in this window, click "Generate".

The following window appears. It shows the progress of the operation.

```
 ┌──────────────────────────────────────────────────────┐
 │ ─    │           Conversion in progress                │
 ├──────────────────────────────────────────────────────┤
 │                                                        │
 │   0%                    50%                    100%     │
 │                                                        │
 │   ┌──────────────────────────────────────────────┐    │
 │   │▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓                                 │    │
 │   └──────────────────────────────────────────────┘    │
 │                                                        │
 │                   ┌───────────┐                        │
 │                   │  Cancel   │                        │
 │                   └───────────┘                        │
 └──────────────────────────────────────────────────────┘
```
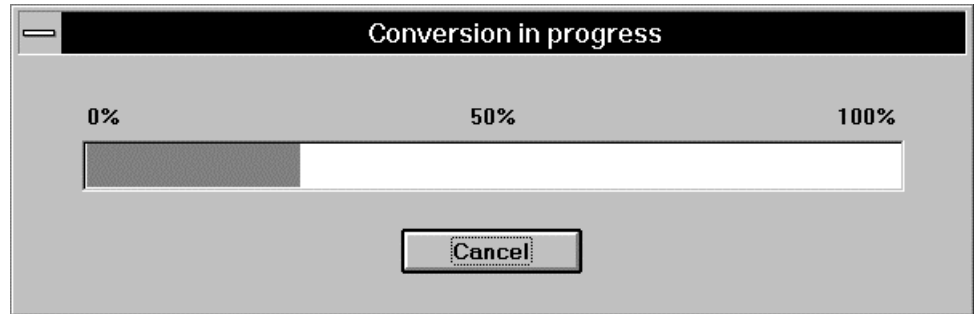
A window showing the Document report then opens.

REPORT
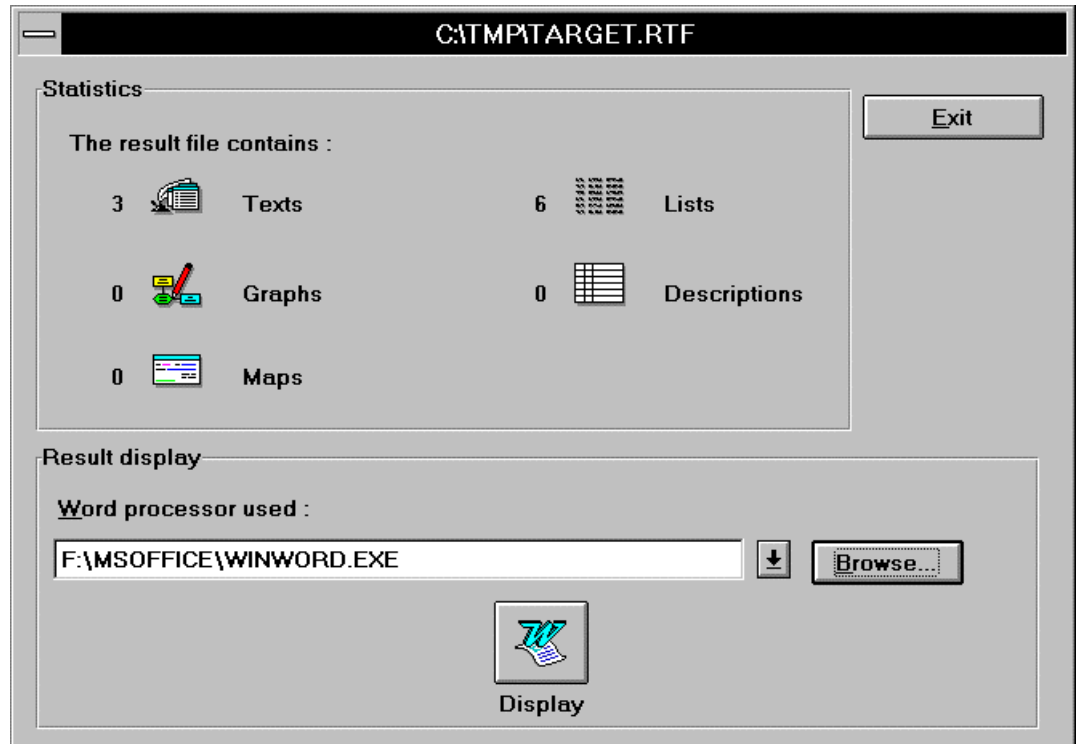
The elements taken into account are grouped in the following five categories:

- the Texts represent the
  - Text descriptions,
  - Description 8 of User Entity Occurrences.

- the Graphs represent the:
  - Graphical descriptions of User Entity Occurrences,
  - Graphical descriptions of WorkStation specific entities.

- the Maps represent the:
  - Report maps,
  - Screen maps,
  - Description of User Entity Occurrences (except description 8 and graphical descriptions).

- the Lists represent the:
  - Lists of entity occurrences,
  - PDM+ lists (H- and G-type lines).

- the Descriptions represent the:
  - Segment Call of Elements,
  - User Entity Call of Elements,
  - Methodology Entity Call of Elements (Object, Relationship),
  - Screen Call of Elements,
  - Report Call of Elements,
  - Data Element descriptions.

Descriptions are displayed in the form of tables.

The "Statistics" field indicates the contents of the Document, i.e. the number of the various elements it contains.

In the "Associated word processor" edit box, specify the location of the word processor you will use to display and print the result of the generated RTF file.

The icon for the word processor application then appears in the "Display" button.

Click on "Display" to start the word processor to display and modify the RTF file as you wish.

Chapter 5   Navigation in the WorkStation

Getting to the Windows

The WorkStation windows open as follows:

- ▪ Connect to the WorkStation. This opens the WorkStation Manager window
  For details about connecting, refer to chapter "WorkStation Connection".

- ▪ In the WorkStation Manager window, select a module from the **Module** menu. Select a sub-schema or List of Entities from the **Metamodel** menu
  For details about modules, refer to chapter "Introduction", subchapter "Architecture - the Modules"

- ▪ In the WorkStation Manager window, double click on an entity in a sub-schema or in the List of Entities to open the Entity dialog box
  For details about different ways to access the Entity dialog box, refer to subchapter "The Entity Dialog Box".

- ▪ Now choose a description. This will open a new WorkStation window
  For details about the descriptions listed in the Entity dialog box, refer to subchapter "The Entity Dialog Box"

The various WorkStation windows are adapted to the selected description. All the different types of description windows are described in this manual. Not every module necessarily accesses all of them.

The following schema illustrates navigation when you first enter the WorkStation:
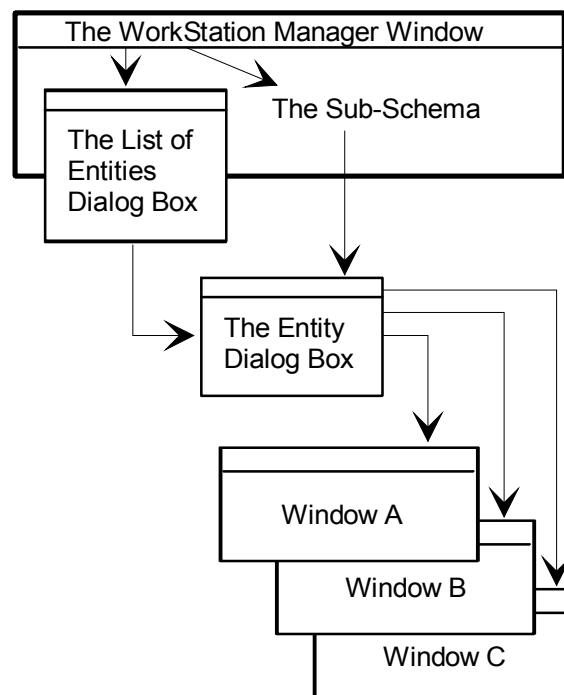
Multi-Windowing

The multi-windowing feature of the WorkStation allows you to:

- Open several windows at the same time

- Manage open windows via different menus: in the WorkStation Manager window via the **Windows** menu and in other WorkStation windows via the Cascaded and Pop-Up **Entity** menus.

- Re-activate each of these windows from any open window

```
┌─────────────────────────────────────────────┐
│         The WorkStation Manager Window        │
└─────────────────────────────────────────────┘
                                  ┌──────────────┐
                                  │ The Windows  │
                                  │ Menu         │
  ┌──────────────┐                └──────────────┘
  │ The Cascaded │
  │ or Pop-Up Menu│
  └──────────────┘
  ┌──────────────┐
  │ Window A     │
  └──────────────┘
     ┌──────────────┐
     │ The Pop-Up   │
     │ Menu         │          ┌──────────────┐
     └──────────────┘          │ Window B     │
                               └──────────────┘

        ┌──────────────┐
        │ Window C     │
        └──────────────┘
```
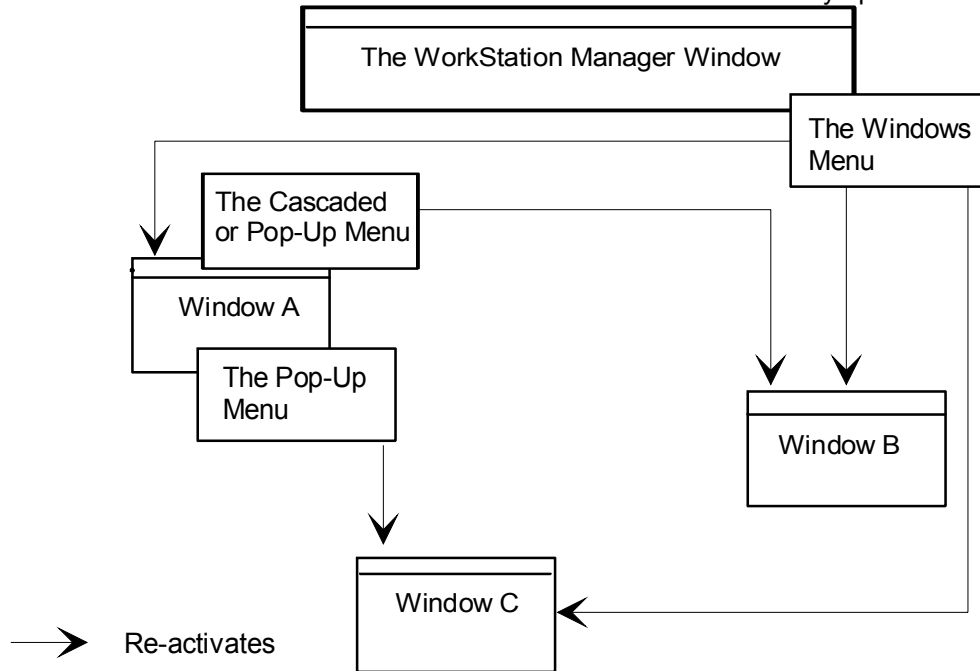
──────▶ Re-activates

To re-activate means to redisplay a currently open WorkStation window (visible, hidden or minimized).

Re-activate WorkStation windows (even if they have been hidden or iconized) via the:

- Windows menu in the WorkStation Manager window

- *Checked commands* in the Cascaded and pop-up menus

Hyper-Navigation

Use the hyper-navigation feature of the WorkStation to open any window using the relationships between the information they display.

The main entity is the entity you are working on. The related entity is an entity used in the description of the main entity. For example, in the Data Element Calls description of a Segment, the Segment is the main entity and the Data Element is the related entity.

Main Entity


```
┌─────────────────────────┐                          ┌─────────────────────────┐
│       Window A          │                          │       Window A          │
├─────────────────────────┤                          ├─────────────────────────┤
│  The Cascaded Menu      │                          │   Pop-Up Menu of        │
│  Main Entity  ▶         │                          │   the main entity       │
└─────────────────────────┘                          └─────────────────────────┘

              ┌─────────────────────────┐
              │       Window B          │
              ├─────────────────────────┤
              │  Pop-Up Menu of         │
              │  the related entity     │
              └─────────────────────────┘

              ┌─────────────────────────┐
              │       Window C          │
              ├─────────────────────────┤
              │                         │
              └─────────────────────────┘
```

→ Follow this arrow to any window concerning the same occurrence of the main entity.

→ Follow this arrow to any window concerning the occurrence of the related entity.
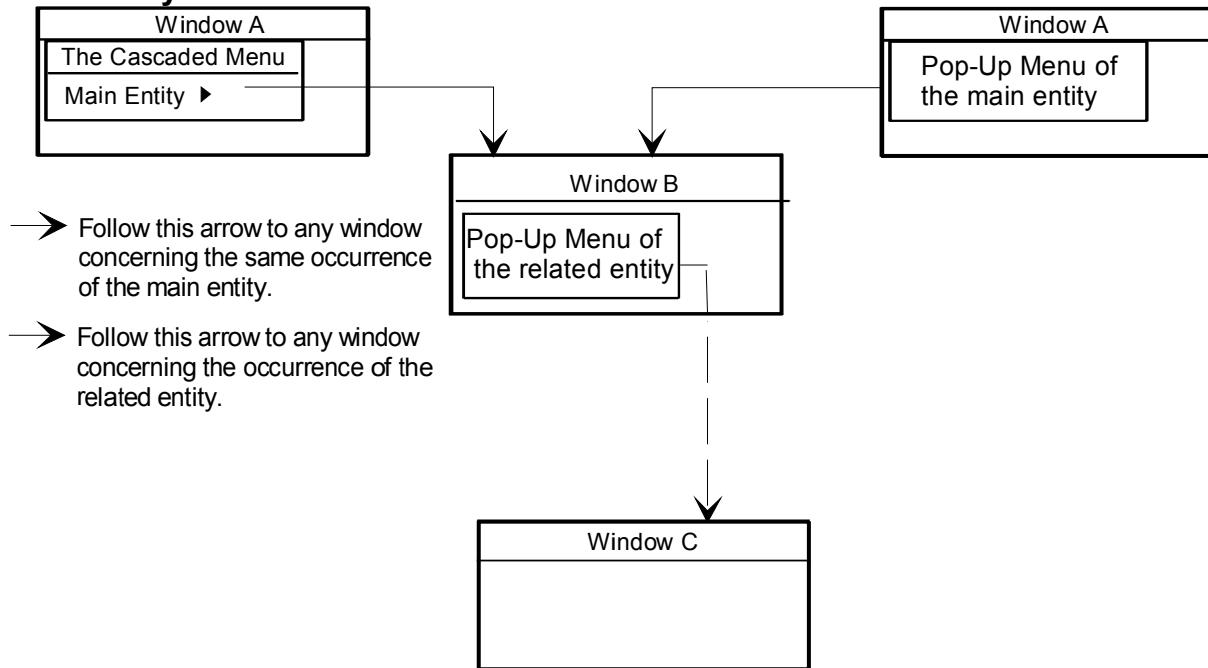
To display a Pop-Up menu, place the cursor in the field that contains an occurrence of the main or the related entity and click the right mouse button.

Open a window via the *unchecked commands* in the Cascaded menu and in the pop-up menu.

```
┌─────────────────────────┐
│       Window A          │
├─────────────────────────┤
│  The Cascaded Menu      │
│  Main Entity  ▶         │
│     Other Occurrence... │
└─────────────────────────┘

                    ┌──────────────┐
                    │  The Entity  │
                    │  Dialog Box  │
                    └──────────────┘

              ┌─────────────────────────┐
              │       Window B          │
              ├─────────────────────────┤
              │                         │
              └─────────────────────────┘
```

→ Follow this arrow to another occurrence of the main entity.

Related Entity

```
┌─────────────────────────────────┐
│           Window A              │
│  ┌──────────────────────┐      │
│  │  The Cascaded Menu   │      │
│  ├──────────────────────┤      │
│  │  Related Entity...   │      │
│  └──────────────────────┘      │
└─────────────────────────────────┘
```

```
┌──────────────────┐
│                  │
│  The Entity      │
│  Dialog Box      │
│                  │
└──────────────────┘
```
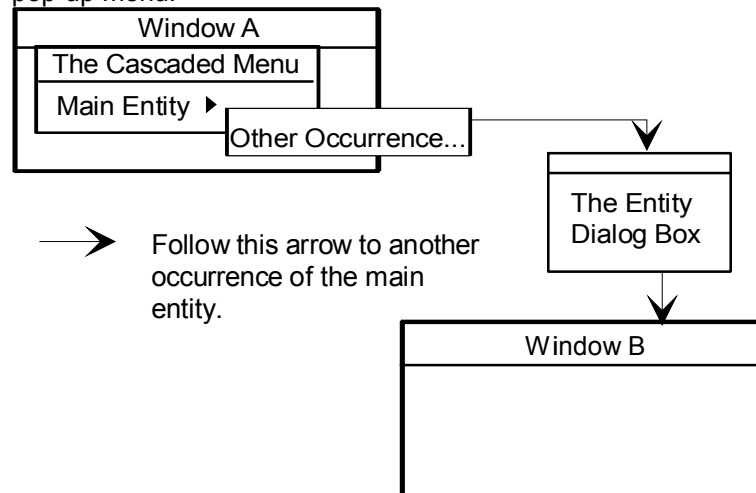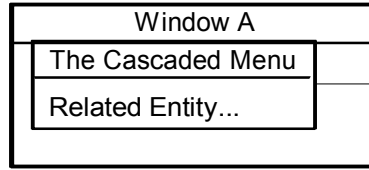
First, place the cursor in the field that
contains the related occurrence.
Then select the Related Entity...
command.

```
┌─────────────────────────────────┐
│           Window B              │
│                                 │
│                                 │
│                                 │
└─────────────────────────────────┘
```

→   Follow this arrow to any
    occurrence concerning
    the related entity.

DSREF000352A
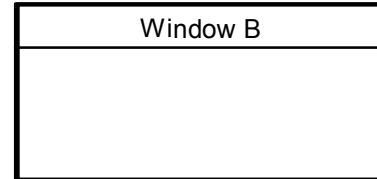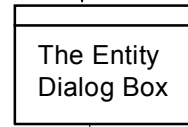
The Entity Dialog Box

You can access the Entity dialog box of an entity via the WorkStation Manager window. This is done via:

- The list of entities, in one of the following ways:
  - Double-click on an entity in the List of Entities (the scroll bars can be used to move in the list)
  - Select an entity from the List of Entities and **Entity...** on the menu bar
  - Select an entity from the List of Entities and click the **Open** button
  - Select an entity from the List of Entities and click **ENTER**.

- A sub-schema in one of the following ways:
  - Double-click on an entity
  - Select an entity and the **Entity...** command on the menu bar
  - Select an entity and **ENTER**

You can also access the Entity dialog box from other WorkStation windows (definition, description, X-reference) by using the Entity menu.

The Entity dialog box allows you to navigate within the WorkStation and access its windows:

- Host Occurrence Lists (host connection only)

- Local Description Lists

- Occurrence Definition (host connection only)

- Occurrence Descriptions (local descriptions only if local connection)

- X-References (host connection only)

The Entity dialog box displays different list boxes, depending upon whether or not you are connected to the host.

Local Connection
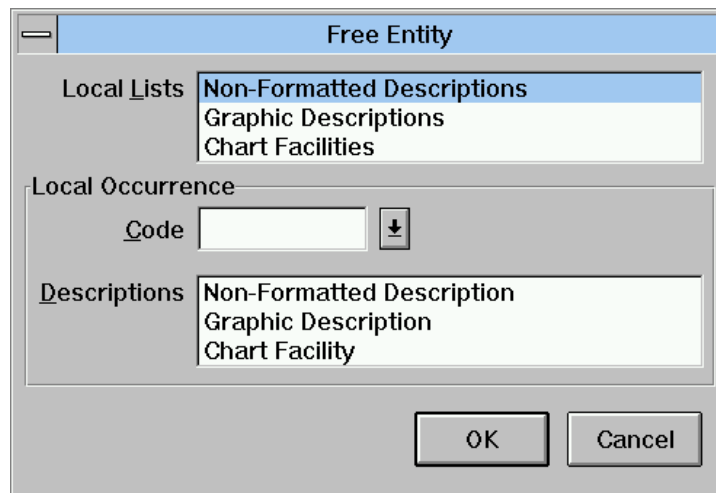
Only local lists and descriptions are displayed. You cannot access the host Definition window, nor the host lists or cross-references. On the other hand, you can work on previously downloaded host occurrences, or create drafts via the Local List window.

Host Connection

DSREF000352A
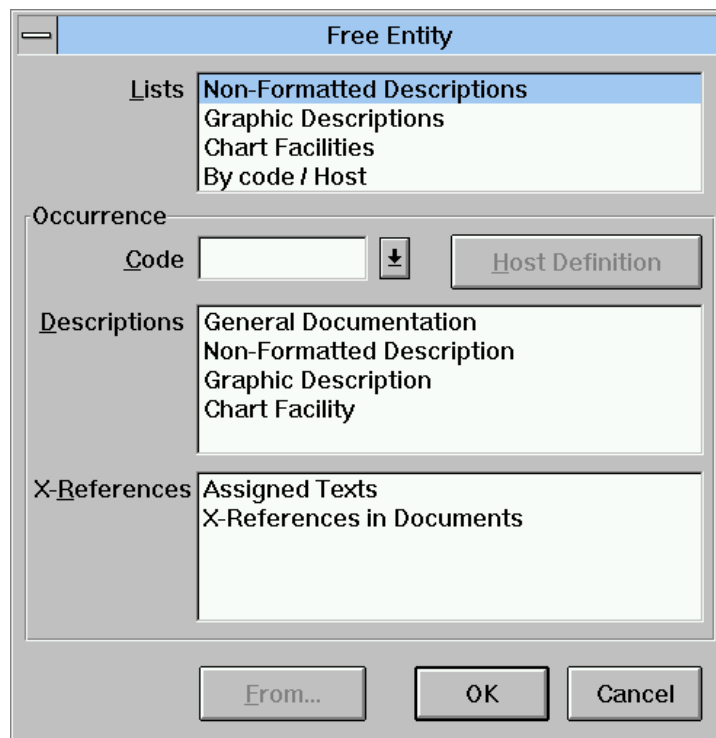
Local Lists/Lists

With a local connection, this list box contains only lists of local descriptions**.**

With a host connection, this list box contains host occurrence lists and local description lists. Drafts are local descriptions, so they appear in local lists together with downloaded host occurrence descriptions.

There are several ways to access these lists:

- Select a list and click on **OK**, **From...** (if it is active) or **ENTER**
- Double click on a list

Local Occurrence/Occurrence

Code
There are several ways to enter a code in this field:

- Simply type the code in the edit box
- Click the arrow located to the right of the Code field to display the list of codes which have already been used and click on one of these codes to enter it in the Code field

A maximum of twenty codes are memorized by the WorkStation (twenty is the total number of codes for all of the entities combined). These codes are specific to a user and are saved when you exit the WorkStation.

The following commands are exclusive:

Host Definition
This button, available only when connected to the host, allows you to access the definition of the occurrence specified in the Code field.
This button opens the Definition window and closes the Entity Dialog Box.

Descriptions
This list box displays all the descriptions available for the entity in the selected Module.

Once a code has been entered in the Code field, there are several ways to access a description:

- Select the description and **OK**, **From...** (if it is active) or **ENTER**
- Double click on the description

When a user connected to the host calls a local description which has not yet been downloaded onto the PC, a dialog box opens and offers to download that description for update or consultation.

Downloading for update locks the description on the host. If the required description is already locked, downloading can only be done for consultation, since another user is currently working on it.

If a disconnection occurs during downloading, the user cannot access the local description which is incomplete. However, downloading can be resumed. For complete details, refer to chapter "The Local List Window".

NOTE: For security reasons, you cannot download:

- A description of an occurrence defined in a library which is hierarchically higher than your connection library

- A description of an occurrence for which a logical lock has been positioned in a library of your connection network

X-References

This list box displays all the X-references available for the entity (available only with a host connection).

Enter a code in the Code field. There are several ways to access a X-reference:

- Select the X-reference and **OK**, **From...** (if it is active) or **ENTER**

- Double click on the X-reference

From...   This button is available according to which list related item is selected from the Entity dialog box. For a complete description of the From... dialog box, refer to subchapter "Auxiliary Dialog Boxes".

OK / Cancel   Select **OK** to open the requested window and close the Entity Dialog Box. Select **Cancel** (or ESC) to close the Entity dialog box and ignore any selection entered.

NOTE: When both the OK and From... buttons are active, press From... to display the From... dialog box and OK button to bypass the From... dialog box.

When the From... button is unavailable, the From... dialog box is bypassed.

When the OK command button is unavailable, the From... dialog box is required.

The default button (i.e. the button which is automatically activated when you press Enter) has a thick black surrounding line.

The Cascade Entity Menu

The menu bar of most WorkStation windows contain the **Entity** menu:
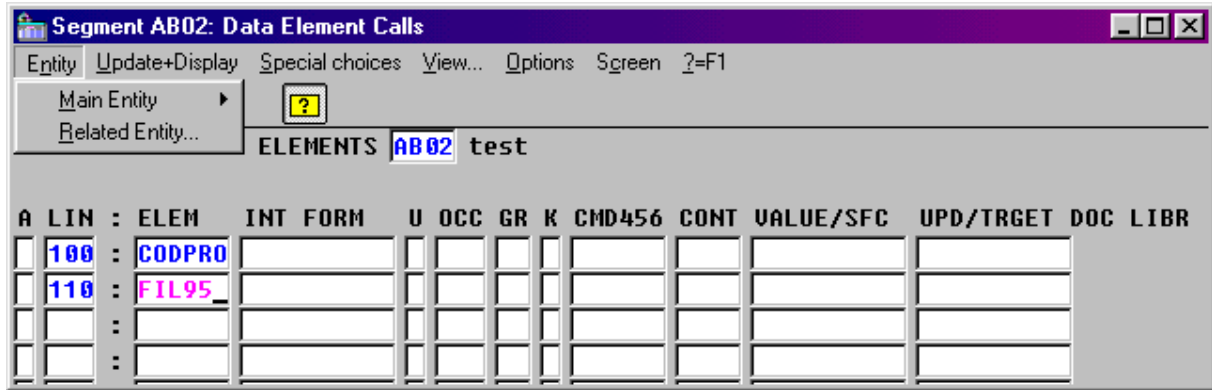
The **Main Entity** submenu is Cascaded as it contains a set of related commands. To display these commands, select the **Main Entity** submenu.

Lists, Descriptions and X-references are also Cascaded because they contain related commands.
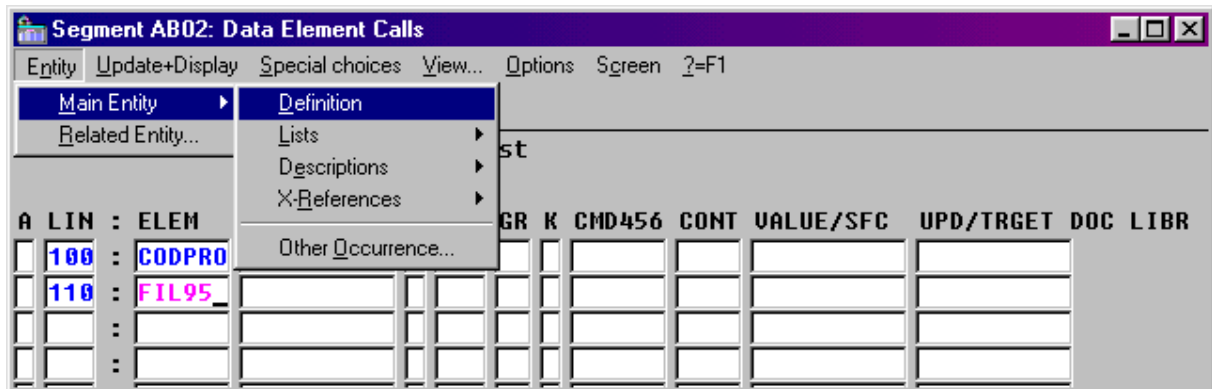
The **Related entity...** submenu is active if you place the cursor in a field containing an occurrence of the related entity. This command leads you to the Entity dialog box of the related entity.

EXAMPLE: In the Data Element Calls description of a Segment, the Segment is the Main Entity and the Data Element is the Related Entity. Place the cursor in the desired Data Element occurrence field and select **Related Entity**... to display the Entity dialog box of the Data Element occurrence.

Entity Menu with a Host Connection:

Entity	Main Entity	➔ Definition...	
		Lists	➔*Available lists*
		Descriptions	➔*Available descriptions*
		X-References	➔*Available x-references*
		————————————	
		Other Occurrence...	
	Related Entity...		

DSREF000352A

NOTE   With a local connection, only Lists and Descriptions are available.

Main Entity   This menu leads you to the definition, lists, descriptions, and X-references of the currently accessed occurrence, according to the selected module and connection mode.

If any of these windows is already open, a check mark will appear by the corresponding command. Click a checked command to **re-activate** the corresponding window (which is hidden or iconized). Click an unchecked command to **open** the corresponding window.

To access the Entity dialog box of the occurrence you are working with, select **Other Occurrence...** in the **Main Entity** Cascaded submenu of the **Entity** menu.

Related Entity...   This command leads you to the Entity dialog box of an entity related to the occurrence currently being accessed. Place the cursor in a field containing an occurrence of the related entity and select it.

NOTE   The **Related entity...** command is not active in the Formatted Description of a Volume if the cursor is positioned in the "Title, Option, Font, Comments or Selection" field as it may contain occurrences of very different entities.

The Pop-Up Entity Menu

If you click with the right mouse button in a field which displays an occurrence of a main or of a related entity, a pop-up menu will appear. This menu leads you to the definition, lists, descriptions, and X-references of the occurrence of the main or related entity. In the example below, we clicked on a related entity occurrence, which is here the Main Entity, the Segment code.
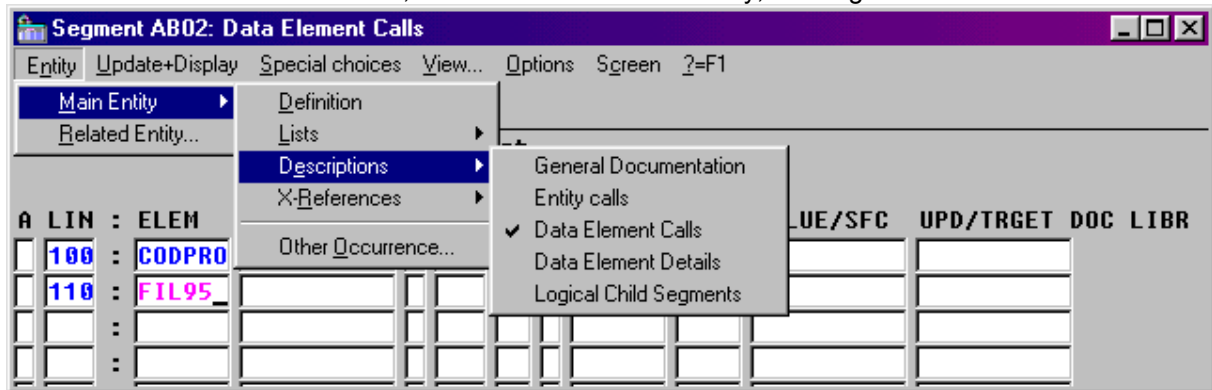
NOTE   When hyper-navigation is triggered from a field which does not contain an occurrence code, the description and X-reference submenus are de-activated.

In the following example, we clicked on an occurrence of the related entity, in this case a Data Element appearing in the CORUB column.
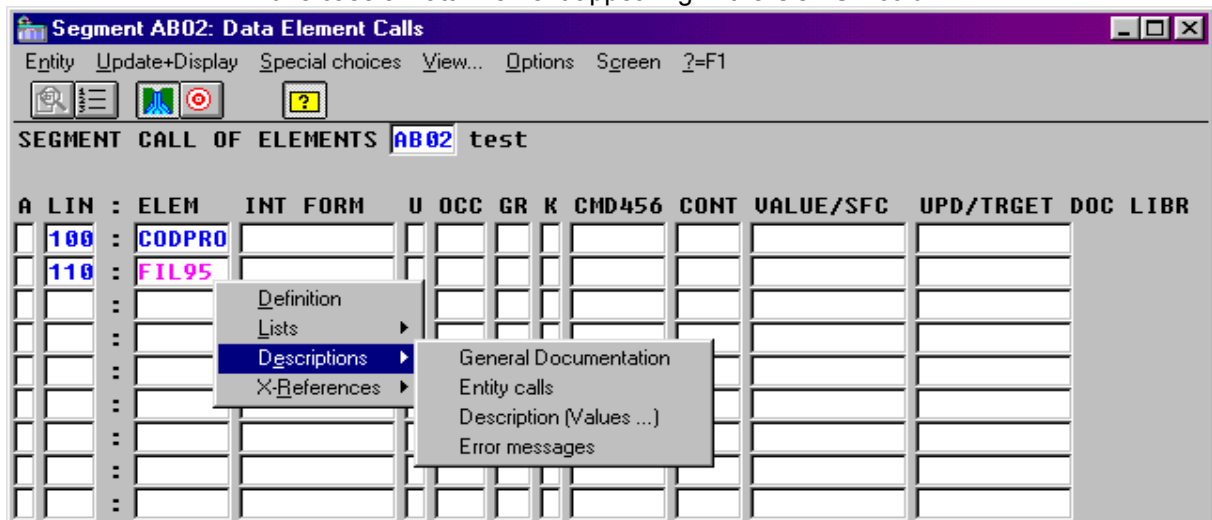
This pop-up menu is also a Cascaded menu. For more details on Cascaded menus, refer to the subchapter "The Cascaded Entity Menu".

Auxiliary Dialog Box

The From... Dialog Box

The From... dialog box appears via the Entity dialog box or via the **Entity** Cascaded menu (only when the From... dialog box is required).

In the From... dialog box, you can enter a display start key (required in certain cases) for a list or X-reference. This key is used to enter the occurrence code, name, line number, etc. to determine the start of the display.

The content of the From... dialog box is variable. Two examples are given below.

Request of an occurrence list by code:

Request of X-references for a Data Element, e.g. "Used in Screens":

NOTE: The hierarchical organization must be followed when entering information in this box. For example, input in the Section field requires that the hierarchically higher fields also be entered (i.e. the Working check box and the Occurrence code field).

OK

Click to save changes made in the From... dialog box.

Cancel

Click to close the From... dialog box without saving changes.

SECTION 3   DESCRIPTION OF THE WORKSTATION WINDOWS

Chapter 6   The Host Occurrence List Window

Functionalities

Use the Host Occurrence List window to:

- Consult the Specifications Database contents formatted in occurrence lists in real time

- Select occurrences to access (view or edit) their descriptions or their cross-references

- Select occurrences to associate them with objects (icons or occurrence-bearing links) of a Graphic Description during matching operations

You can select an entity occurrence code from a host list in order to place it in a Definition window, a Formatted Description or a Graphic Description using drag-and-drop.

In Definition windows or Formatted Descriptions, only occurrence codes can be loaded, while in Graphic Descriptions the code and the name are simultaneously transmitted to icons and occurrence-bearing links.

- Simultaneously open the host list and the Definition window or the Formatted Description or Graphic Description of an entity

- Select the occurrence code (or the name in the case of a Graphic Description) from the host list by clicking the left mouse button, then move the mouse to the required window, keeping the button pressed

- Release the mouse button on a field which will accept an occurrence code of the same entity for Definitions and Formatted Descriptions or on the icon or link to be entered for Graphic Descriptions: the code (and the name in a Graphic Description) appear simultaneously in the field or on the icon/link.

For more details on lists and descriptions in the Entity dialog box, see the chapter "Navigation in the WorkStation", subchapter "The Entity Dialog Box".

NOTE: When the local list is open, the entity list is de-activated. If you open a Definition window or a Description from a local list, you must access the host list via the **Entity** menu for the local list.

Getting to the Window

A host connection is required.

Select one of the **Host Occurrence List** options in the List section of the Entity dialog box.

For details on the Entity dialog box, see the chapter "Navigation in the WorkStation", subchapter "The Entity Dialog Box".

For the occurrence list of the following entities:

Entity	Type
◆Screen	__ *(blank)*
◆C/S Screen	C
◆Business Component	S
	FM: Communications monitor folder mode
	MV: Communications monitor simple mode
	E : Error host
	Other types exist, consult your documentation.
◆Folder	F
◆Folder View	FV

Select the command **Lists by type,** when it is available, by entering the appropriate type in the **From...** box.

The Host Occurrence List Window Menu Bar

Entity
This Cascaded menu contains commands which allow you to access the definition, lists, descriptions and X-references of the occurrence selected from the list.

Display
This menu contains several commands which allow you to choose the point from which the list is displayed.

Match!
This command is active only when the Host Occurrence List has been requested from a Graphic Description window for matching purposes.

View...
This command leads you to the View dialog box. From this dialog box you can select a Library sub-network and the list display type.

Screen
This menu allows you to copy and print the current window.

System Menu
In addition to standard commands, the system menu allows you to consult the context of the current window.

Function Keys and Mouse Control

For the use of function keys and mouse in this screen, see the Appendix at the end of this manual.

The Entity Menu

Entity   After you select an occurrence (i.e. click on a line in the list), this Cascaded menu contains commands to access the definition, lists, descriptions and cross-references of the selected occurrence or of another occurrence of this entity.

You may also right-click on an occurrence code and the pop-up Entity menu appears on the list. (Also, a double click on an occurrence code will open its entity dialog box.)

For more details on this menu, see the chapter "Navigation in the WorkStation".

NOTE   In local mode you cannot download host occurrences which have a code containing the special characters listed in the chapter "Definition", subchapter "Functionalities".

The Display Menu

Display   **Next page**
                     Same page
                     _____

                     Start
                     From...
                     Repositioning   ➜   **Type of memorization**

Next page   Displays the next page in the host list.

   NOTE   Pressing ENTER has the same effect.

Same page   Redisplays the same page. This command is used to display the latest modifications made to the host list. For example, use this command to display new occurrences which may have been defined after the window was opened.

Start   Displays the list from the start.

From...   Opens the From... dialog box in which you enter the position from which to display the list.

                     Each position indicated in this dialog box will be memorized. These positions can be requested again via the **Repositioning** choice.

                     For a complete description of the From... dialog box, see the chapter "Navigation in the WorkStation", subchapter "Auxiliary Dialog Boxes".

Repositioning   ➜   **Type of memorization**

                     Opens the Position Memorization dialog box. In this box, select the type of memorization you want:

                     Explicit Memorization
                       This type of memorization memorizes each display position specified via the **From** command of the **Display** menu as a sub-choice of the Repositioning choice.

                     Implicit Memorization
                       This type of memorization memorizes each current position you obtained through a simple transmit as a sub-choice of the Repositioning choice.

   NOTE   You can select both types of memorization in the Position Memorization dialog box. The Repositioning choice can store up to 20 positions while the window remains open.

The Match! command

Match!   This command is available when the Host Occurrence List is requested from a Graphic Description window. It is used to match an occurrence selected in the list with an icon or occurrence-bearing link previously selected on the graphic description. (For complete instructions, refer to chapter "The Graphic Description Window".)

                     During a matching operation, the **Match!** command may be used several times without closing the window. To perform another match, select another object in the graphic description, select another occurrence in the list and select **Match!**

The View... Command

View...   Opens the View dialog box.

For full details, see the subchapter "Auxiliary Dialog Boxes".

The Screen Menu

Screen Menu   **Copy Host Screen**
Print Host Screen...

Copy Host Screen

Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...

Prints the current Host Screen.

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

Auxiliary Dialog Boxes

The View Dialog Box

This dialog box allows you to select a part of the Specifications Database sub-network (i.e. the view from which the host occurrence list will be drawn or the scope of the search by keyword) via the "icon" buttons. This dialog box also allows you to select a display option via radio buttons.

NOTE   You can not open more than one View dialog box. The corresponding View menu is therefore disabled if a View dialog box is open.
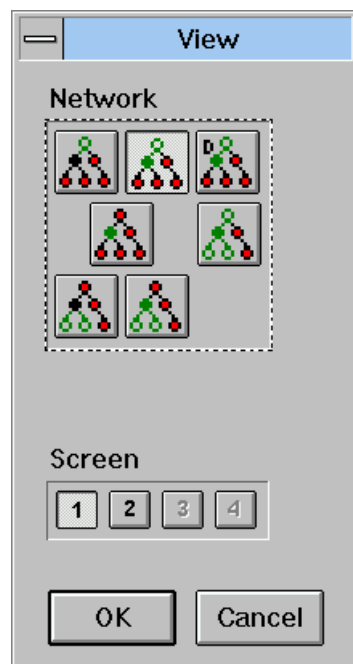
Network

Meaning of the icons (from top left to bottom right):

OPTION CORRESPONDS TO -->	HOST OPERATION CODE (FIRST CHARACTER)
greater levels	>
greater & equal levels (default)	C
greater & equal levels with duplicates	A
selected library only	U
whole hierarchical branch	I
lower levels	<
lower & equal levels	Z

NOTE   When this dialog box opens, the current view of the selected sub-network is indicated by the selected button. To change the network view, select another button.

Screen

The buttons numbered from 1 to 4 correspond to the host operation code and to 4 different presentations of the same screen.

NOTE   The significance of the view type depends on the list. Refer to the Character Mode *User Interface* Guide*,* Chapter "Initializing, Modifying and Ending Work Context", Subchapter "Modifying the Display". Inactive options are disabled.

OK

Click this button to save changes made in the dialog box.

Cancel

Click this button to return to the Host Occurrence List window without saving changes made in the dialog box.

Chapter 7   The Local List Window

Functionalities

This window presents the list of descriptions downloaded on your workstation for a specific kind of entity.

There can be several local lists for a given entity, each one for a specific kind of description (e.g. Graphic Description, Non-Formatted Description). These lists are sorted by occurrence code.

Local descriptions are classified into categories for each description displayed in the Local List window. The category to which a description belongs is indicated by an appropriate symbol in column U:

∗	Update authorized
X	Updatable and cross-referenced graphic descriptions only
BLANK	Consultation only
@	Draft
~	Intermediate status The description is already locked on the host, whereas the download is not yet completed.

The Local List window is used for a number of operations:

- Consult information on local descriptions

- Access (view or edit) local descriptions

- Upload local descriptions to the Specifications Database

- Create and edit draft descriptions (i.e. local descriptions NOT related to a host occurrence).

- Copy a local description onto another updatable local description

- Replace an updatable local description with another local description

- Transfer ownership of a description to another user

- Clear a local description and download it again from the Specifications Database (revert to the host description)

- Unlock a host description and delete the corresponding local description

- Delete local descriptions

Depending on the category (column U), not all menu commands will be available. For example, a draft description cannot be uploaded, and a consultation-only description cannot be replaced with another description.

Getting to the Window

As local lists are managed at local level, i.e. at WorkStation level, the Local List window is accessed in local connection as well as in host connection.

Choose a local list in the List group of the Entity dialog box.

For details about the Entity dialog box, refer to chapter "Navigation in the WorkStation", subchapter "The Entity Dialog Box".

The Menu Bar of the Local List Window

Each command in the **Description** and **Host-Access** menus is available only for specific categories of descriptions. In this subchapter, an explanation of the commands is given along with the symbols of the categories for which the commands are active. For the definition of the category symbols, see subchapter "Functionalities".

Entity...   This command leads you to the Entity dialog box.

Description   This menu contains commands which open the description window, create and rename draft descriptions and copy/replace/delete selected local descriptions.

Host-Access   This menu manages the host communication for uploading, unlocking, downloading and transferring descriptions.

Function Keys and Mouse Control

For the use of function keys and mouse in this screen, see the Appendix at the end of this manual.

The Entity... Command

Entity...   Opens up the Entity dialog box for the selected occurrence in the list.

The Description Menu

Description   **Open**
                         Information
                         ──────────────
                         Create Draft...
                         Rename Draft...
                         ──────────────
                         Copy to...
                         Replace by...
                         ──────────────
                         Delete

Open (∗, blank, x, @)

Opens the window corresponding to the selected description (graphic description, text description, etc.).

You can also open the window by double-clicking on a description of the list (or by selecting the description then pressing ENTER). The Information dialog box must remain closed.

Information (∗, blank, x, @, ~)

Opens the Information dialog box which displays the following information for the selected description:

• User code of the description owner

• User authorization to consult or update the description

• DSMS change

• Date, time and session of the description download on the PC

• Date, time and session of the last description upload on the host

• Date and time of the last local save

• Information as to whether the local description or draft description is empty or not.

The Information dialog box remains open when you select another description. The information in the dialog box changes with respect to the selected description.

Create Draft...(@)

Creates a draft description (i.e. a local description NOT related to a host occurrence). However, a draft description depends on the connection context (Database, Session, Library and Product Code and Change Number) in which it is created.

The **Create Draft** command opens a dialog box where you enter its code and name. Certain characters cannot be used in the draft code: for these codes refer to chapter "The Definition Window", subchapter "Functionalities". If the chosen code already exists in the local list, creation is not possible.

Once you click OK, the dialog box closes and the new draft is listed in the Local List window.

Rename Draft...   Allows you to change the name (the code cannot be changed) of the draft.

Copy to...(∗, BLANK, x, @)

Copies the selected description (source) onto another updatable description of the same type (target description).

Warning: the content of the source description cancels and replaces the content of the target description (example of the Text entity: if you copy text TEXT1 which has two sections AA and BB onto text TEXT2 which has three sections 01, 02 and 03, the result will be TEXT2 with only two sections, AA and BB).

NOTE: To perform a copy, you must be the owner of the target description. The target description must have the same Product Code and Change Number as those of your current connection context (**Context** in the System menu).

A dialog box, containing two sections, opens up:

• The Source section indicates the code of the source description you have selected

• Enter the code of the target description in the Target section

If the target description is located in a Database, Session, or Library which is different from your current connection context, enter them in the corresponding input fields (type over the displayed values).

Furthermore, if the target description does not exist, you may create a draft description.

You can also select a different target context through the Help button which opens up a dialog box containing three list boxes:

1. Databases available for your user code.

2. For the Database selected in the first list box, locally "known" Sessions.'

3. For the Session selected in the second list box, locally "known" Libraries.'

The target context selected by default appears in these list boxes.

After changes have been made, a confirmation dialog box is displayed (OK = confirm, Cancel = ignore changes).

Replace by...(∗, @)

Replaces the selected description (target) with another description of the same type (source).

Warning: the content of the source description cancels and replaces the content of the target description (example of the Text entity: if you replace text TEXT1 which has two sections AA and BB with text TEXT2 which has three sections 01, 02 and 03, the result will be text TEXT1 with three sections 01, 02 and 03).

NOTE: To perform a replacement, you must be the owner of the target description. Target descriptions must have the same Product Code and Change Number as the current WorkStation window context (**Context** in the System menu).

When **Replace by** is called, a dialog box similar to the preceding one is displayed (except that all targets are replaced by sources).

Delete (blank, @)

Deletes the selected description: a dialog box requests confirmation.

NOTES   To   delete   a   **"description"**   downloaded   locally   for   update (∗ or **x)**, first delete its content then upload the description via the **Host-Access** menu (see below). A dialog box asks you if you want to delete the local file corresponding to the description.

To delete an **"occurrence"** downloaded locally for update **(**∗ or **x)**, first delete all   lines   depending   on   the   occurrence   (X-references,   comments   and descriptions).   Then upload the "empty" description to the host and, in the Definition window, select **Delete** from the **Occurrence** menu. See chapter "The Definition Window" for a complete description of this window.

The Host-Access Menu

Host-Access   **Deferred Upload...**
                         Immediate Upload...
                         ─────────────────
                         Unlock
                         ─────────────────
                         Clear and Download
                         ─────────────────
                         Transfer to ...

                         These commands all require a host connection except for **Deferred Upload**.

Deferred Upload...
Immediate Upload...(∗, x)

                         Select one of these commands to upload the description into the Specifications Database. Other applications cannot communicate with the host during upload. You must close the window of the description you want to upload.

                         A deferred upload does not require a host connection. Once a deferred upload is requested, the request is stored in an upload queue. Once connection to the host is established, the actual upload can be performed.

                         Selection of one of these commands may have one of the following results:

                         1. The display of messages, if:

                             ▪ The local description is empty

                             ▪ The local description is similar to the description which is already in the Specifications Database

                             ▪ Links have been deleted from a graphic description and you have not selected **Operate links**. In this case there is a chance that the links in the graph and the actual links that exist in the Database are not the same. For example:
                                 ♦ A link is shown in the graph but does not exist in the Specifications Database
                                 ♦ A link exists in the Specifications Database but is not shown in the graph

                             You may choose to keep these differences. For more details of graphic descriptions, refer to chapter "The Graphic Description Window".

                         In each of these cases, a dialog box opens up with a message corresponding to the problem.

2. The opening of a dialog box:

>   This dialog box asks you whether the description is to be unlocked in the Specifications Database.
>
>   If you perform the upload for archiving or safety purposes, or simply in order to "refresh" the host description, and if you intend to update the description further, you must upload the description without unlocking it.
>
>   On the other hand, if your work is finished and if you want to make the description available to the other users, you must unlock it.
>
>   Refer also to chapter "Introduction", subchapter "Data Sharing and Consistency".
>
>   You are also asked if you wish to delete the local description file after uploading and unlocking the description.

NOTE: When a description is uploaded and unlocked without local deletion, the access mode for the corresponding local file is changed to Consultation Only.

After an upload of this type, the system verifies that the Technical Unlock has occurred. If the upload was not correctly performed, it is not possible to delete the corresponding local descriptions.

See also **Delete** in the Description menu.

Deferred Upload...(∗, x)

Save the update request in an upload queue. To start the effective upload of the description, select **Deferred Upload** from the **Host-Access** menu in the WorkStation Manager window. For more details, refer to chapter "The WorkStation Manager Window", subchapter "The Deferred Download/Upload Requests Window".

Immediate upload...(∗, X)

Uploads the description immediately. The Upload/Download icon appears on the icon bar. The Upload/Download icon is displayed on the icon bar.

You cannot request an immediate upload for a description for which you have already requested a deferred upload or download. You must send or cancel the deferred requests before requesting the immediate upload.

Unlock...(∗)   Unlocks the description selected on the host and deletes it on your workstation without uploading it.

The unlock results in restoration of the initial version of the host description, i.e. the version which existed before the description upload (and any update).

Only one description can be unlocked at the same time.

Clear and Download(∗, blank, ~)

If you have wrongly modified a local description, or have downloaded a description which has subsequently been modified in view mode only, you can refresh it and retrieve the initial version. This command does not modify the description update category. (For example, if the description is in view mode only and you wish to update it, you must delete it locally and request clear and download from the Entity dialog box.)

No communication is possible between the host and any other application during download.

A confirmation message appears: "Download is overDo you wish to access the Description?" If you confirm, you directly access the new local description.

If disconnection occurs during downloading, you cannot access the description, which is incomplete, but you will be able to select the command again.

Transfer to ...(∗, x)   This command is used to transfer ownership of the selected description from the owner to another user.

As ownership transfer directly updates the Specifications Database, it is available only with a host connection. The selected description must be owned by the connected user.

This command opens a dialog box in which you enter the code of the new owner. Click **OK** to confirm, which then runs an application on the host. An icon for authorization transfer appears in the icon bar and remains displayed during the "Transfer to..." operation.

As soon as your request is recorded at the host level, the local list is re-displayed to show the new owner.

Only one description ownership can be transferred at the same time.

See also chapter "Introduction", subchapter "Data Sharing and Consistency".

Chapter 8 The Definition Window

Functionalities

Use the Definition window to:

- Consult and/or update occurrence definitions in the Specifications Database in real time

- Select occurrences in order to match them with objects (icons or occurrence-bearing links) in a graphic description, and to define new occurrences for this purpose

- Consult the host Definition online help

Whatever the type, the Definition window displays the following information:

- The occurrence Code, Name, and explicit Keywords, if any

- Host environment information (i.e. Library and Session, and also any occurrence lock)

- A field for standard error messages generated by the host

Other fields are displayed according to the entity and the module. Some of the fields displayed in the Definition windows are controlled by the host. For a complete description of the Definition window, use the on-line help.

The colors of all these fields can be changed via the **Logical Screens** dialog box in the WorkStation Manager window. Refer to the chapter "The WorkStation Manager Window", subchapter "The Auxiliary Dialog Boxes".

Getting to the Window

A host connection is required.

Enter an occurrence code in the Code field of the Entity dialog box and press the Host Definition button.

For more details on different ways of entering occurrence codes in the Entity dialog box, see the chapter "Navigation in the WorkStation", subchapter "The Entity Dialog Box".

Occurrence Name and Code Restrictions

The following symbols are not allowed in occurrence **names** since they are used as delimiters in the system:

    Two consecutive semi-colons   (;;)

The following symbols are not allowed in occurrence **codes** because the names of local files are created using these codes, and the special characters may have a special meaning for the PC operating system:

Semi-colon	(;)
Colon	(:)
Comma	(,)
Quotes	(")
Apostrophe	(')
Equals sign	(=)
Plus sign	(+)
Square brackets	([and])
Pipe	(|)
At sign	(@)
Paragraph mark	(§)
Asterisk	(*)
Question mark	(?)
Period	(.)
Blank	( )
Underscore	(_)
Forward slash	(/)
Backslash	(\)
Greater than sign	(>)
Less than sign	(<)
Power of 2	(²)

Accented characters are not permitted. They are automatically changed to their non-accented form on validation.

Occurrence Code Input made easy

You can use the drag and drop technique to fill in the occurrence code in a Definition window (target window) from a host list, a Formatted Description or another Definition window (source window).

- Open simultaneously the Definition window and the Formatted Description, the host list or another Definition window.

- Select an occurrence code in the source window by clicking the mouse's left button and drag the mouse to the target window while keeping the button pressed.

- Release the button above a field which accepts an occurrence code of the same entity.

The Definition Window Menu Bar

Entity   This Cascaded menu contains commands used to access the definition, lists, descriptions and cross-references of the occurrence selected in the list.

Occurrence   This menu contains commands used to create, modify or delete an occurrence.

Match!   This command is active when a Definition window is selected from a Graphic Description window in order to associate an occurrence with an object in the graph.

Options   This menu contains commands used to display the source occurrence or the target occurrence.

?=F1   This command accesses host online help.

Screen   This menu allows you to copy and print the current window.

System Menu   **In addition** to standard commands, the system menu allows you to consult the context of the current window.

Function Keys and Mouse Control

For the use of function keys and mouse in this screen, see the Appendix at the end of this manual.

The Entity Menu

Entity	Main entity	➔ Definition...	
		Lists	➔ *Available lists*
		Descriptions	➔ *Available descriptions*
		X-references	➔ *Available X-references*
		─────────────────	
		Different occurrence...	
	Related entity...		

For full details of this menu, see the chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The Occurrence Menu

Occurrence   **Create/Modify**
                    ─────────────
                    Create
                    Modify
                    Delete

Create/Modify   Creates or modifies the occurrence depending on the contents of the Specifications Database.

Pressing ENTER has the same effect.

It is possible to create or modify the definition of another occurrence of the same type without calling the Entity dialog box. Type over the displayed occurrence code with the code of the second occurrence:

- If the second occurrence already exists, it's values will be modified according to those displayed

- If it does not exist, it will be created with these values

See also the **Options** menu.

Create   Creates the occurrence. If the occurrence already exists, an error message is displayed.

Modify   Modifies the occurrence. If the occurrence does not exist, an error message is displayed.

Delete   Deletes the occurrence. If the occurrence does not exist, an error message is displayed.

NOTE   Everything related to the occurrence (X-references, documentation, descriptions) must first be deleted. To delete local descriptions, see the chapter "The Local List Window", subchapter "The Menu Bar of the Local List Window" under The **Description** Menu (**Delete**).

The Match! command

Match!   This command associates an occurrence defined in the Definition window with an object (icon or occurrence-bearing link) in the graphic description.

Select an object (icon or occurrence-bearing link) in the graphic description and then select **By Definition** in the **Reference** menu. For additional information, refer to chapter "the Graphic Description Window".

During a matching operation, the **Match!** command may be used several times without closing the window. To perform another match, select another object in the graphic description, select another occurrence in the list and select **Match!**

NOTE   If you modify the definition, the **Match!** command will become inactive. You must transmit the modification to the host (select **ENTER** or **Create/Modify** from the **Occurrence** menu) to re-activate this command.

The Options Menu

Options

Stay on Source
Go to Target

This menu allows you to specify which occurrence is to be displayed after the creation (or modification of the definition) of an occurrence by duplication, or after the deletion of an occurrence from the Definition window of another occurrence. The checked command indicates the current mode.

Duplication procedure:
Type the target occurrence code over the source occurrence code. Attention should be paid to the correspondence of description line identifiers.

For full details on duplication, see the *Character Mode User Interface Guide*:
- Chapter "On-Line Updating", Subchapter "Possible Update Actions,"
- Chapter "Text Editing Facilities".

Stay on Source   Displays the definition of the source occurrence after the update is performed. This is the default option unless you access the definition via **By Definition** in the **References** menu of a Graphic description.

Go to Target   Displays the definition of the target occurrence after the update is performed. This is the default option when you access the definition via **By Definition** in the **References** menu of a Graphic description.

The Screen Menu

Screen Menu   **Copy Host Screen**
                      Print Host Screen...

Copy Host Screen

Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...

Prints the current Host Screen.

The Help Command

?=F1   This command accesses the online help.

For more information, see subchapter "The Auxiliary Window: The Help Window".

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

Auxiliary Window: Help Window

Two types of help are available on the Definition windows:

- Input help, used to fill in unprotected fields with an authorized value

- General help on the Definition window

Input Help

To access the Input Help window corresponding to the Help on an input field, position the cursor in the input field and choose **?=F1** from the menu bar or press F1. A Help page corresponding to the relevant field appears.
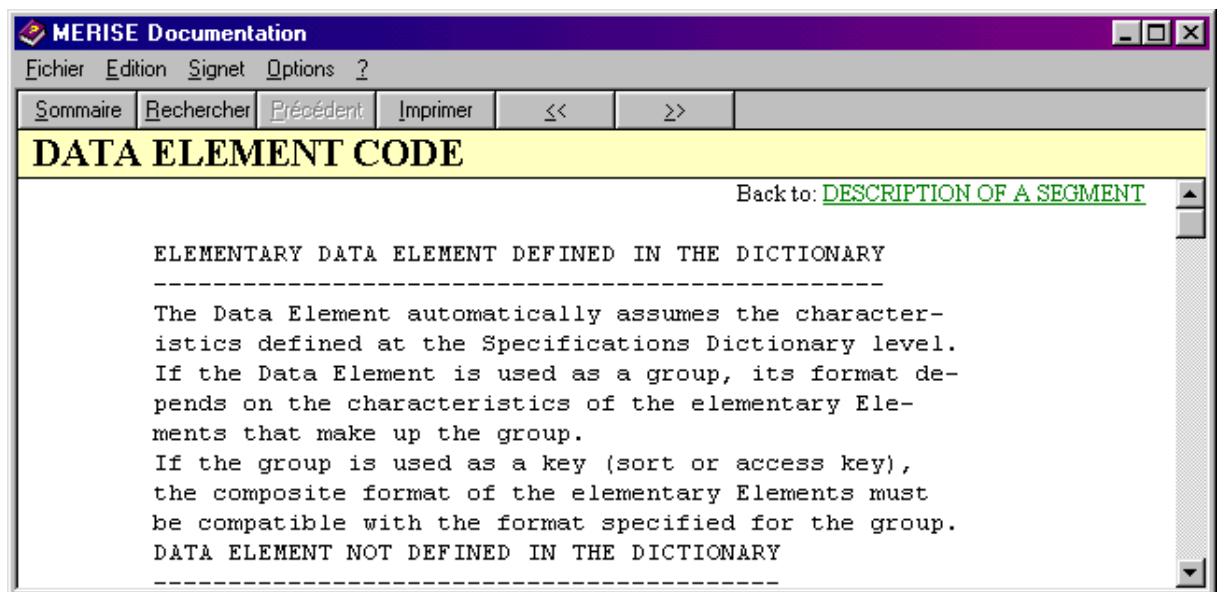
If values have been defined for the field, the Help page displays the various authorized values with explanations. If you select a value (underlined and located to the left of the screen) it is input directly and the Help page closes.

The value entered in a field is referenced against the list of authorized values for this field. This verification is performed each time the cursor exits a field. If the value entered is not one of the authorized values, an error message appears requesting confirmation of the entry. If the entry is confirmed, the invalid value is accepted (it may subsequently be refused by the host) and the cursor is positioned on the next field. If the entry is not confirmed, the cursor is repositioned in the field for a new input.

General Help

To access the General Help window for a Definition window, position the cursor anywhere but in an input field and choose **?=F1** from the menu bar or press F1.
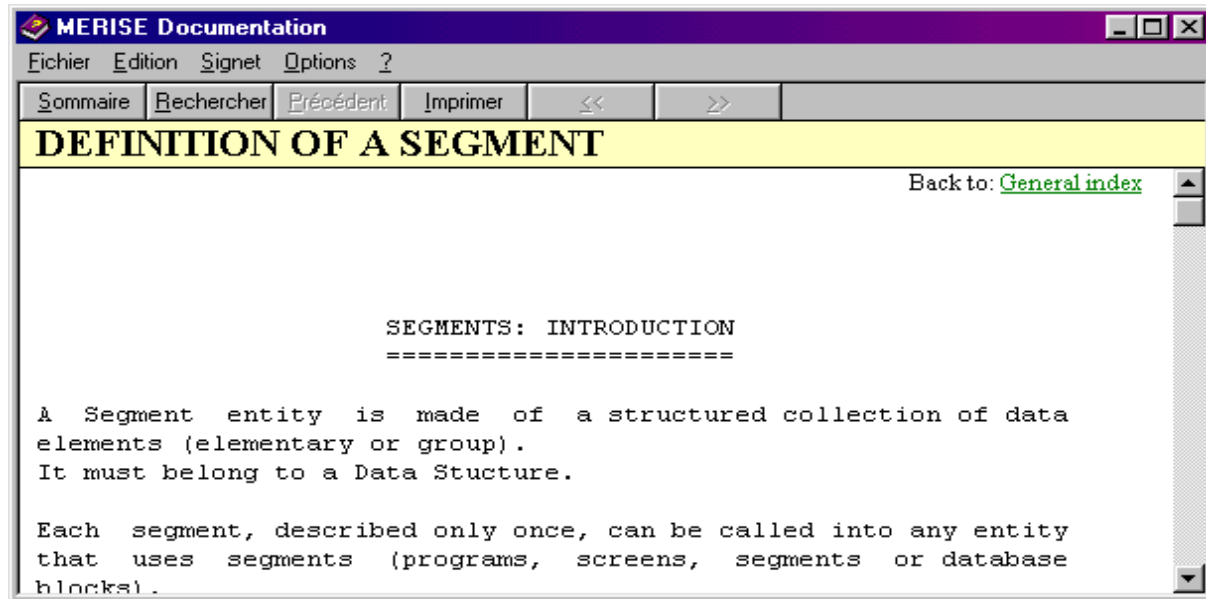
The list of fields in this Definition window appears at the end of the page. These are hypertext links you can use to read online help on these fields.
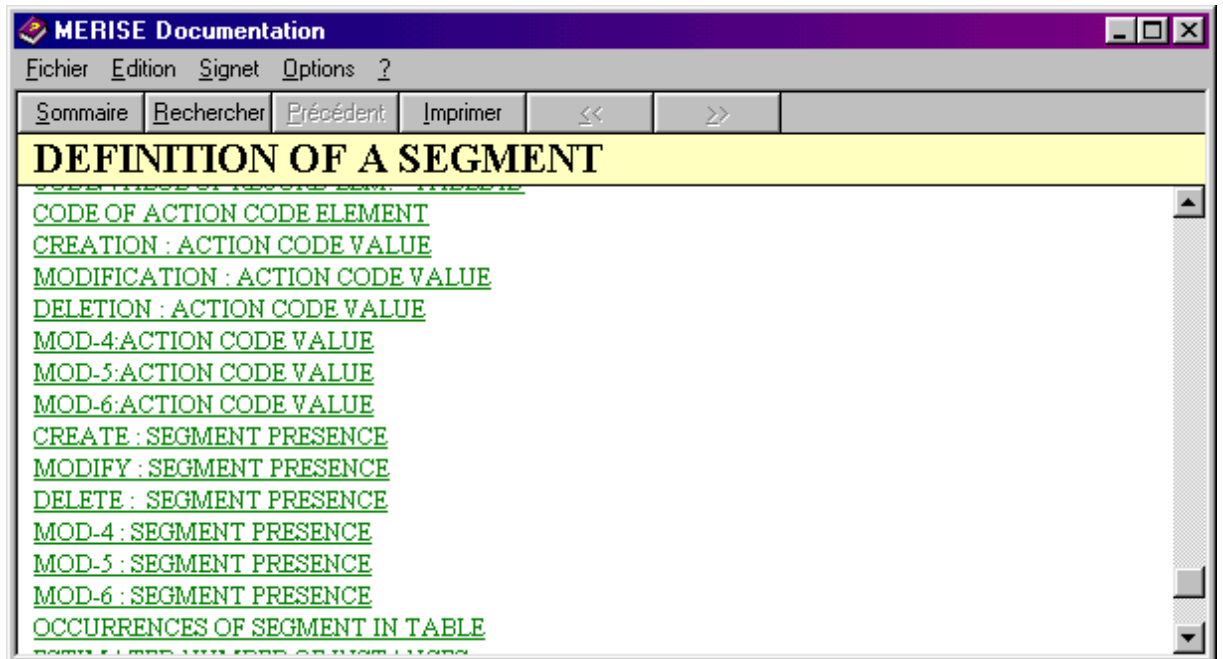
For more details on navigation in the on-line help, refer to chapter "Metamodels", sub-chapter "Methodological Help".

Chapter 9   The Cross-References Window

Functionalities

The Cross-References window allows you to consult the cross-references of an occurrence. The Cross-Reference lists vary according to the type of entity being cross-referenced.

Getting to the Window

A host connection is required.

Enter an occurrence in the Code field of the Entity dialog box and select a type of cross-reference from the list of cross-references in the Entity dialog box.

For details about different ways of specifying an occurrence code in the Entity dialog box, refer to chapter "Navigation in the WorkStation".

The Menu Bar of the Cross-References Window

Entity   This Cascaded menu contains commands that allow you to access the definition, lists, descriptions and cross-references of the occurrence selected in the list.

Display   This menu contains several commands which allow you to choose the point from which the list is displayed.

Match!   *This command is inactive in this window.*

View...   This command leads you to the View dialog box. From this dialog box you can select a Library sub-network and a list display type.

Screen   This menu allows you to copy and print the current window.

System Menu   In addition to standard commands, the system menu allows you to consult the context of the current window.

Function Keys and Mouse Control

For the use of function keys and mouse in this screen, see the Appendix at the end of this manual.

The Entity Menu

Entity   **Main entity**   ➔ **Definition...**
                                           Lists   ➔ *lists*
                                           Descriptions   ➔ *descriptions*
                                           X-references   ➔ *X-references*
                                           ────────────────────
                                           Different occurrence...
                    Related entity...

For full details of this menu, see the chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

Display   **Next Page**
                    Same Page
                    ───────────────

                    Top
                    From...
                    Repositioning   ➔   **Type of memorization**

Next Page   Displays the next page of the Cross-Reference List.

        NOTE: Pressing the ENTER key has the same effect.

Same Page   Re-displays the same page. This command is used to display an updated version of the Cross-Reference List. For example, use this command to view new occurrences which may have been defined after opening this window.

Top   Displays the list from the beginning.

From...   Opens the From... dialog box in which you enter the position from which the list is to be displayed. Each position you indicate in this dialog box will be memorized.

                    For a complete description of the From... dialog box, refer to chapter "Navigation in the WorkStation", subchapter "Auxiliary Dialog Boxes".

        NOTE: This command is not available for all types of cross-references.

Repositioning   ➔   **Type of memorization**

                    Opens the Position Memorization dialog box. In this box, select the type of memorization you want:

                    Explicit Memorization
                        This type of memorization memorizes each display position specified via the **From** command of the **Display** menu as a sub-choice of the Repositioning choice.

                    Implicit Memorization
                        This type of memorization memorizes each current position you obtained through a simple transmit as a sub-choice of the Repositioning choice.

        NOTE   You can select both types of memorization in the Position Memorization dialog box. The Repositioning choice can store up to 20 positions while the window remains open.

The View... Command

View...   Opens the View dialog box.

                         For a complete description of the View dialog box, refer to chapter "The Host List Window", subchapter "Auxiliary Dialog Boxes".

System Menu   **Copy Host Screen**
                 Print Host Screen...
                 Context…

Copy Host Screen   Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...   Prints the current Host Screen.

Context...   Displays the current context.

                         For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

Chapter 10   The Graphic Description Window

Functionalities

You use the Graphic Description window to create, update and print diagrams associated with the Application Design Methodology. You can also validate graphic descriptions with regard to the methodology in use and integrate them into the Specifications Database.

For further details on entities with graphic descriptions, refer to the online help. Graphic descriptions vary with the selected entity.

When used for a Free Entity, the Graphic Description window provides restricted functionalities. For more details, refer to chapter "The Free Entity".

You can use the drag and drop technique to fill in the occurrence code in a Definition window (target window) from a host list, a Formatted Description or another Definition window (source window).

- Open simultaneously the Definition window and the Formatted Description, the host list or another Definition window.

- Select an occurrence code in the source window by clicking the mouse's left button and drag the mouse to the target window while keeping the button pressed.

- Release the button above a field which accepts an occurrence code of the same entity.

A graphic description involves three different operations: Building, Matching, and Link/Cross-Reference Updating.

Building

If you want to update a description which is defined on the host, it must be downloaded for update. Since graphic descriptions are managed locally, building does not require a connection to the host, if the description has previously been downloaded to the PC. You may also choose to create a Draft description of a graph. This can be done locally. (See chapter "The Local List Window".)

To build a graphic description you use icons and links specific to the entity and description of the methodology in use.

A number of building features are available:

- Create, move, modify and delete icons and links
- Assign, modify and delete the names of icons and links
- Move and delete groups of icons and links
- Cut, copy and paste sections of a graphic description onto another graphic description
- Scroll with the help of scroll bars within the graphic description
- Display various scales and zoom

- Use various grid sizes
- Set parameters of the components used in the graph
- Print all (or part) of a graphic description

Matching

Once the graphic description is complete, it must become stable. To do this, it must be integrated into the Specifications Database. In other words, the Database is expanded by matching the icons and links of the graphic description with occurrences in the Specifications Database. For more information, refer to subchapter "The Menu Bar of the Graphic Description Window", the **References** menu.

Since Matching updates the Specifications Database directly, all commands involved in the matching operation are only active if you are connected to the host.

You must specify which icon or link corresponds to which occurrence in the Specifications Database. There are three ways to do this:

- Direct matching when you already know the code (and name) of the occurrence which will reference the icon or link
- Access the Host Occurrence List window in order to match the icon or link with an already existing occurrence
- Access the Definition window in order to create a new occurrence and match it to the icon or link, or match the icon or link to an already existing occurrence

In the Specifications Database these matches are translated into cross-references between each occurrence matched with an icon or link and the occurrence being graphically described.

NOTE   In practice, the building and matching operations may occur concurrently. However, manipulations on matched icons or links are restricted in order to maintain data integrity at the host level. For instance, icons or links cannot be removed from the graphic description if they are matched with occurrences.

Link/Cross-Reference Updating

Links drawn in graphic descriptions are translated into cross-references between host occurrences.

Link/cross-reference updating requires a host connection. For more information, refer to subchapter "The Menu Bar of the Graphic Description Window", the **References** menu.

Parameter Definition Levels of a Graphic Description

WARNING

Graphic descriptions are stored in the Specifications Database in an internal format which cannot be read on the host. This description must UNDER NO CIRCUMSTANCES be modified on the host. IBM accepts no responsibility for any inconsistencies resulting from modifications of this type.

You can set the preferences (colors, formats, options) and styles (of icons, links and comments) for a graphic description at different levels:

For all entities

• In the WorkStation Manager window, from the **Preferences** menu, choose **Graph**

  ▪ Set the user default preferences for all graphic descriptions of **all entities**

  ▪ These preferences are disabled by parameters defined at the level of:
    a specific entity
    a graphic description
    a component of a graphic description

  ▪ For more details, refer to subchapter "Auxiliary Dialog Boxes", the **Preferences** dialog box

For a special entity

• In the Graphic Description window, from the **File** menu, choose **Preferences**

  ▪ Define default preferences for all graphic descriptions of a **specific entity**

  ▪ These preferences are disabled by parameters defined at the level of:
    a graphic description
    a component of a graphic description

  ▪ For more details, refer to subchapter "Auxiliary Dialog Boxes", the **Preferences** dialog box

For a specific graphic description

• In the Graphic Description window, from the **Style** menu, choose a type of component (e.g. link).

  ▪ Set the default styles for **all component(s) of the same type** in the graphic description

  ▪ These styles are disabled by parameters defined at the level of a specific component

  ▪ For more details, refer to subchapter "Auxiliary Dialog Boxes", the **Default Style** dialog boxes for Icons/Links/Comments

Component (icon/link/comment)

• In the Graphic Description window, double-click the required component to open a dialog box

  ▪ Define the style for the **selected component(s)**

    For more details, refer to subchapter "Auxiliary Dialog Boxes", the **Icons/Links/Comments** dialog boxes.

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Getting to the Window

Select a graphic description from a List group or from the Descriptions group in the Entity dialog box.

The Menu Bar of the Graphic Description Window

Preliminary Remarks

In the Graphic Description window, certain commands remain selected until you select a new one. This allows you to perform for example repeated manipulations (see for example **Icon** in the **Draw** menu). The message "The previous command is still selected" is displayed in this case. To go to a different manipulation, you must either exit the current command, or press ESC or the right mouse button before selecting another command from the menu bar.

The **Draw** and **References** menus are only active when the description has been downloaded for update.

NOTE   Occurrence codes and names must follow the rules in chapter "Definition", subchapter "Occurrence Name and Code Restrictions".

Entity   This menu contains commands which select or redisplay another description of the current occurrence, open the Entity dialog box for the occurrence containing the graphic description or the Entity dialog box which references the selected graphical component.

File   This menu contains commands which save or restore the graphic description on your workstation, print it and validate links.

Draw   This menu contains commands for using the various components which can be integrated in your specific graphic description, as well as the commands for inserting links, free lines and comments.

Edit   This menu contains commands that allow you to select, cut/copy/paste, move or delete a graphical component or group of components.

References   This menu contains commands that match occurrences from the Specifications Database to graphic description icons/links and update names and links.

Display   This menu contains the commands which manage the graphic description display type: zoom, select display size, expand/contract the graph area, repaint, display toolbar and icon box.

Style   This menu contains commands that allow you to assign default values to graph components: icons, links, comments, and grid and to open the Preferences dialog box (in which you can change colors/formats/options).

System Menu   In addition to standard commands, the system menu allows you to consult the context of the current window.

The Entity Menu

Entity   **Main entity**   ➔ **Definition...**
                                    Lists   ➔ *Available lists*
                                    Descriptions   ➔ *Available descriptions*
                                    X-references   ➔ *Available X-references*
                                    ─────────────────────
                                    Different occurrence...
                    Related entity...

For full details of this menu, see the chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The File Menu

File   **Save**
                    ─────────────

                    Restore
                    ─────────────

                    Print Layout...
                    ─────────────

                    Select pages to print
                    ─────────────

                    Proportional scale
                    ─────────────

                    Free scale
                    ─────────────

                    Print Parameters …
                    ─────────────

                    Print
                    ─────────────

                    Printer...
                    ─────────────

                    Validate

Save   Saves the graphic description on your workstation. If a Match! (see the References menu below) was performed before the save, all menus will be grayed while the X-references are being saved.

NOTE   If the Updating application has detected a host disconnection, it automatically switches to local connection. To connect to the host again, select **Host Connection** in the **Host-Access** menu in the WorkStation Manager.

Restore   Returns to the last save of the graphic description, replacing the current version of the graph being edited with the last version saved on disk.

Print layout…

You can "divide" the width of the graphic description ("column" wise) into several pages. The graphic description will be divided into a number of "lines" (horizontal subdivisions) corresponding to the number of "pages" defined.

If you choose 0, the page layout is not specified. If you choose 1, the full graphic description is sprinted on a single page. From 2 to 6, the **width** of the graphic description is divided into 2 to 6 **across** pages.

The height is set according to the page orientation. For example, if you choose landscape orientation, selecting 3 displays three pages across and three pages down on the screen. You will see nine pages in total.

NOTE   The format and orientation of a page are set according to selections made via the options in the **Printer** command. The number of divisions (in pages) and the graph orientation are memorized in the graph.

Select pages to print

Once the page layout is set, you need to select the pages to be printed. Select this menu and click on the page(s) to be printed. Then, the page is displayed in reverse video. Clicking again on the page clears the selection.

Proportional scale

Allows you to define the section of the graphic description to be printed. The system will pick up proportions based on the size and orientation of the printer page (See Printer options.) Draw a rectangle around the section you wish to print by moving the mouse, holding the left button. When you release the button, the section to be printed is highlighted.

Free scale   Allows you to "freely" define the section of the graphic description to be printed.

NOTE   To change the section to be printed, press ESC (or the right mouse button) and redefine the section.

Print parameters… Displays a dialog box which allows you to set print options.

The dialog box displays the various types of icons drawn in the graphic description. For each icon, you can select the element which you wish to print : occurrence code, name in plain text, attributes (independently of the code) or the icon itself.

You may also print the code of an occurrence bearing-link, the attributes associated, the name of a link or the labels of free lines.

Other options are available: print of title (i.e. the name of the occurrence being graphically described), frame and comments.

Choose **Save** to save your options and close the dialog box.

Print   Once Printer options and Print options are set, is choice allows you to print all or a section of the graphic description. This is done in two steps: selecting the section and printing.

Once one of the following commands is selected (**Selection of the pages to print, Proportional or free scale**), this menu allows you to request the actual printing.

NOTE   If pages are not selected to print, the whole graph will be printed by default.

A dialog box opens up where the printing procedure can be canceled using the **Cancel** button. As long as this dialog box remains open, printing is in progress.

Printer...   Open a dialog box listing the printers connected to your PC.

You can select print options in this dialog box, such as **Paper size**, and **Orientation (Portrait/Landscape)** to print a graph.The parameters defined will be saved in the file containing the description of the graph. Afterwards, each time you print the graph, the printer is automatically configured to the parameters defined for the graph.

If no page orientation has been selected for the printing of your graph, the default orientation selected is that one specified in MS/Windows.

Validate   Validates the graphic description according to the methodology in use.

For more details and examples concerning validation, refer to subchapter "Validation of a Graphic Description".

The Draw Menu

Draw   *List of available icons*
                            ———————————

                            Link
                            Free line
                            Comment
                            Column   *(according to entities)*
                            Time column   *(according to entities)*

You can use the Preferences dialog box and the **Style** menu to define your own default options for the grid, icons, links and comments before editing your graphic description.

List of available icons

Displays all available icons for the entity and the specific graphic description which you are working on.

Select an icon and click in the graphic description to insert it at the required location.

This command remains active: if you click in another location, an icon of the same type is inserted.

NOTE   The icons can appear twice in the list, once on their own and again accompanied by the term Attributes in parentheses. Attributes are data appearing in the occurrence definition. If you select the icon with attributes and enter them, the attributes are displayed on the icon (in addition to the code and name) in the graphic description. For more details about attributes according to entities, refer to the online help.

                         The characteristics of an icon inserted into the graph can be changed via the Icon dialog box. Refer to chapter "Auxiliary Dialog Boxes".

Link   To create a link, click on the source icon (or on a comment), then on the target icon (or on a comment). If you wish to include mid-way points on the link, click on the source icon, then on the locations where you wish to place the mid-way points, and finally on the target icon.

                         If there are several mid-way points, only the first point will appear and will have the link handle/square and name. The other points are however saved and appear when you select the link.

                         For a pipe link, the handle/square is also positioned on the first mid-way point. If there is no mid-way point, the handle/square is positioned on the link elbow and in this case is only used to select the link: it is only moved if one of the ends is moved.

                         To draw a reflexive link (valid only for certain entities), select this command, click on the source icon, click on one or more mid-way points near the source icon and then click again on the source icon.

WARNING: If you place a mid-way point of a curved link inside a rectangle including an icon, the icon will be considered as both source and target icon. The link created will be drawn as an arc.

- The system automatically checks that the link you try to create is compatible with the methodology in use.

- The link display varies with:
  - The linked icons
  - The link direction

Once the link has been placed on the graph, its characteristics can be changed via the Link dialog box. Refer to subchapter "Auxiliary Dialog Boxes".

Free line   Allows you to draw lines without linking them to icons.

To draw a free line, click on the graphic description where you want the line to start, then on the different places where you want mid-way points to appear. To end the line, click on an end point.

If there are several mid-way points, only the first point will appear on the screen and will bear the handle and the name. The other points are however saved and appear when you select the free line.

You can modify the characteristics of a free line via the Link dialog box. Refer to subchapter "Auxiliary Dialog Boxes".

Comment   This facility allows you to enter short text comments on the graphic description.

Select this command, then click on the place in the graph where you want to place comments and move the mouse diagonally, holding the left button down, towards the bottom-right in order to "stretch" the comment area to the desired size. This will draw a box in which you can place comments. Release the left mouse button and a dialog box appears for your comments. Once you have entered text and pressed OK button, the dialog box closes and the text appears within the area defined. If the Frame option is checked in the default Comment Style dialog box (Style menu), the text appears within a rectangle.

Here is an example which shows how text appears in comments	Here is an example which shows how text appears in comments	Here is an exam which

For complete information concerning the Comment dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Column   This command allows you to create containers (grouping icons). The command
                            is not available for all entities: when it is, its label can vary according to the
                            entity and/or the methodology used. For instance, the label is "Column" for the
                            Free Entity as well as for all MERISE entities, when available. For more details,
                            refer to the online help.

                            You can:

                            1. Create a chart of containers:

                            Select this command. Click where you want the chart of containers to be
                            positioned. The first container is then inserted. In order to add **n** containers,
                            simply click **n** times inside the first container. Containers will be added to the
                            right of the initial one.

                            2. Add **n** containers to an existing chart of containers:

                            Select this command. Click **n** times anywhere within the chart. New containers
                            will be added to the right of the initial chart.

                            3. Move containers:

                            If there is only one container in a chart, click once on the container and drag it
                            to the new location. If there are several containers in the chart, select the entire
                            chart (point the cursor to the upper-left corner and drag it to the lower-right
                            corner: the chart will change color) and move (click on the chart and drag) it to
                            the new location.

                            4. Change the size of a container:

                            Click once on the container (even if it is in a chart of containers) to select it and,
                            using the cursor, drag the handles (rectangle shapes) on the container to
                            change its width and length.

                            5. Change the size of a container by copying the size of other containers in the
                            same chart, and centering icons within a container:

                            Double-click on the container whose size you wish to modify or whose icons
                            you wish to center. A dialog box will open. For a description of this dialog box,
                            refer to subchapter "The Container Dialog Box".

                            6. Deleting a container

                            After selecting a container, choose **Delete** from the **Edit** menu. A dialog box
                            asks you if you want to delete the icons located in the container. Displaying this
                            dialog box is optional. In the Preferences dialog box (**Preferences** in the **File**
                            menu) set the **Display confirmation messages** item in the Option part to
                            Yes/No.

NOTE   Enlarging a container in a chart does not move the icons it contains.
                            Adjoining containers will accordingly be nudged with the icons they contain if
                            they are part of the same chart (otherwise they will overlap).
                            When deleting a container, you are asked to confirm the deletion of the icons
                            it contains. The default answer is NO.

Time Column   This command is not available for all entities: when it is, its label can vary according to the entity and/or the methodology used. For more details, refer to the online help.

For instance, the label is "Time Column" for the Free Entity as well as for all MERISE entities, when available. When MERISE methodology is used, a time column is used to indicate periodic processing cycles. It is generally placed to the left of a chart of columns.

Graphic components managed by this command are manipulated in the same way as the previous command.

The Edit Menu

Edit   **Select group**

            Cut
            Copy
            Paste

            Move
            Delete

COMMENTS ON THE CLIPBOARD

It is possible to work on groups of components. These edit operations can be performed inside the same graphic description or between two graphic descriptions of the same entity.

The **Copy** and **Cut** commands transfer the group selected from the graphic description to the clipboard where it remains until replaced by another group.

The clipboard is a temporary storage area in the memory.

The **Paste** command calls the group from the clipboard and pastes it into the graphic description. This command is only active if the content of the clipboard is compatible with the graphic description displayed.

Whatever the content of the clipboard, it can be pasted into PAINTBRUSH or other programs running under the same graphic environment as WorkStation.

Select a group

Draw a rectangle around the group you wish to select by moving the mouse diagonally, holding the left button down, towards the bottom-right. When you release the mouse button, the elements inside the rectangle are selected. As a result, the color of the objects outlines has changed.

The links between the selected icons are also selected even if they overlap the rectangle.

If a selected icon is linked to a non-selected icon, this link is automatically re-positioned if you move the icon. When a Cut is performed, the link is lost.

NOTE

▪It is possible to modify the size of a selected group without modifying the other parts of the graph. When a group is selected, the icons are displayed with a specific shape. The selection rectangle is displayed with handles that allow to enlarge or reduce its size according to the mouse movement. The fixed point is the center of the selection rectangle. This operation modifies the shape and the position of the selected icons and links while the general disposition of the group remains unchanged.

Cut   Removes the selected group from the graphic description and transfers it to the clipboard.

An icon (or link) matched with an occurrence defined in the Specifications Database cannot be cut.

Copy   Transfers the selected group from the graphic description to the clipboard. The selection mark (a rectangle) is held.

Paste   Calls the group contained in the clipboard and pastes it into the graphic description. This command is only active if the content of the clipboard is fully compatible with the graphic description. Otherwise, the operation fails.

Once a group of objects is pasted, it is displayed in a selection rectangle so that it can be moved.

    NOTE

- Each entity represented graphically in the selection (by an icon or a link) must also be managed in the target graph

- Each non-entity bearing link and each container must have an equivalent in the target graph

- The copied graphic components (icons, links, containers) adapt to the format of the target graph. A component cannot therefore have the same graphic appearance after it has been copied onto the target graph

- If the selection contains icons connected by a link, it must also be possible to connect them in the target graph

After selecting Paste, point the cursor at the position where you wish to paste. If you hold the left mouse button down, the rectangle surrounding the group is displayed, allowing you to adjust the position of the group before releasing the button to paste the component. Once they have been pasted, icons and links are drawn in the same way as in the target graph.

Move   Moves a selected group to within a graphic description. Click on the selected field (in reverse video) using the left mouse button and drag it to the required position.

For more details about this functionality, refer to subchapter "Editing Tips".

Delete   Delete the selected component(s). An icon (or link) matched with an occurrence cannot be deleted.

The References Menu

References   **By Host Occurrence List**
                        By Definition
                        Direct Match
                        Delete Match
                        ────────────────
                        Update Names
                        Update Link/X-Ref.

All commands in this menu require access to the Specifications Database and are therefore only accessible with a host connection. This menu is used to match components of a graph with occurrences in the Specifications Database.

Matching allows you to go from a local graphic description to an actual view of graph cross-references in the Specifications Database.

NOTE   The graphic description icons of a Free Entity and certain other entities (see the relevant documentation for your methodology) cannot be matched with host occurrences.

Click on the icon (or link) before selecting a command. The icon (or link) changes color when it is selected, and changes color again after matching.

By Host Occurence List

Select the icon (or link) to be matched before activating the command: the host occurrence list opens (at the beginning of the list)

To match the icon (or link) selected by an occurrence, select the occurrence from the list then choose **Match** from the menu bar in the Host Occurrence List window.

You hear a "beep" and the color of the icon (or link) changes, thus indicating the match.

The matched icons or links are displayed with the code, name and any attributes of the selected occurrence.

To repeat this operation, select another icon (or link) of the same type , then, another occurrence in the list, and finally the **Match** command.

NOTE   When working on a draft description, you may use this command in order to retrieve an existing occurrence code and name for the selected icon (or link). There will be no actual matching: the color of the selected icon (or link) does not change. A host connection is however required.

By Definition   Select the icon (or link) to be matched then activate this command. A Definition window opens:

• If the icon (or link) already has a code:

▪ Either the code entered for the icon (or link) identifies an occurrence already defined in the Specifications Database. In that case, the Definition window is automatically filled in by the information which is already on the host. If the information on the icon (or link) is different, you can transfer it to the host definition. Press ENTER. The occurrence will then be modified on the host

▪ Or the code entered for the icon (or link) is not the code for the occurrence defined in the Specifications Database. In this case, the Definition window only displays details of the icon (or link). If necessary, you can complete this information and then validate it by pressing ENTER. The occurrence will be created on the host

• If the icon (or link) has no code, the Definition window is displayed empty. You must fill it in

To match the icon (or link) selected by an occurrence, choose **Match** from the menu bar in the Definition window.

You hear a "beep" and the color of the icon (or link) changes, thus indicating the match.

The icons, links or attributes are displayed with the corresponding host values of the matched occurrence.

To repeat this operation, select another icon (or link) of the same type, display/update the definition of the corresponding occurrence and finally choose **Match**.

You can open several Definition windows, each one corresponding to a type of icon or link. Click the right mouse button to close lists and Definition windows after matching graph components.

Direct Match   This matches graph components with host occurrences without immediately checking the validity of the match with the host. The match is verified when you save the graphic description.

Either the icon (or link) has not yet been matched, or the icon (or link) has been matched but you must modify the code, name or attributes of the occurrence which matches it:

▪ Double-click on the icon (or the link)

▪ A dialog box opens up where you enter or modify the code and/or name and possibly the attributes of the occurrence to which the selected icon (or link) must be matched. Click OK

▪ Select the icon (or link) again

▪ Select the **Delete Match** command.

The color of the icon (or link) changes, thus indicating the match.

Delete Match   This command deletes the match between an icon (or a link) and the host occurrence.

Select the icon (or the link), then **Delete Match**. The icon reverts to its initial color.

NOTE   The now unmatched icon (or link) can be deleted if necessary.

NOTES REGARDING THE FOUR PRECEDING COMMANDS:

The commands described above involve modifications of cross-references at the Specifications Database level. To avoid excessive response times, these updates are performed locally. This also allows for the immediate deletion of invalid references before unnecessary transactions are performed.

Actual updating in the Specifications Database takes place when you close the Graphic Description window or select the **Save** command. A message appears: "X-References updating on the host" and a special icon will appear in the lower part of the screen during this operation.

If, for whatever reason, the cross-reference update cannot be executed, the system displays a corresponding error message and the icons/links involved change color.

Update Names

The purpose of the Update Names command is to override - whenever necessary - an icon or link local name, a primary cross-reference label: and/or an attribute by the name (or corresponding attribute) of the occurrence referenced to this icon or link.

For further details concerning Update Names and attributes, see subchapter "Updating Names". For further details concerning primary and secondary cross-references, see subchapter "Updating Link/X-References".

Update Link/X-Ref. The main purpose of the Update Link/X-Reference operation is to translate each link between two matched icons into a cross-reference between their referenced occurrences in the Specifications Database.

For more details, refer to subchapter "Update Link/X-Ref.".

The Display Menu

Display

Zoom
──────────────

Magnitude x1
Magnitude x2
Magnitude x3
Magnitude x4
Magnitude x5
Magnitude x6
──────────────

Alignments
──────────────

Expansion
──────────────

Shrinkage
──────────────

Repaint
──────────────

Tool Bar
Icon Box

Zoom   Allows you to zoom in on a specific section of the graphic description. This command is checked when in use.

Point to the upper-left corner of the section to be magnified and move the mouse, holding the left button down. When the mouse button is released, this section occupies the whole screen.

Magnitude   This command allows you to select a display size for the graphic description. With x1 magnitude the complete description is displayed. With the other magnitudes (x2, x3, x4, x5, x6), the user sees a section of the description.

Magnitude	Display on screen
x 1	full page
x 2	1/4 of page
x 3	1/9 of page
x 4	1/16 of page
x 5	1/25 of page
x 6	1/36 of page

Alignments   Used to align icons of a selection on the reference icon. In a group of icons selected, one is automatically assigned as the reference icon by default, that is to say, the fix icon on which the other ones will be aligned. The reference icon is presented with full handles.

To change the reference icon, just click on a selected icon while pressing the Ctrl key.

A new icon added to the selection becomes automatically the new reference icon.

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When you withdraw a reference icon from the selection, another one is automatically assigned as the new reference icon.

For more details on the adding and withdrawal of an object from a selection, consult subchapter "Drawing Hints".

The **Left** and **Right** sub-menus are used to align vertically the left side or the right side of the objects selected.

The choices **Top** and **Bottom** are used to align horizontally the upper side or the lower side of the selected objects.

When you choose **Vertical Center**, the objects selected are centered and aligned vertically. When you choose **horizontal Center**, the objects selected are centered and aligned horizontally.

Expansion   Expands the graph area to the right and the bottom, without changing the characteristics of the existing objects (coordinates, icon and font size, etc…). This expansion makes the graph look further as a greater area is displayed in the same window, in view 1. This expansion operation can be processed several times. To compensate for the moving away effect, you can use the existing magnitudes or the zoom.

Shrinkage   Contracts the diagram area if the area retrieved at the corresponding expansion does not contain any object. The graph will then look nearer.
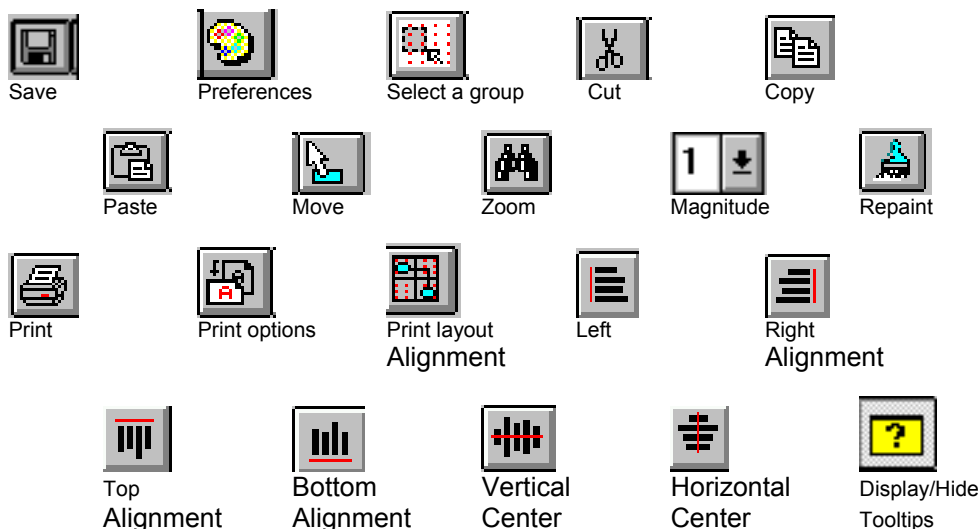
Repaint   Refreshes the graphic description when several modifications have left gaps or other marks.

This command is activated if you have selected **Update Names** or moved components in the graph.

Tool Bar   Displays the tool bar when the command is checked.

Save	Preferences	Select a group	Cut	Copy

Paste	Move	Zoom	Magnitude	Repaint

Print	Print options	Print layout Alignment	Left	Right Alignment

Top Alignment	Bottom Alignment	Vertical Center	Horizontal Center	Display/Hide Tooltips

Icon Box   Displays the icon box when the command is checked. The icons are the same as those in the **Draw** menu.

Click on an icon: the icon label is displayed in the information bar. Then click in the graphic description to insert the icon.

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The Style Menu

Style   **Icon...**
                        Link...
                        Comments...
                        Grid...
                        Preferences

                        The commands in this menu allow you to set default options in the current graphic description for the styles of icons, links and comments. Most of these options can be customized for individual components of the graphic description. For further information, refer to subchapter "Drawing Hints".

Icon...   This command brings up the Default Icon Style dialog box. For complete details, refer to subchapter "Auxiliary Dialog Boxes", Section "The Default Icon Style Dialog Box".

Link...   This command brings up the Default Link Style dialog box. For complete details, refer to subchapter "Auxiliary Dialog Boxes", Section "The Default Comment Style Dialog Box".

Comment...   This command brings up the Default Comment Style dialog box. For complete details, refer to subchapter "Auxiliary Dialog Boxes", Section "The Default Comment Style Dialog Box".

Grid...   This command brings up the Grid Layout dialog box. For complete details, refer to subchapter "Auxiliary Dialog Boxes", the **Grid Layout** dialog box.

Preferences…   Opens the Preferences dialog box. See subchapter "Auxiliary Dialog Boxes".

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

                        For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

Drawing Hints

Before they can be changed, components must have been selected. Click on an icon, comment, or container to select the component or, to select a link, click on its handle (small square) or name. Selecting a component changes its color.

The time required to display a graphic description may vary according to the performance of your workstation. It is not always necessary to wait for all components of the graphic description to be displayed before you can begin work.

NOTE
A link may contain several mid-way points. The handle is the first mid-way point and displays the name of the link. The handle can also open the Link dialog box if you double-click on it.

MOVE   Click on a component. Drag the component to the desired location holding the left mouse button down, then release the button. The links without mid-way points are redrawn after they have been moved.

To redraw a link, first select it by clicking on its handle/square. Then click on the source icon, any new mid-way point(s) you wish to insert, and the target icon: the link is redrawn accordingly.

To move the mid-way points of a link, select the link by clicking on its handle/square or name. The mid-way points are displayed in the selection color. Select the point to be moved and drag it to its new location. Release the mouse button: the points remain selected and you can move another one. To clear the selected link, click the right mouse button or press ESC.

ENLARGE/REDUCE

The default size of a component in a graphic description is set through the **Grid** command in the **Style** menu.

Click on the icon, comment, or container. A rectangular outline is displayed with sizing handles on its sides and corners. Click on a side handle and drag it to enlarge or reduce the component width or height accordingly. Click on a corner handle and drag it to modify both component width and height.

DESELECT   To deselect, click out of the selection rectangle.

ADD/WITHDRAW AN OBJECT

To add an object (icons, links, free lines or charts), press the Shift key and click on the object. Its handles are displayed in bold and the selection rectangle fits the new selection.

To withdraw an object from a selection, perform the same action. You can notice that the object no longer has selection handles.

A link can be added to a selection only when the related icons already belong to the selection. A link with no mid-way point will follow the icons when the selection moves. On the contrary, links with mid-way points must be selected to enable the mid-way points to be moved too.

In some graphs, charts can be included in a selection but they cannot be withdrawn afterwards.

CENTER ICONS   For graphic descriptions with containers: to center or re-center the icons in a container, double-click inside the container (but not on an icon) and use the options offered by the dialog box that opens.

FONTS   The fonts available during the use of a graphic description are those fonts available with WINDOWS on a specific workstation. In some cases, fonts exist on one workstation, but not on another.

EXAMPLE: When a graphic description is downloaded and the font of a component is not found on the current workstation, there is no font selected in the font list box. In this case, you have the following commands:

- *Do not select a font*: WINDOWS will select a default font for the display of the graphic description on the current workstation.

  - *Select a font*: The graphic description will be displayed on the current workstation using the selected font. All other workstations will also display the graphic description using the font selected (if it exists on the workstation).

Update Link/X-Ref.

The **Update Link/X-Ref.** command of the **References** menu allows you to translate each link between two matched icons into a cross-reference between their referenced occurrences in the Specifications Database.

This command only applies to matched components of the graphic description.

> **Make sure you have saved your graphic description**
> (**Save** in the **File** menu)

NOTE

If the Updating Link/X-References application detects a host disconnection, it automatically switches to local connection. To connect to the host again, select **Host Connection** in the **Host-Access** menu in the WorkStation Manager.

Example of Update Link/X-Reference

If you match Icon1 with occurrence OCC1, and Icon2 with occurrence OCC2, and then link both icons, you automatically create a cross-reference between OCC1 and OCC2 in the Specifications Database.

This type of cross-reference (secondary X-Ref) should not be confused with the cross-reference - automatically created via **Save** - between the occurrence described by the graph and each occurrence referenced to an icon or occurrence-bearing link drawn in the graph (primary X-Ref).

Both types of X-Refs are assigned labels in the Specifications Database. These labels are originally built from the names of icons (or links) matched with host target occurrences.

A source occurrence refers to an occurrence from which the cross-reference originates. Source occurrences are listed in the left-hand container of the update report (see below for complete information). A target occurrence refers to an occurrence to which the cross-reference is directed.

The direction of the link in the graph cannot be considered as an indicator of which occurrence is the source or target occurrence. See the corresponding Entity dialog box or the online help for more details on the cross-references for each entity.

Special case of occurrence-bearing links:

The cross-reference created for an occurrence-bearing link is double: it involves two secondary X-Refs.

EXAMPLE: If you match Icon1 with occurrence OCC1, and Icon2 with occurrence OCC2, and if you link both icons with a link matched with occurrence LINK0, you automatically cross-reference OCC1 to LINK0 and OCC2 to LINK0 in the Specifications Database.

Whatever the direction of the link, occurrences referenced to icons are considered as source occurrences (OCC1 and OCC2 in the preceding example).

NOTE An occurrence-bearing link involves two secondary X-Refs when it is a 1-way link. A 2-way link (for instance, Send/Receive type) actually involves four secondary X-Refs, reflected by four cross-references in the Specifications Database.

Update report

The **Update Link/X-Ref.** command first opens a dialog box which asks whether you want to ignore the missing links in the Graph. The choice YES opens up a blank Update Report dialog box with the following message **Update in Progress**. It means that the graphic description links between matched icons are being compared to cross-references existing in the Specifications Database.

When the Link Analysis is completed, an Update Report appears summarizing the status of each link in the graphic description compared to the Specifications Database.

• If a link has not yet been translated into a cross-references in the Specifications Database, it is automatically created. In this case, the report message is **Update Performed**

• For each link which have already been translated into a cross-reference in the Specifications Database, there is no update and the report message is **No Update, already existing X-Ref**

Two preliminary checks are performed before this Update Report is displayed.

☞ The second preliminary check is not performed if you chose to ignore the missing links in the links (see the Second Preliminary Check paragraph below).

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First Preliminary Check: Labels of Secondary X-Refs

The Update Link/X-Reference operation will first check whether names assigned to icons (or occurrence-bearing links) matched with target occurrences are identical to the labels of the corresponding secondary X-Refs in the Specifications Database.

For each discrepancy detected, a dialog box will ask you if you wish to change the label of the secondary X-Ref in the Specifications Database to the icon or link name found in the graphic description:

- If you say YES, the corresponding Update Report message will be **Update Performed**

- If you answer NO, the message will be **No Update, Update not Requested**

Second Preliminary Check: Existence of Additional Secondary X-Refs

☞ This check is not performed if you chose to ignore the missing links in the graph (see the "Update Report" paragraph above).

If you chose not to ignore these missing links, the Update Link/X-Reference operation then checks whether source occurrences have other cross-references in the Specifications Database through the same secondary X-Ref.

If other cross-references of the same type are found, a dialog box prompts you to:

- Delete these additional cross-references from the Specifications Database. The corresponding Update Report message will be **X-Ref Deleted**

- Ignore the suggested deletion. The corresponding Update Report message will be **Missing X-Ref in the Graph**. However, you may choose to translate these additional cross-references by drawing the relevant links and icons onto your graphic description

You may use the **Print** button to produce a printed copy of all messages issued by the Update Link/X-Reference operation.

If you click **Quit**, you exit without accessing the system menu.

We recommend that you activate the **Update Names** command **after** selecting the Update Link/X-Reference in order to ensure overall consistency between your graphic description and the Host Specifications Database.

Updating Names

The purpose of this operation is to replace, where necessary, the local icon or link name, any attributes which are positioned and the primary cross-reference label by the name of the occurrence which references the icon or the link.

We recommend that you activate the Update Names command **after** selecting the Update Link/X-Reference in order to ensure overall consistency between your graphic description and the Host Specifications Database.

> **Make sure you have saved your graphic description**
> (**Save** in the **File** menu)

This command only applies to matched components of the graphic description.

Select the components you wish to update (all components will be updated by default).

Use the Update Names command in the References menu to check that:

- Icon (or link) names in a graphic description are identical to the names of host occurrences with which they are matched

- Labels of primary cross-references found in the Host Specifications Database are identical to the names of the matched occurrences. This check is performed for all the components of the graphic description (including those which you have not selected)

  For complete details on primary cross-references, see subchapter "Updating Link/X-References".

- Attributes of the host occurrence are identical to the attributes used by the icon or the link in the graphic description

For each icon with at least one inconsistency, a dialog box asks you if you want to replace the local value displayed in the graphic description with the host value. If you check the box, the local value will be replaced by the host value. On the other hand, if you clear it, the local value will not change.

Update Names operations are summarized in the final Update Report where all your answers are listed.

NOTE   If the Update Names application has detected a host disconnection, it automatically switches to local connection. To connect to the host again, select **Host Connection** in the **Host-Access** menu in the WorkStation Manager.

Validation of a Graphic Description

The validation of a graphic description allows you to check whether the relations between the entities of the graph are consistent with the metamodel.

The number of links attached to each icon of the graphic description must be between the minimum/maximum numbers of links described in the metamodel (called respectively minimum/maximum meta-cardinality). It is validated against a list of possible values: (0,1), (0,n), (1,1), (1,n), or of type x,y, with x and y variable from 0 to n where x is lesser than or equal to y and y is different from 0.

For example, the cardinality of an Object/Relationship relationship in a CDM, according to the MERISE methodology, is (1,n). The cardinality of a Relationship/Object relationship is (2,n), a Relationship being related to a minimum of 2 Objects and a maximum of n Objects.

A Validation Report is displayed and you may choose whether or not to correct the errors notified.

EXAMPLES :

ENT	OCCURR	ENT	OCCURR	EFF	MIN	MAX	ERROR MESSAGE
REL	COREL1	OBJ		1	2	n	NOT ENOUGH RELATIONSHIPS

REL	entity on which error is found
COREL1	code of occurrence on which error is found
OBJ	entity linked to occurrence REL COREL1
1	cardinality found in graphic description (EFF)
2 and n	minimum (MIN) & maximum (MAX) cardinalities shown in corresponding sub-schema

ENT	OCCURR	ENT	OCCURR	EFF	MIN	MAX	ERROR MESSAGE
REL	CDREL1	OBJ	CDOBJ1	7	2	n	INCORRECT CARDINALITIES

REL	entity for which link is invalid
CDREL1	occurrence code for which link is invalid
OBJ	entity linked to occurrence REL COREL1
COOBJ1	occurrence code linked to occurrence REL COREL1
7	cardinality found in graphic description
2 and n	minimum (MIN) & maximum (MAX) cardinalities shown in corresponding sub-schema

If you click on the **Show errors on graph** button, errors will be shown in red once you have closed the Validation Report window.
If you click on a line, the corresponding error will be shown in red once you have closed the Validation Report window.

NOTE   To stop displaying errors, choose **Validate** again, then close the report *without* clicking on the **Display** button.

To print the report, click on **Print**.

To close the dialog box without displaying the System menu, click on **Quit**.

For complete information on cardinalities, see the online help.

Auxiliary Dialog Boxes

The Preferences Box

When you access the Preferences dialog box from a graphic description, you set the parameters **for all graphic descriptions of the entity** you are working on. The Preferences dialog box is in this case entitled **Preferences for *entity name***.

When you access the Preferences dialog box from the WorkStation Manager window, you set the parameters **for all graphic descriptions of all entities**. The Preferences dialog box is in this case entitled **Preferences for all entities**.
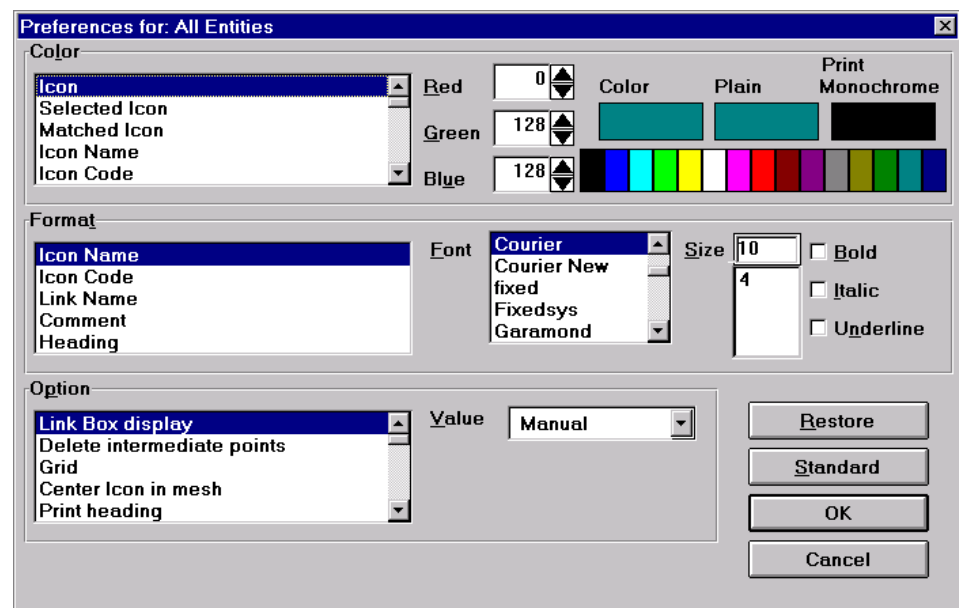
COLORS

Select an item from the list box:
  Icon
  Selected Icon
  Matched Icon
  ...

Then assign it another color by selecting the desired color on the color bar. To create colors other than those shown on the bar, select the nearest color to that required, then use the **Red/Green/Blue** scroll bars to "mix" or "tone" one of these three colors.

The **Color** area indicates the color given to the selected item.

The **Monochrome** area (you can click in this area as for the color bar) indicates the nearest color to the customized color you have created. Very small items are displayed in this color, rather than the color indicated in the Color area.

The **Print** area indicates the color used for printing (or on a monochrome screen display).

FORMATS

Select an item from the list box:
>   **Icon Name**
>   **Icon Code**
>   **Link Name**
>   **...**

Then assign it a format (**Font, Size, Bold/Italic/Underline**) by selecting the desired values. These formats (except the Heading) can be changed via the **Style** menu.

OPTIONS

Select an option from the List section, then choose a value from the combo box to the right:

Link Box display   **Automatic**
                                     Manual

>   This option gives you the option of automatically displaying the Link dialog box each time a link is created. This option can also be specified via **Link** in the **Style** menu.

Delete mid-way points   **No**
                                    Yes

>   If you check this box, the mid-way points of a link will be deleted when the link is automatically redrawn, that is:
>   – when you move the source or target icon of the link
>   – when you change the type of the link (straight <-> pipe)

>   This option does not affect the links as long as you do not perform any of the manipulations described above. If this option is selected, you can continue to create links with mid-way points.

Grid   **Show**
                                    Hide

>   This option can also be set via **Grid** in the **Style** menu.

Center Icon in mesh   **No**
                                    Yes

>   This option can also be specified via **Grid** in the **Style** menu.

Print Heading   **No**
                                    Yes

>   The heading consists of the name of the entity: the title, code and date of creation of the graphic description, and the current date and the coordinates of the graph (line, column).

>   If you select Yes, the format of the heading can be changed in this dialog box in the Format section. This option can also be set via **Options** in the **Print** menu.

Print Frame   **No**
                                    Yes

>   This option can also be set via **Options** in the **Print** menu.

Print Comments   **No**
                                    Yes

>   This option can also be set via **Options** in the **Print** menu.

Icon - shadow	**With** **Without**
Display confirmation messages	**No** **Yes**

This option allows you to display the confirmation messages which appear when you choose **Save** or **Restore** in the **File** menu or when you delete a container.

Icon - shadow (x-axis)	**0** **10** **20** **...** **80**

If you have chosen **With** for the **Icon - shadow** option, this option allows you to select the x-axis position of the shadow in relation to the icon.

Icon - shadow (y-axis)	**0** **10** **20** **...** **80**

If you have chosen **With** for the **Icon - shadow** option, this option allows you to select the y-axis position of the shadow in relation to the icon.

Link line mode	**Pipe** **Curve** **Straight**

This option can also be specified via **Link** in the **Style** menu or in the Link dialog box.

Align Link Name	**Center** **Left** **Right**

This option can also be specified via the Link dialog box.

Link thickness	**0** **1** **...** **9**

This option can also be specified via **Link** in the **Style** menu or in the Link dialog box.

Link line type	**Line** **Dot** **Dash** **Dash-Dot** **Dash-Dot-Dot**

Some of these commands can also be specified via **Link** in the **Style** menu or in the Link dialog box.

Mesh number	**1** **10** **...** **99**

This option can also be specified via **Grid** in the **Style** menu.

Icon outline thickness	**0** **1** **...** **9**

This option can also be specified via **Icon** in the **Style** menu.

Column outline thickness	**0**
	1
	...
	9
Comments frame thickness	**0**
	1
	...
	9

This option can also be specified via the Comments dialog box.

Icon minimum size	**0**
	10
	30
	50
	70
	90
Number of pages to print by line	**0**
	1
	2
	...
	6

This option can also be specified via **Page Layout** in the **Print** menu.

Window format	**A4-210x297mm**
	Executive (US)
	Legal (US)
	Letter (US)
	Station-8.0.1

This option allows you to specify the window format. These formats correspond to commonly used printed pages. When you choose one of these commands, icon positions are recalculated. To avoid any distortion, icon dimensions are **not** changed: however, icons which are close together may overlap. The graphic description printed will be the same as the description displayed on the screen.

The **8.0.1-WorkStation** option exists for graphic descriptions created with the 8.0.1 release. Once all modifications have been made on these descriptions, you can open them in 8.0.2 Release and choose a new format (see subchapter "Graphic Descriptions Created Prior to 8.0.2 Release").

Displayed label	**Opaque**
	Transparent

Displayed labels are names and codes of icons and links displayed on the screen. **Opaque** means that the label will be clearly displayed (if necessary, parts of other icons and links are erased). **Transparent** means that the label can be covered by other icons and links.

Printed label	**Opaque**
	Transparent

Printed labels are names and codes of icons and links printed in a graphic description. **Opaque** means that the label will be clearly printed (if necessary, parts of other icons and links are erased). **Transparent** means that the label can be covered by other icons and links.

Label clipping	**No**
	Yes

When this option is set to Yes, the label of an icon does not overlap the icon border.

Printed label clipping   **No**

                                              Yes

When this option is set to Yes, the printed label of an icon does not overlap the icon border.

Icon Box display   **Automatic**
                                              Manual

This option allows the Icon dialog box to be displayed automatically each time an icon is created. This option can also be specified via **Icon** in the **Style** menu.

Align Comments   Center

                                              Right
                                              Left

This option can also be specified in the Comments dialog box.

Align Icon Name   **Center**
                                              Right
                                              Left

This option can also be specified in the Icon dialog box.

Comments with frame   **No**
                                              Yes

This option can also be specified in the Comments dialog box.

Display of Selected Field   **As is**
                                              Icons and links
                                              Icons only

The "Icons and links" option extends the selected field to the largest rectangle including all the selected icons and the links connecting these icons. The extended field can include icons which are not selected but these icons will not be taken into account during a later manipulation (move...).
The "Icons only" option reduces the selected field to the largest rectangle including all the selected icons.
The "As is" default option displays the selected field without any extension or reduction.

APPLY TO GRAPH and **APPLY TO COMPONENTS**

The Apply to graph command is available when you access the Preferences dialog box via a graphic description.

The Apply to components command is available when you access the Preferences dialog box via a graphic description and you check Apply to graph.

The options set in the Preferences dialog box are distributed at the graph level and at the graph components (icons, links, comments) level.

• Apply to graph re-initializes the options set at the graph level

• Apply to components re-initializes the options set at the components level

CAUTION   These two commands override options which may have been re-defined via the **Style** menu commands or via Icon/Link/Comment dialog boxes. To avoid this, rather than use these two commands, we recommend that you adjust options for a given type of graph once only in draft (and not modify them too often subsequently). Then if you want to modify:

• Options for a specific graph: we recommend that you use the **Style** menu commands or the Icon/Link/Comment dialog boxes

• Options for all graphs: we recommend that you close the current graph, then open it again. The options set in the Preferences dialog box will be automatically taken into account. Proceed in the same way for each graph you wish to modify.

RESTORE

Select this button to restore the most recently saved values in this Preferences dialog box.

STANDARD

When you access the Preferences dialog box via the WorkStation Manager window, this button allows you to set the values in this Preferences dialog box to the original default values set for the WorkStation.

When you access the Preferences dialog box via a graphic description, this button allows you to set the values in this Preferences dialog box to the values set in the Preferences dialog box accessed via the WorkStation Manager window.

OK

Click this button to save changes made in the Preferences dialog box and return to the current graph.

CANCEL

Click this button to return to the current graph without saving changes made in the Preferences dialog box.

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The Default Icon Style Dialog Box
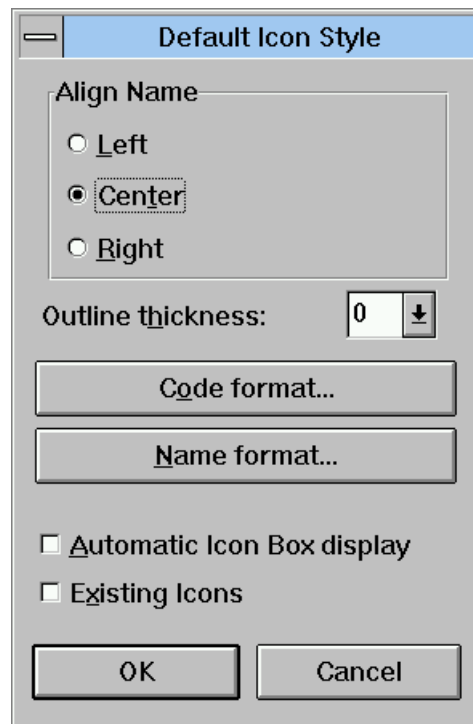
Align name

Select the alignment of the icon name.

Outline thickness

Select the thickness of the icon outline (0 = thinnest, 9 = thickest).

Code format
Name format

> These buttons open dialog boxes in which you select the font, size and presentation of the icon code/name.

Automatic Icon Dialog Box display

> Check this box to display an Icon dialog box each time you place an icon in the graph. For complete information, refer to "The Icon Dialog Box".

Existing Icons

> Check this box to apply the parameters present in this dialog box to the existing icons. Otherwise, the options set in these dialog boxes will apply only to icons placed in the graph after the dialog box is closed.

OK

> Applies changes and closes the dialog box.

Cancel

> Cancels changes and closes the dialog box.

The Default Link Style Dialog Box
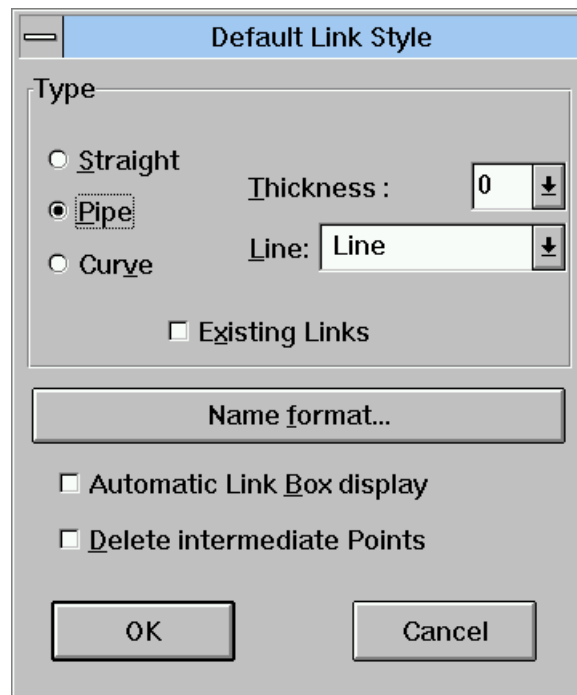
Type

Straight/Pipe/Curved

Select the link draw mode.

Thickness

Select the thickness of the link (0 = thinnest, 9 = thickest).

Line

Select the line type:
- line
- dash
- dot
- dash-dot
- dash-dot-dot

Existing Links

Check this box to apply the parameters present in the dialog box to the existing links. Otherwise, the options set in this section of the dialog box will only apply to links placed in the graph after the dialog box is closed.

Name Format

This button opens a dialog box in which you select the font, size and presentation of the link name.

Automatic Link Box display

Check this box to display the Link dialog box automatically each time you create a link between two components in the graph. For complete information, refer to "The Link Dialog Box".

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Delete mid-way points

If you check this box, the mid-way points of a link will be deleted when the link is automatically redrawn, that is:

▪ When you move the source or target icon of the link

▪ When you change the type of the link (straight <-> pipe)

This option does not affect the links as long as you do not perform any of the manipulations described above. If this option is selected, you can continue to create links with mid-way points.

OK

Applies changes and closes the dialog box.

Cancel

Cancels changes and closes the dialog box.

The Default Comment Style Dialog Box
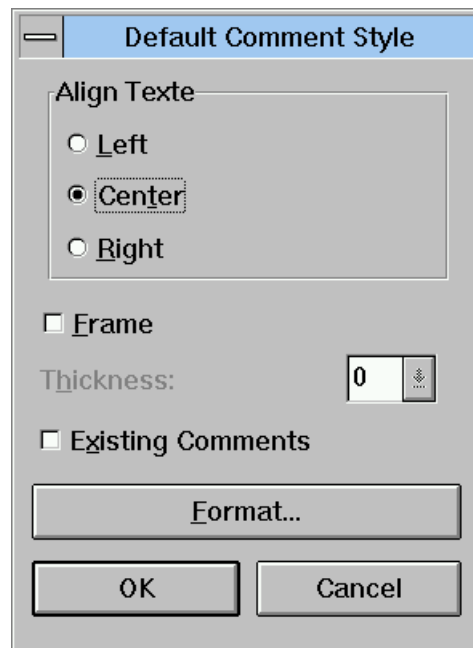
Align Text

   Left/Center/Right

      Select the alignment of the text.

Frame

   Check this box to place a frame around the comment.

Frame thickness

   This command is active once the Frame check box is checked. Select the thickness of the frame around the comment (0 = thinnest, 9 = thickest).

Existing Comments

   Check this box to apply the parameters set in the dialog box to the existing comments. Otherwise, the options set in this section of the dialog box will apply only to comments placed in the graph after the dialog box is closed.

Format

   This button opens a dialog box in which you select the font, size and presentation of the comments.

OK

   Applies changes and closes the dialog box.

Cancel

   Cancels changes and closes the dialog box.

The Icon Dialog Box

When you double-click on an icon, a dialog box opens where you set specific parameters for the selected icon.

To automatically display the Icon box when you draw an icon and a link, choose **Icon** in the **Style** menu and check the Automatic Icon Box Display box.
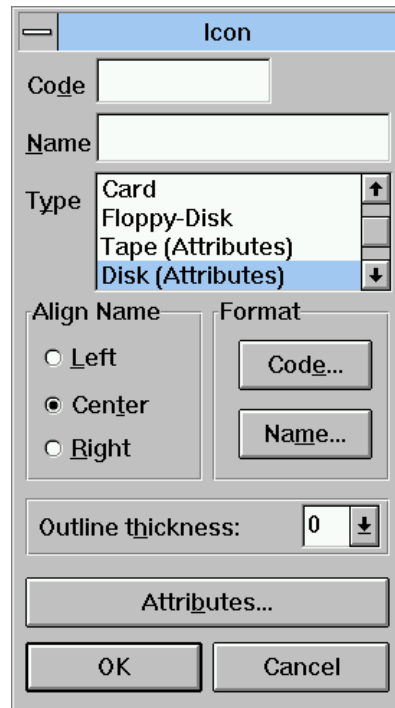
Code

Specify or change the code of the icon. Icon codes are automatically switched to uppercase characters.

If an icon has been matched with an occurrence, the code button is inactive and you cannot modify the code unless you first delete that match (**References** menu).

Name

Specify or change the icon name.

NOTE:
It is possible to load the code and the name of an entity occurrence in a Graphic Description from the host list, the Definition window or from the Formatted Description window of the same entity by using drag-and-drop. Follow these steps:

• Simultaneously open the description of an entity and the Definition window or the Formatted Description window or the host list.

• Select the occurence code in the source window by clicking the left mouse button (the occurrence name is automatically selected), then move the mouse to the Graphic Description window, keeping the button pressed.

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- Release the mouse button on the icon or link to be entered. The code and the name in a graphical description appear simultaneously on the icon or on the link.

Type

Select the icon type. Icon types are also listed in the **Draw** menu. When an icon is **not** linked to another icon, all icon types are listed. In some cases, when an icon is linked to another icon, only those types compatible with the linked icon are listed.

Example:

In the graphic description of a Conceptual Process Model (C.P.M.), the Operation icon (when not linked) may be one of the following types: Operation or Synchronized Operation. As long as this icon is not linked, its type can be changed (Operation/Synchronized Operation). However, if a link is drawn from the Synchronized Operation icon to an Event/Result icon, the icon type can be changed.

Align Name

Select the alignment of the icon name.

Format

Select the Code/Name button to open the dialog box in which you change the format (font, size, presentation) of the code/name.

Outline Thickness

Select the thickness of the icon outline (0 = thinnest, 9 = thickest).

Attributes

This button can be activated only if the methodology which is used provides attributes for the selected icon. Select this button to open the dialog box in which you change the attributes for the selected icon.

For complete details of attributes according to entities, see the online help.

OK

Applies changes to the icon and closes the dialog box.

Cancel

Cancels changes and closes the dialog box.

The Link Dialog Box

When you double-click on a link (its name/code/attribute or its handle) or on a free line (its name or its handle) in a graphic description, a dialog box opens where you set specific parameters for the selected link.

To automatically display the Link dialog box when you draw a link or a free line, select the **Link** command in the **Style** menu and check the Automatic Link Box Display check box.

```
┌──────────────────────────────────┐
│ ▭         Link                    │
├──────────────────────────────────┤
│                                   │
│  Name ┌──────────────────────┐    │
│       └──────────────────────┘    │
│ ┌Align Name──┐ ┌Type──────────┐   │
│ │ ⦿ Left     │ │ ○ Straight   │   │
│ │ ○ Center   │ │ ⦿ Pipe       │   │
│ │ ○ Right    │ │ ○ Curve      │   │
│ └────────────┘ └──────────────┘   │
│ ┌──────────────────────────────┐  │
│ │ Line:   │ Line          │ ± │ │  │
│ │                              │  │
│ │ Thickness:   │0        │ ± │ │  │
│ └──────────────────────────────┘  │
│ ┌──────────────────────────────┐  │
│ │ Uses (Line)                  │  │
│ │ Uses (Arrow)                 │  │
│ │ <─>                          │  │
│ │                              │  │
│ └──────────────────────────────┘  │
│  ☒ Default graphics               │
│ ┌──────────────────────────────┐  │
│ │        Attributes...         │  │
│ └──────────────────────────────┘  │
│ ┌───────────┐  ┌───────────┐      │
│ │    OK     │  │  Cancel   │      │
│ └───────────┘  └───────────┘      │
└──────────────────────────────────┘
```

Code (only for an entity-bearing link).

Specify or change the link code.

Name

Specify or change the link name.

NOTE: It is possible to load the code and the name of an entity occurrence for entity-bearing links in a Graphic Description window from the host occurrence list of the same entity using drag-and-drop. For complete information, refer to subchapter "Functionalities".

Align Name

Select the alignment of the link name.

Type

Select the type of link. A link can be:

- a straight line

- a piped line

- a curved line

Line

The link lines can be made up of the following:

- line

- dash

- dot

- dash-dot

- dash-dot-dot

NOTE   Line types "dot" and "dash" can only be used if the thickness of the link is 0.

Thickness

Select the thickness of the link (0 = thinnest, 9 = thickest).

List box

The untitled list contains links that correspond to the methodology in use.

Examples:
- In the graphic description of a MERISE Organization Chart (MOE), a link between two Organizational Units is a simple line by default. Double-click on the handle (small square) of the link to open the Link dialog box. The simple line is indicated by Responsible (Line). If you decide to change the link into a 1-way arrow, select Responsible (Arrow). For a 2-way arrow, select <->.

- In the graphic description of a Process Flow (SEP), a link between a Process and an Event/Result is a 1-way arrow by default. Double-click on the handle (small square) of the link to open the Link dialog box. The 1-way arrow line is indicated by Send. If you decide to change the link into a 2-way arrow, select Send-Receive. The link in the other direction between an Event/Result and a Process is also by default a 1-way arrow indicated by Receive. To change the link, select Send-Receive.

Default Graphics

This check box allows you to select default graphics for the link ends. In the list, select a graphics type and check the box. The graphics type will be assigned to the links you subsequently create.

NOTE

The set of available graphics types varies according to the linked icons (for example, in the Batch Flow Chart of MERISE methodology, the link between the "Program" and "Report" icons is different from the link between the "Program" and "File/DB" icons). For each graph, one or more series of available links have been preset according to the icons they can link. You can define a default graphics type for each series of links. Refer to the documentation for your methodology for more details about the series of available links for each graph.

Attributes

This button can be activated only if the methodology which is used provides attributes for the selected icon. Select this button to open the dialog box in which you change the attributes for the given link.

For complete details of attributes according to entities, see the online help.

OK

Applies changes to the link and closes the dialog box.

Cancel

Cancels changes and closes the dialog box.

The Comment Dialog Box

When you double-click on a comment in a graphic description, a dialog box opens where you set specific parameters for the selected comment.
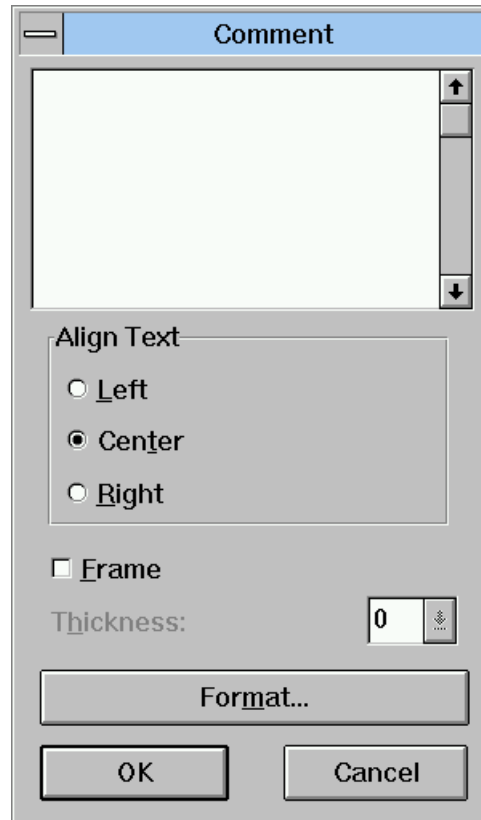
Enter the text of your comment in the space provided in this dialog box (use CRTL+ENTER to go to the next line). This text is limited to 234 characters (CRTL+ENTER = 2 characters). The initial size of a comment in the graph is one mesh of the grid (see "The Grid Layout Dialog Box").

A comment containing no character string is automatically deleted (blank characters are considered as characters, therefore make sure the blank characters are deleted if you wish to delete the comment).

Align Text

Left/Center/Right

Select the alignment of the text.

Frame

Check this box to place a frame around the comments.

Frame thickness

This command is active once the Frame check box is checked. Select the thickness of the comments frame (0 = thinnest, 9 = thickest).

Format

This button opens a dialog box in which you select the font, size and presentation of the comments.

OK

Applies changes to the comment and closes the dialog box.

Cancel

Cancels changes and closes the dialog box.

The Grid Layout Dialog Box
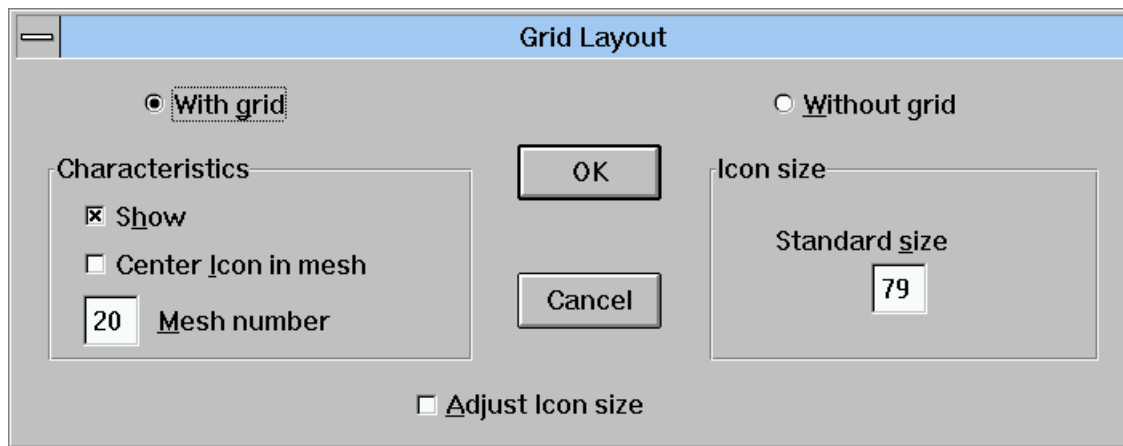
With grid

When you click this button, you can perform the following operations:

- **Characteristics**
  - **Show**
    You may choose whether or not to show the grid in the graphic description. Keep in mind that the With Grid option may be active even if the grid is not shown.
  - **Center icons in mesh**
    This command centers new or existing icons within the mesh of the grid.
  - **Mesh number**
    The Mesh number represents the grid (from 1 to 99).

Without grid

If you select this button, you can perform the following operations:

Icon size

- **Standard size**

Enter a value from 1 to 98. (See note below.)

Adjust Icon size

This option adjusts all icons to the size defined in the standard size.

NOTE ON ICON SIZE   If With grid is active (whether the grid is displayed or not), the standard size of an icon adjusts to the size of a grid mesh.

With or without a grid, an icon size is expressed by a number "n" (from 1 to 98) where "n = 99 - s", "s" being the number of containers (= number of rows).

See the following examples:

1. The grid is made up of 20 columns.
    STANDARD ICON SIZE = 99 - 20 = 79

2. Likewise, with a standard icon size of 59:
    NUMBER OF COLUMNS = 99 - 59 = 40
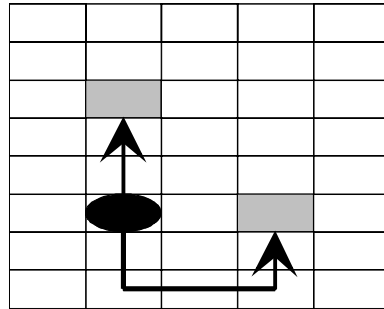
Excerpt from a 20-mesh grid
The icon size is 79
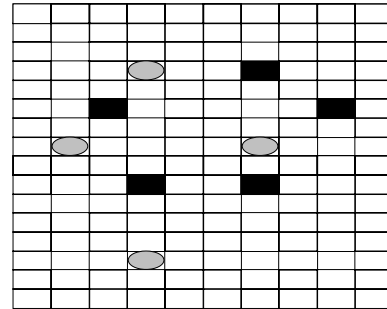
Excerpt from a 40-mesh grid
The icon size is 59

The Container Dialog Box

To access this dialog box, double-click on a container.
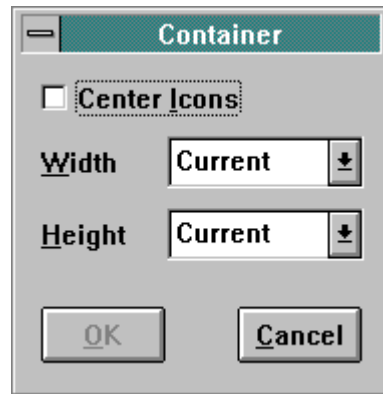
Center icons

Re-centers the icons in the container. If several icons were originally positioned on the same line, they will overlap. See also subchapter "Drawing Hints".

Width

A drop-down list offers several options (the options vary according to how many containers are present in the chart of containers, which container you select and whether or not the container has already been modified):

Current	Keeps the same width for the selected container.
First	Sets the width of the selected container to the width of the first container in the chart.
Previous	Sets the width of the selected container to the width of the container immediately to its left.
Next	Sets the width of the selected container to the width of the container immediately to its right.
Last	Sets the width of the selected container to the width of the last container in the chart.
Standard	Sets the width of the selected container to the standard width (can vary between containers).
All	Sets the width of all containers to the width of the selected container.

Height

A drop-down list offers several options (the options vary according to how many containers are present in the chart of containers, which container you select and whether or not the container has already been modified):

Current   Keeps the same height for the selected container.

First   Sets the height of the selected container to the height of the first container in the chart.

Previous   Sets the height of the selected container to the height of the container immediately to its left.

Next   Sets the height of the selected container to the height of the container immediately to its right.

Last   Sets the height of the selected container to the height of the last container in the chart.

All   Sets the height of all containers to the height of the selected container.

OK

Applies changes and closes the dialog box.

Cancel

Cancels changes and closes the dialog box.

Graphic Descriptions Created Prior to the 8.0.2 Release

When you access a graphic description created before the 8.0.2 WorkStation Release, it may cause messages to be displayed:

- "Graph created with previous release. Do you want it updated automatically?"

    - This message will appear in the following cases:
        - The graphics of a link are no longer compatible with the methodology implemented with the 8.0.2 WorkStation Release.
        EXAMPLE :   2-way links between Objects and Relationships which were OK are now 1-way links with the 8.0.2 Release
        - A link direction is no longer compatible with the methodology implemented with the 8.0.2 WorkStation Release.

    - If you answer YES to the prompt, links are re-displayed using their default graphics

    If you answer NO to the prompt, the graphic description will not be displayed.

The next two messages appear because the style and size of the fonts implemented with previous versions are not compatible with those of WINDOWS:

- "Choose: Printer - in order to keep a printed document comparable to the preceding version."

    - This message does not appear if there are no printers connected

    - When you select the Printer button, the way documents are displayed on the screen may change

- "Choose: Screen - in order to keep a displayed document comparable to the preceding version."

    - When you select the Screen button, the printed document may change

    IMPORTANT: In some cases, if you select the Printer button, the document displayed on the screen is better than the result obtained using the Screen button.

In order to view the differences between screen displays, test one display (select one button), observe the document displayed or printed and then exit the graphic description **without saving it**. Test the other display (select the other button), observe the document displayed or printed and decide which you prefer. **Saving the graphic description saves the current display**.

The following message will appear when a link between two icons is no longer compatible with the methodology implemented with the 8.0.2 WorkStation Release.
          "The links in red are invalid and will be ignored!"

As a result, invalid links are automatically erased.

LIST OF CHECKS PERFORMED

Links in each graphic description are analyzed in order to check that they are compatible with the methodology in use. If they are not, their validity is tested (the source icon becomes the target icon and vice-versa). If the new link is valid for the methodology, it automatically replaces the initial link. If it is not valid for the methodology, it is displayed in red after retrieval, and then deleted.

EXAMPLE: (MERISE) 2-way links between two phases are invalid and therefore deleted. 1-way links between Reports and Programs are replaced by 1-way links between Programs and Reports (the arrow is reversed).

Links between a comment and an icon are now represented in the same way: an arrow pointing to the target icon. When you retrieve graphic descriptions from earlier releases, such links are checked and re-drawn accordingly.

ATTRIBUTE DISPLAY

It is possible to display and update attributes associated with icons or links in a graph, even if the graph was created before implementation of this functionality in the WorkStation.

During the first display operation under the new WorkStation release, attributes are not displayed because they are not initialized. Choose **Update names** in the **References** menu to initialize attributes.

GRAPH CONSULTATION

A graph which is retrieved under the new WorkStation release cannot subsequently be displayed using a previous WorkStation release. Downloading a graph from a previous release for consultation on a new WorkStation release does not have the same disadvantages: if the links in the graph are modified or deleted via the retrieval functions, modification is only visual. The graphic description remains unchanged on the host and fully compatible with the WorkStation release where it originated.

NOTE: a graph downloaded for consultation can NOT be updated.

Chapter 11   The Textual Description Windows

Functionalities

Textual descriptions concern occurrences of the Text Entity defined in the Specifications Database and local drafts.

NOTE: For a description of the Text Entity, refer to the on-line help.
                    For local drafts, refer to chapter "The Local List Window".

As on the standard host system, a text has a two-tier structure: a Table of Sections where up to 250 sections can be specified, and the sections themselves.

NOTE: A WorkStation section is equivalent to a paragraph in the standard host system terminology.

The Textual Description is composed of two windows: the Table of Sections window and the Section window.

The Table of Sections window allows you to:
          Create, duplicate and delete Sections
          Hyper-navigate
          Open Sections
          Modify the title and code of Sections
          Assign text to other occurrences defined in the Specifications Database
          Print all or selected Sections
          Define customized page headers
          Set the various style options which characterize Paragraph Formats
          Install Spell Checkers
          Access the online help

In the Section window, standard word-processing features are available. The following options are available through menu commands or keyboard commands:
          Word Wrap
          Text entry without justification (useful for charts)
          Various paragraph styles and indentations (called formats)
          Style, size and font selections
          Copy/Cut/Paste/Concatenate/Delete character strings
          Search/Replace character strings
          Section save and restore on the PC hard disk
          Print preview
          Print the current Section or specific pages
          Online Help
          Cross-reference Text occurrence to a Data Element
          Spell Checker

Getting to the Windows

Since actual text processing is done locally, a host connection is only required for:

- Downloading a Text from the host
- Uploading a Text to the Specifications Database after its local update

The Table of Sections window opens up each time you access a Textual description. It displays the list of text sections: code (internal paragraph code) and title.

Double-click on a Section title to open the Section window which displays the contents of the selected Section.

The background color of the Section window can be changed in the WINDOWS configuration panel.

The Menu Bar of the Table of Sections Window

Entity   This Cascaded menu contains commands that allow you to access the definition, lists, descriptions and cross-references of the current occurrence of the Text entity.

Section   This menu features commands which allow you to create, create from, open, duplicate, move, delete and modify section(s). It is also used to assign Text sections to occurrence(s) for documentation purposes.

Print   This menu contains commands that allow you to print all of the text or selected section(s) and to set print options and printers.

Preferences   This menu contains commands that bring up dialog boxes in which you set the default style options and install Spell Checkers.

? = F1   This command calls the online help.

System Menu   In addition to standard commands, this menu contains a command to consult the current context.

For more information about the context, refer to chapter "WorkStation Connection", subchapter "Context".

The Entity Menu

Entity	Main Entity	➜ Definition	
		Lists	➜ *Available lists*
		Descriptions	➜ *Available descriptions*
		X-References	➜ *Available x-references*
		─────────────────	
		Other Occurrence...	
	Related Entity...		

For complete details of this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The Section Menu

Section   Create...
                     Create from...
                     Open
                     ─────────────────
                     Duplicate
                     ─────────────────
                     Move
                     Delete
                     Modify...
                     ─────────────────
                     Assign...

Create...   This command opens a dialog box in which you enter the code and title (limited to 60 characters) and code of the new section. The new section will be inserted immediately **after** the Section line selected in the Table of Sections window. If no line is selected when you choose this command, the new section will be added at the end of the Table of Sections. The section code is automatically assigned (in alphabetical order), but you may modify it before clicking OK. You may move the section within the list of the Sections window using **Move** (see below).

Select ***** TOP OF TABLE ***** before you select **Create** in order to place a section at the beginning of the Text occurrence.

The default options set via the **Style...** command in the **Preferences** menu apply to sections created with the **Create...** command.

Create from...   This command opens the **Create from...** dialog box. For complete details, see subchapter "Auxiliary Dialog Boxes".

The default options set via **Style...** in the **Preferences** menu apply to sections created with the **Create from...** command.

Open   This command opens the Section window and displays the selected section. The Table of Sections window is reduced to an icon.

    NOTE: Several sections can be opened simultaneously. Click on the sections while pressing CTRL to select a block of sections. Click on the sections while pressing SHIFT to select sections that do not follow each other in the list. Then select **Open** (or **ENTER**).

Duplicate   After selecting the section to be duplicated, use this command to duplicate the section. Select the location (the title line which will precede the duplicated section) and press **ENTER**.

    NOTE: ESC or the right mouse button cancel the command.

Move   After selecting the section to be moved within the table, use this command to move the section. Select the location (the section which will precede the moved section) and press ENTER.

    NOTE: ESC or the right mouse button cancel the command. This command is grayed when the Table of Sections contains only one section.

Delete   This command deletes selected section(s) after a confirmation.

> **The deletion applies to the section title and to its contents.**

Modify...   This command opens a dialog box in which you modify the code and/or title and of the section.

Assign...   This command is used to assign a Text section to one or more occurrences in the Specifications Database. Assigning creates a cross-reference between the section and each specified occurrence. This type of cross-reference is especially useful when creating application documentation via the Report/Volume entity.

                A dialog box opens up. It lists occurrences to which the section is already assigned (if any).

                In order to assign the selected section to an occurrence, enter the host or local code of the entity and the occurrence code. Select **Add** to perform the text assignment.

                In order to delete a text assignment of an occurrence, click on that occurrence in the list and then press **Delete**.

                The **Quit** button closes this dialog box. Assignments become effective when the Text occurrence is uploaded into the Specifications Database.

    NOTE: When a Text assigned to an occurrence is downloaded, the host code of this entity is converted into a local code. However, a host code sometimes corresponds to several local codes. A default local code is thus chosen (it may vary according to the Module used). Therefore, in the list of occurrences, some local codes can be different from those entered originally. This does not prevent the assignment operation from working correctly.

The Print Menu

Print   **Print All Text**
                      Print Section(s)
                      Print Table of Sections
                      ▬▬▬▬▬▬▬▬▬▬▬▬▬

                      Print Options...
                      Printer...

Print All Text
Print Section(s)
Print Table of Sections

These commands print all of the text (all the Sections of the Text occurrence) or specific Sections (the Sections that are selected in the Table of Sections window) or the Table of Sections according to options set in the Print Options dialog box.

If, for **Print Section(s)** in the Print Options dialog box, you have selected an Absolute command for Pagination and the Page Number command for the Header Style, the Absolute Pagination dialog box will prompt you to input the number of the first page of the Section.

Print Options   This command opens the Print Options dialog box. For complete details, refer to subchapter "Auxiliary Dialog Boxes".

Printer...   This command opens up a dialog box listing the printers connected to the PC.

The **Configure...** button opens another dialog box that contains all parameters associated with the printer driver (i.e. paper format and orientation, specific characteristics, etc.)

The Preferences Menu

Preferences   **Style...**
                     Spell Checker installation...

Style...   Opens the Style dialog box in which you can specify a default presentation for all the Sections of the Text.

For complete details, refer to subchapter "Auxiliary Dialog Boxes".

Spell Checker installation...

This command opens the Spell Checker Installation dialog box. For complete details, refer to subchapter "Auxiliary Dialog Boxes".

The Help Menu

? = F1   This command calls the online help function.

Section Contents

Section

A section is composed of *text* (strings of characters) in which all printable characters, entered via the keyboard, can feature: lower and upper case letters, numeric characters and some special characters (blank spaces, punctuation, etc.).

The size of a section is free if you save the section locally. In this case, the size of the section is only limited by the memory available for printing and by the disk space available for the local save.

However, if you want to upload your Text on the host, the section cannot exceed 998 lines, which is the maximum authorized by the host. You can check the number of lines your section would occupy when uploaded on the host via **Host Validation** in the **File** menu in the Section window. For complete information, refer to the description of this command in subchapter "The Menu Bar of the Section Window".

Paragraph

The Text contained in a section is composed of *paragraphs*. The number of paragraphs in a section is free up to the limit of the number of lines of the section (see limit of lines above).

Each paragraph ends with a *paragraph mark*. The display of these marks is optional (**Paragraph mark** command of **Options menu**). A displayed paragraph mark is indicated by ¶. This can vary depending on the character font used for the paragraph.

In most cases paragraphs are composed of words. A *word* is a character string delimited at both extremities by one of the following characters : **, ; : . ! ?** / **+ =** ' " * ( ), blank space or paragraph mark.

The size of a word is free if you print your Text locally only. However, on the host, words exceeding 30 characters are truncated when the Text is processed in justification by PDM. In the Section window, the **Host Validation** command of the **File** menu allows you to check if the section contains words exceeding this limit. For further information, refer to the description of this command in subchapter "The Menu Bar of the Section Window".

Text presentation attributes

The paragraphs and the text they contain are displayed, formatted and printed according to specific parameters, called *attributes*. Some of these attributes concern the characters. Other attributes, called style and format, concern only a paragraph or a group of paragraphs with the same characteristics.

Character attributes

These are the *character font* used, its *size* in points, and the **bold**, *italic* and underline attributes. The character attributes, although concerning the characters, apply to the whole paragraph. Therefore, they can only be modified for an entire paragraph (or for a group of consecutive paragraphs). In the Section window, you can modify them via the **Characters** menu.

A *default font* and a *default format* can be selected in the Style Dialog Box accessed in the Table of Sections window via **Style** in the **Preferences** menu. These attributes will be used for the first paragraph of a new section, or for all the contents of a Text created on the host, accessed locally for the first time, and which contains no indication of the font to be used.

Paragraph margins

These are the *left margin*, the *right margin* and the *indentation*. The left margin defines the space between the left border of the paragraph and the left limit of the display or print space. The right margin defines the space between the right border and the right limit. The indentation defines the space between the first line of the paragraph and the other lines of the same paragraph.

The margins and the indentation are set by a number from 1 to 78. The space between the left and the right margin and between the indentation and the right margin must be at least 30.

In the Section window, you can modify the margins and the indentation of a paragraph with the Ruler. However, this modification will concern all the paragraphs of the section which have the same format as the modified paragraph (see below "Paragraph formats").

Paragraph alignment

Within the margins, the text of a paragraph is automatically set according to the selected alignment. The paragraph alignment can be *left*, *centered*, *right*, *justified*.

In the Section window, you can modify the alignment for each paragraph of the section, either via the **Alignment** command of the **Paragraph** menu, or via the Ruler. This modification only concerns the selected paragraph(s).

Paragraph format

Each paragraph of a section has a *format*. There are 10 formats, numbered 1 to 10. Format 10 is the default format (modifiable option). A format defines three attributes: the left margin, the right margin and the indentation.

The attributes of a format can be different from one section to another within the same Text. You can modify the definition of a format in a specific section, without affecting the other sections.

To define the same format for all sections of an edited Text, click on **Style** in the **Preferences** menu in the **Table of Sections** window. In the dialog box which opens, enter the selected values for each format (in the Default Format area), then click on **Apply these formats**. The same definition will be assigned to the format of all sections in the updated Text.

At the WorkStation installation, the initialization values of the default formats are as follows (the indentation is always the same as the left margin):

DSREF000352A

format 1	6-78
format 2	8-78
format 3	10-78
format 4	12-78
format 5	14-78
format 6	16-78
format 7	18-78
format 8	20-78
format 9	22-78
format 10	4-78 (by default)

The default format values defined in this dialog box are applied when you:

▪ Create a new section

▪ Access locally for the first time a Text previously defined on the host.

For more details, refer to subchapter "Upload/Download", Section "Download".

Presentation style

The type of a paragraph corresponds to how the paragraph will be used on the host.

The Word Wrap type is used to enter the majority of the text in a section. The format values are taken into account, and the contents of the paragraph are not limited.

The No Word Wrap type can be used to enter information which must be presented in form of charts, on the condition that a non proportional font be used. The format values are not taken into account for printing.

The VisualAge Pacbase Line type exists for compatibility with previous versions of VisualAge Pacbase (Y-, F-, and D-type lines). The content of this type of paragraph are limited to 61 characters.

The Labeled Paragraph and Title types can be used at the same time and can be combined with each of the three preceding styles.

All the types are described in detail in subchapter "The Menu Bar of the Section Window", **Paragraph** menu.

You can define a default **presentation style** for a particular paragraph type by choosing a color and character attributes. In this way, all the paragraphs of this type will have the same aspect (i.e. a specific color would improve the legibility of the text on the screen).

You define a presentation style in the dialog box accessed via **Style...** in the **Preferences** menu in the Section window.

The **Style** dialog box is described in subchapter "Auxiliary Dialog Boxes".

In this dialog box, you choose the type of paragraph with which you want to associate a presentation style. Then, you assign a *color* and *character attributes* (bold, italic, underlined).

Once the presentation style has been defined, the type characteristics will be adopted by every paragraph to which you assign that particular type. For example, if you defined a presentation style with the "bold" and "underlined" attributes for the Title type, and if you wish to convert a paragraph from Word Wrap type to Title type, this paragraph will automatically be assigned the "bold" and "underlined" attributes.

NOTE   If you change the characteristics of an existing presentation style, the paragraphs already using this style are not assigned the new characteristics. Only the new paragraphs based on this style will take the new characteristics into account.

Text Editing in the Section Window

Cursor

The *cursor* is a blinking graphical element indicating the current position in the text where the characters can be entered via the keyboard. In insert mode, the cursor is represented by a vertical bar: in typeover mode, it is represented by a highlighted rectangle covering a character.

NOTE

The cursor is always present, but is not necessarily visible in the window: if you have used the scroll bars, it can be located in a part of a text which is not displayed in the window. If you move the cursor, enter characters via the keyboard or select a command from the Edit menu, the display moves automatically so that the cursor reappears.

The cursor must not be confused with the *mouse pointer*. The pointer is moved by the mouse. Depending on its position in the window, it is displayed as an arrow or as an insert pointer resembling an I. It can be used to position the cursor in the text or to perform a selection.

Cursor positioning and moving

Left button click Positions the cursor where you click

← / → / ↑ / ↓   Moves cursor character by character (← / →)
        or
line by line (↑ / ↓).

CTRL+→ (CTRL+←) Moves the cursor to the beginning of the next (preceding) word.

TAB   (SHIFT+TAB) Moves the cursor to the beginning of the next (preceding) word.
In an empty paragraph, in no word wrap mode (with a non-proportional font - "courier" or "system") the tab key jumps to the position below the first character of the words in the previous line while generating blanks.

↖   (END)   Moves the cursor to the beginning (end) of the line.

CTRL+↖ (CTRL+END) Moves the cursor to the beginning (end) of the paragraph.

PG-DN (PG-UP) Moves the cursor to the beginning of the next (preceding) display page.

Selection

You can select a part of the text. The next Edit command will be performed on this selected part. A *selection* can be restricted to several characters, one or more words, or one or more paragraphs: it can also apply to the whole section.

The selected text is highlighted.

NOTE   As for the cursor, a selection can exist in the text without being visible in the displayed window. If you move the cursor, enter characters via the keyboard or select a command from the Edit menu (concerning this selection), the display will move, showing the selection.

How to Select

To *select a string of characters*

Click (with the left mouse button) at one end of the string, hold the mouse button down and move the pointer to the other end of the string you want to select.

Release the button to end selection.

To *select a word*

Double-click on the word. If the word is followed by a space, the space will be selected too.

To *select a paragraph*

Double-click on the left margin of the paragraph. The paragraph mark will also be selected.

To *extend or reduce a selected area* (a selected string)

Press the SHIFT button, then click (with the left mouse button) up to the point where you want the area to be extended or reduced.
If necessary, move the pointer to adjust (extend or reduce) the selection.
Release the SHIFT button to perform the selection.

SHIFT+← / → / ↑ / ↓   Selects the string of characters from the current cursor position to the new position determined by the direction arrow used.

SHIFT+CTRL+ →   (SHIFT+CTRL+ ←)
Selects the string of characters from the cursor position to the beginning of the current word or the following (preceding) word.

(SHIFT+END)   Selects the string of characters from the cursor position to the beginning (end) of the line.

(SHIFT+CTRL+END)   Selects the string of characters from the cursor position to the beginning (end) of the paragraph.

SHIFT+PG-DN (SHIFT+PG-UP)

Selects the string of characters from the cursor position in the current display page to the same position in the next (preceding) display page.

How to Enter and Update Text

To *enter text*:   Position the cursor at the desired point and enter the text via the keyboard. The text will be displayed and the cursor will move automatically according to the input. In insert mode, each character entered will be inserted at the cursor position: in typeover mode, each character will replace the character pointed by the cursor.

To *delete one character*:
Position the cursor at the desired point and press DELETE to erase the character following the cursor, or BACKSPACE to erase the character preceding the cursor.

To *delete a string of characters*:
Select the string to erase and press DELETE or BACKSPACE.

To *override (delete and replace) a string of characters*:
Select the string to be replaced and enter the new text, which automatically replaces the selection.

Text Organization in Paragraphs

The word processor performs formatting of the text between print margins according to the paragraph format defining these margins and the paragraph style. The text is displayed with the selected font, font size, character attributes (bold, italic, underlined) and alignment (left, right, centered, justified). Therefore, to change attributes (for example a different font) or to separate two parts of a text with blank lines, create a new paragraph.

To *create a new paragraph*:
Position the cursor at the end of an existing paragraph and press ENTER. The cursor is positioned at the beginning of the new paragraph, which takes on the characteristics of the preceding one.

To *split an existing paragraph*:
Position the cursor where you want the paragraph split and press ENTER. The paragraph is divided into two paragraphs with the same attributes, and the cursor is positioned at the beginning of the second paragraph.

To *merge (concatenate) two consecutive paragraphs*:
Position the cursor at the beginning of the second paragraph and press BACKSPACE or position the cursor at the end of the first paragraph and press DELETE. In both cases, the paragraphs merge and the characteristics of the <u>second</u> paragraph are automatically applied to the <u>first</u> paragraph.

Text editing via the clipboard

The *clipboard* is a communication zone between WorkStation windows which allows you to export text from the Section window to other windows (applications), or to import text from other applications. The clipboard contains only the last selection copied to it. This information remains in the clipboard until it is replaced. The basic manipulations are described below.

How *to put a string of characters in the clipboard*:
Select the string and select **Cut** (CTRL+X), **Copy** (CTRL+C) or **Concatenate** (CTRL+SHIFT+INS) from the **Edit** menu:

- *Cut* deletes the string from the Section window and places it on the clipboard, replacing the contents of the clipboard.
- *Copy* and *Concatenate* keep the string in the Section window and copy it to the clipboard, either replacing the contents of the clipboard (Copy) or adding the string to the contents (Concatenate).

How *to recover a string of characters from the clipboard*:
Select **Paste** (CTRL+V) from the **Edit** menu. The text contained in the clipboard will be inserted at the cursor position, or will replace any selection.

NOTE   If the clipboard contains information other than text (for example graphs), the Paste and Concatenate commands are inactive. However, cut or copy commands are active when a selection exists in the Section window. This selection can be copied to the clipboard, whatever the type of information contained in the clipboard.

In the Section window, the clipboard can be used to move text from one place to another, or to duplicate text.

How *to move text*:
Select and **Cut** the text to be moved. Position the cursor at the point where the duplicated text must appear, then **Paste** the contents of the clipboard.

How *to duplicate text*:
Select and **Copy** the text to be duplicated. Position the cursor at the point where the duplicated text is to appear, then **Paste** the contents of the clipboard.

You can move or duplicate parts of text within a section or a Non-formatted Description, from one section to another, from a section to a Non-formatted Description, from a Non-formatted Description to a section, and from a Non-formatted Description to another.

NOTE   The text format attributes are memorized in the paragraph marks and apply to all text in the paragraph. When you move or duplicate text containing paragraph marks via the clipboard, remember the following points:
- each string in the clipboard which is not followed by a paragraph mark takes the format attributes of the paragraph in which it is pasted
- when you paste text containing one or more paragraph mark(s) within a paragraph, the beginning of the target paragraph takes the format attributes of the first mark in the pasted paragraph.

How *to move (duplicate) text without format information*:
Select the text only (without its paragraph mark) and cut (or paste) it. When you paste it into a paragraph, the text takes the format information of this paragraph.

How *to move (duplicate) text with format information:*
Select the text with its paragraph mark and cut (or paste) it. When you paste it into a paragraph, the text keeps the format information of its paragraph mark.

Information exchange with other applications via the clipboard

You can use the clipboard to import text into the Section window from another word processor, running in the same environment as the WorkStation. You can also export text from the Section window to this word processor.

If you paste text into the Section window from other word processors, the tabulation characters are converted into '>' and other characters which can not be interpreted by the WorkStation are converted into spaces.

When you copy text into the clipboard from other word processors, the text is arbitrarily split into lines. When you paste it into the Section window, each line is inserted in the form of a specific paragraph. To reassemble the text into one paragraph, merge these paragraphs.

Display, Print Preview and Printing a Section

Display the text in the Section window, pagination

The Section window displays only part of the contents of the section. The size of the displayed part, called *display page*, depends on the current size of the window.

The display page is not the same as the *print page*. The size of the print page depends on the characteristics of the printer and on the current values of the printing parameters (print margins, heading, etc.). Select **Paginate** in the **File** menu to split the contents of the section into print pages.

This command determines the position of the beginning of the print pages, called *page breaks*. A page break is always positioned before a paragraph, so that a paragraph is never split between two different print pages. You can also add manual page breaks (via **Page Break** in the **Paragraph** menu): these page breaks will be taken into account by automatic pagination.

The page breaks are displayed as dotted lines: manual page breaks have more densely dotted lines than automatic page breaks.

Move within the section

The Section window contains *scroll bars* allowing access to all of the contents of the section. The scroll bars allow you to move line by line, display page by display page, or directly to a given position.

You can access a particular page by selecting **Go to** in the **Search** menu. You can also slide the scroll bar: when sliding the scroll bar, if the section has already been paginated, the page numbers are displayed at the bottom right of the window, indicating which page will be displayed.

Print preview and printing

The **Print Preview** command in the **File** menu opens a secondary window in which you can display the section as it will be printed. Whole print pages are displayed containing the presentation (margins, frame, title, context, page number...) set by the current print options.

The **Print section** and **Print pages...** commands in the **File** menu allow you to print part or all of the section contents. In the Print Preview window, you can also use the **Record page to print** command of the System menu (or the **F2** shortcut key) and repeat this command for several pages. When you close this window, the list of recorded pages will be displayed for printing.

The Menu Bar of the Section Window

File   This menu contains commands that allow you to save, save as, restore, paginate, print preview, print section, print pages, set print options and printers and validate the Section according to the host rules.

Edit   This menu contains commands that allow you to use text editing facilities.

Search   This menu contains commands that allow you to search for characters strings, replace characters strings, and to go to a specific page.

Characters   This menu contains commands that allow you to select character style and font.

Paragraph   This menu contains commands that allow you to format paragraphs (with/without Word Wrap, define as a VisualAge Pacbase Line, label the paragraph, use paragraph as Title), to insert page breaks and to align paragraphs.

Options   This menu contains commands that allow you to define paragraph formats, display the Ruler and select the input mode (insert/typeover). You can also install and use Spell Checkers.

Section   This menu contains commands that allow you to display other sections in the same section window.

? = F1   This command calls the online help.

The File Menu

File

Save
Save as...
━━━━━━━━━━━━━━━

Restore
━━━━━━━━━━━━━━━

Paginate
Print Preview
Print Section
Print pages...
━━━━━━━━━━━━━━━

Print Options...
Printer...
━━━━━━━━━━━━━━━

Host Validations

Save   Saves the Text section. Host validations are then performed. If host validations are not OK, the section is still saved locally. The message "**Too many lines for upload"** is displayed, and you can split the section or copy part of it into another section. This situation can be avoided by regularly checking your Section with the **Host Validations** command.

NOTE   You cannot save a text that contains incorrect VisualAge Pacbase Lines. For complete information, refer to subchapter "Upload/Download and Data Element Cross-Reference". A dialog box opens displaying the incorrect line types.

Save As...   Opens the Save As... dialog box which enables you to duplicate the section into another file. If, in the Print Options dialog box, you have selected the Absolute command for Pagination and the Page Number command for the Header Style, the Absolute Pagination dialog box will prompt you to input the number of the first page of the Section.

Restore   All modifications carried out after the last save will be lost (a confirmation message is displayed). Press **YES** to redisplay the last saved version of the section.

Paginate   Inserts and updates automatic page breaks after you have typed and edited the text according to the print options and the printer orientation.

Automatic page breaks appear as thin dotted lines: manual page breaks appear as dark gray lines.

NOTE   Page numbers are displayed at the bottom right of the screen.

Print Preview   Opens the Print Preview window in which you can see your section as it will look when printed. See subchapter "Auxiliary Dialog Boxes".

If, in the Print Options dialog box, you have selected the Absolute command for Pagination and the Page Number command for the Header Style, the Absolute Pagination dialog box will prompt you to input the number of the first page of the Section.

Print Section

Prints the Section.

If, in the Print Options dialog box, you have selected the Absolute command for Pagination and the Page Number command for the Header Style, the Absolute Pagination dialog box will prompt you to input the number of the first page of the Section.

Print pages...

Prints the specified pages.

If, in the Print Options dialog box, you have selected the Absolute command for Pagination and the Page Number command for the Header Style, the Absolute Pagination dialog box will prompt you to input the number of the first page of the Section.

The **Print Pages...** command opens the dialog box in which you specify the order numbers of the pages within the Section (they may be different from the page numbers).

For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Print Options...   Opens the Print Options dialog box.

For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Host Validations   These validations are relevant if the texts are to be uploaded and called in a Document.

This command lets you know at any time the number of lines your section would occupy when uploaded on the host. If the text has more than 950 lines, the maximum authorized for a section on the host, this command displays a warning message (the first 49 lines in the description are for saving any text assigned on the host).

This command also checks the number of characters per word (word wrap paragraph), and displays a message if:

- A word contains more than 30 characters
- The label of a paragraph contains more than 15 characters

NOTE   You cannot save text containing invalid VisualAge Pacbase Lines. For complete information, refer to subchapter "Upload/Download and Data Element Cross-Reference". A dialog box opens notifying you of the incorrect line.

The Edit Menu

Edit

Undo Typing (Formatting, Type)
Redo Typing
──────────────────────────

Cut
Copy
Paste
──────────────────────────

Concatenate
──────────────────────────

Delete

Undo Typing   The **Undo** command reverses your last editing action.

Cut   Deletes the selected character string from a text section and transfers it to the Clipboard.

Copy   Copies a selected character string to the Clipboard.

Paste   Inserts the contents of the Clipboard into the text section where the cursor is positioned, or replaces any selection.

Concatenate   Adds the selected character string to the current contents of the Clipboard (same as copy without clearing the clipboard contents).

Delete   Deletes the character following the cursor or the string of characters selected.

The Search Menu

Search

Search	➜	**In the Section...**
		In all Sections...
Replace	➜	**In the Section...**
		In all Sections...

──────────────────────

Go to...

Search   ➜   **In the Section...**
                             In all Sections...
                       Opens the Search dialog box. For complete details, refer to the subchapter "Auxiliary Dialog Boxes".

Replace   ➜   **In the Section...**
                             In all Sections...
                       Opens the Replace dialog box. For complete details, refer to the subchapter "Auxiliary Dialog Boxes".

Go to...   Opens the Go To dialog box. For complete details of the Replace dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The Characters Menu

Characters   **Plain Text**
                       Bold
                       Italic
                       Underline
                       ─────────────────────
                       List of Fonts
                       ─────────────────────
                       Inferior Size
                       Superior Size
                       ─────────────────────
                       Fonts...

All commands in this menu apply to the selected paragraph(s) only.

Plain Text   Removes all text enhancements (bold, italic, underline).

Bold   Makes characters bold, or removes the bold format.

Italic   Makes characters italic, or removes the italic format.

Underline   Underlines characters, or removes the underline format.

List of fonts

                        The list of fonts varies according to the fonts installed in the operating system used.

                        The font " Brush Script " which is compatible with the € character is available on Windows 2000 and Windows NT. For other operating systems, it must be installed

                        The current paragraph will be formatted according to the font selected in the list.

NOTE   When a new font is selected from this menu, its size will be the same as the previous font where possible.

Inferior Size
Superior Size   Reduces or enlarges the size of the character font, if a smaller or larger size is available.

Fonts...   This command opens up a dialog box allowing you to select both the font and size for the screen.

The Paragraph Menu

Paragraph   **Word Wrap**
                       No Word Wrap
                       VisualAge Pacbase Line
                       ━━━━━━━━━━━━━━━━━━━━━━━
                       Labeled Paragraph
                       Title
                       ━━━━━━━━━━━━━━━━━━━━━━━
                       Page Break
                       ━━━━━━━━━━━━━━━━━━━━━━━
                       Alignment...

All commands in this menu apply to the selected paragraph(s) only.

When a new paragraph is created, the system automatically applies the format of the preceding paragraph.

The following three commands are mutually exclusive.

Word Wrap   Continuous text input with automatic word-wrap.

                       In this type of paragraph, words exceeding 30 characters will be truncated when the text is printed in a Document. You can verify that the text does not contain such words by selecting **Host Validations** in the **File** menu.

                       However, local printing does not impose any limitation on word length.

                       WORD WRAP paragraphs may be indented. For complete information, refer to subchapter "Auxiliary Dialog Boxes", **Define Formats** dialog box.

No Word Wrap   The length of a No Word Wrap line can not exceed 254 characters. A "beep" indicates when the end of the line is reached.

                       The paragraph will be printed as entered, i.e. without re-formatting. This may be suitable for charts with columns, on condition that a non-proportional font is used, in which all characters have the same width (for example Courier font).

          NOTE   If the chart is printed in a PDM, the TS edit option must be active.

VisualAge Pacbase Line

                       This type of line is automatically assigned to lines of type Y, F and D, which may form part of descriptions of text occurrences downloaded locally.

                       They are formatted as follows:
                            -   1-character line type
                            -   60-character line

          NOTE   If the character size used is to big, the line will exceed the page limits. Only characters within page limits will be printed.

                       If you create a new paragraph following a VisualAge Pacbase Line type paragraph, the new paragraph automatically has Word Wrap.

                       For further information, refer to the *Specifications Database Manual*, chapter "Texts", subchapter "Section Description".

The following commands are optional. They can be used together and combined with the **Word Wrap** and **No Word Wrap** commands.

Labeled Paragraph   A labeled paragraph has its first character string as a left negative indent. If you activated **Paragraph marks**, the label will be symbolized by a left-oriented arrow after the indent zone.

In the WorkStation, the label cannot exceed 30 characters. (The WorkStation will "beep" if you go past this limit.) Warning: when this paragraph is validated via **Host Validations**, a message will warn you that you have a label exceeding 15 characters.

NOTE   The character string used for the paragraph label may be truncated when printed if it is too long for the left margin of the format in use.

The **Labeled Paragraph** option is only valid for lines of VisualAge Pacbase Line type.

The ampersand (&) can be used to associate several words in the label.

Example: The character strings "This&is&a&label and this is the text..." will produce the following left negative indent:

This is a label   and this is the text.

The purpose of this sentence is to create several lines of text for an example of negative indent.

Title   This command is used to insert titles within a text section.

NOTE   If you want to underline a title which has a label, the label only will be underlined.

Page Break   This command allows you to position a page break or to cancel a positioned page break (Undo Page Break) before the selected paragraph. This kind of page break appears as a dark gray line: automatic page breaks appear as thin dotted lines.

When you print a text locally, each section starts on a new page. However, page breaks are not automatically placed at the beginning of a section when you upload your text to the host. In order to upload texts with page breaks **at the beginning of sections**, you need to **insert page breaks**. These will be taken into account at host level only.

Alignment...   This command opens up a dialog box where you select alignment (Left, Centered, Right, Justified) and format for the selected paragraph(s).

When the dialog box opens up, it shows the parameters of the selected paragraph. If more than one paragraph is selected, the parameters of the selected paragraphs are displayed if the parameters are the same in all selected paragraphs (if not, no parameters are displayed). If several paragraphs have been selected, you can select the alignment and the format for all of the selected paragraphs.

NOTE   To create tabs (alignments inside lines), you must use blank characters. To ensure the alignments are correct, choose non-proportional screen font and printer fonts.

The Options Menu

Options   **Define Formats...**
                        ━━━━━━━━━━━━━━━━━━━━━━━━━━━
                        Ruler
                        Paragraph mark
                        ━━━━━━━━━━━━━━━━━━━━━━━━━━━
                        Insert/Typeover
                        ━━━━━━━━━━━━━━━━━━━━━━━━━━━
                        Spell Checker   ➔ *Spell Checker names*

Formats defined with the following two commands apply to all paragraphs in the current Section:

Define formats...   Opens the Define formats... dialog box which allows you to specify default formats. Refer to subchapter "Auxiliary Dialog Boxes".

Ruler   Displays the Ruler (command is checked when the Ruler is displayed). For more information refer to subchapter "Auxiliary Dialog Boxes".

Paragraph marks   Select this command (command is checked) to display paragraph marks or re-select the command (the check mark disappears) to hide the paragraph marks. If you request paragraph marks in one section, they will be displayed in all other open sections. This option is memorized for every user, and will be active when you next connect.

Typeover/Insert mode
                        Toggles between typeover and insert modes.

Spell Checker   This command opens a Cascaded menu that contains any of the installed Spell Checkers. The names displayed are the names entered when the Spell Checker was installed. For more information refer to subchapter "Auxiliary Dialog Boxes".

The Section Menu

Section   **First Section**
                        Previous Section
                        Next Section
                        Last Section

                        These commands display the selected text section in the current section.

                        If a text section in which you have made updates is already displayed in another window, a dialog box opens up and asks if updates should be saved before the other section is displayed.

? = F1   Calls online help.

Upload/Download and Data Element Cross-Reference

Upload

A text entered in the WorkStation and uploaded into the Specifications Database has a specific structure and is ready to be printed in a Document occurrence.

The uploaded text structure, seen via the emulator or a standard terminal, is as follows:

- The Table of Sections is displayed in the '++' section (CH: -D++). It is also included in the Text occurrence summary screen (CH: -LT).

- The code of each section is the 2-character code preceding the section title in the Table of Sections window.

- In each section, lines are allocated as follows:

  - **Line 000**: section title

  - **Line 001**: contains paragraph formats specific to the section. However, the layout assigned to the Document occurrence will be taken into account for Text occurrences uploaded from the WorkStation if you use the "-TW" print option

  - **Lines 002 to 049**: assignment requests (I-type line)

  - **Lines 050 to 999**: text line contents entered locally

  - Line numbers are incremented sequentially by one

  - "$i" (WORD WRAP) or $$i (NO WORD WRAP) (i = 0, 1, ... , 9) marks the beginning of a paragraph and its format

  - Line breaks are indicated at the beginning of the following line

  - The **last line** of a section that contains an I-type line will also contain an assignment end request (J-type line)

NOTE: The L-type line (except for the 000 line) is not used with the current WorkStation release.

If for some reason you need to modify a Textual description DIRECTLY in the Specifications Database (not recommended), you should carefully follow the instructions listed below.

- The "++" section must not be modified

- Lines 000 and 001 must not be modified nor moved

- Do not enter text on lines 002 to 049. They are reserved for assignment requests (I-type lines)

- If there is a J-type line, it cannot be deleted

- Renumber existing lines using an interval greater than 1 (from line number 050 or after, until the end of the section)

- Enter your changes

- Keep in mind that - within paragraphs - blanks between two lines must be specified at the beginning of the second line

- If you create a new section, once downloaded, it will be positioned automatically at the end of the list in the Table of Sections window, under its 2-character code. The title is the first title in the Section. If no title is found, "Old Section: XX" is given as a title (where XX is the section code)

Download

When a Textual description is downloaded, all Sections included in this description are downloaded at the same time. The title given to a Section comes from the first title found within the Section. If no title is found, "Old Section: XX" is given as a title (where XX is the section code).

You can set Text downloading options via the WorkStation Manager Window (via **Download** $\rightarrow$ **Text...** in the **Preferences** menu).

When you download text for the first time, a confirmation dialog box will allow you to verify the downloading options.

After its first download on a PC, a text which had been created on the host can take one of the following two presentations:

First case: the Text uses PDM codifications:

All codifications are used:

- The Table of Sections is automatically built. The sections are displayed depending on the alphabetical order of their 2 character code, and their title is built from the first title line, which you can modify

- A "$$n" paragraph becomes a No Word Wrap type of paragraph and a "$n" becomes a Word Wrap type of paragraph.
  The print windows ($n, etc.) take the attributes of the corresponding formats: Format 1 for $1, Format 2 for $2, etc., and Format 10 for $0

  N.B.
  If you want to keep the original formats (defined from the host) *when the text is printed from PDM*, use the "-TW" print option.
  You can also model the formats on the print windows of the used layout.

- Type L lines become type K lines

- Type F, D and Y lines appear as such in the text (VisualAge Pacbase type lines)

- If the section contains a type I line which is not followed by a type J line, all the following sections will also be downloaded

Second case: the Text does not use PDM codifications:

The characteristics are the same as in the previous case, except for the paragraph definition:

- All the lines are integrated in the same paragraph, until there is:
  - a change of line type
  - an empty line

- In the texts defined from the host, $0 is the default print window corresponding in the WorkStation to the Format 10   which will be assigned by default to all downloaded paragraphs

Cross-References between a Text and a Data Element

To cross-reference a Text to a Data Element, enter **$.E=DELCOD** (where DELCOD is the code of the Data Element) in the Text. When the text is uploaded, the cross-reference between the Text and the Data Element is created.

Codes with the form $.E=DELCOD (where DELCOD is the Data Element occurrence code) are cross-references between the Text and the Data Element. Such cross-references entered via the WorkStation have this form: the Data Element is not displayed in the ELEM. column (on the host). However, the ELEM. column may still be used via the Emulator. After a download the values in the ELEM. column will be translated to $.E=DELCOD and will remain in this form even after an upload.

Do not delete these codes unless you wish to delete the cross-reference. These codes do not appear in the printed text or the simulation.

Auxiliary Dialog Boxes

The Create From... Dialog Box

This dialog box is displayed via **Create from...** in the **Section** menu in the Table of Sections window (The Textual Description Window). It enables you to create a section using an existing file:
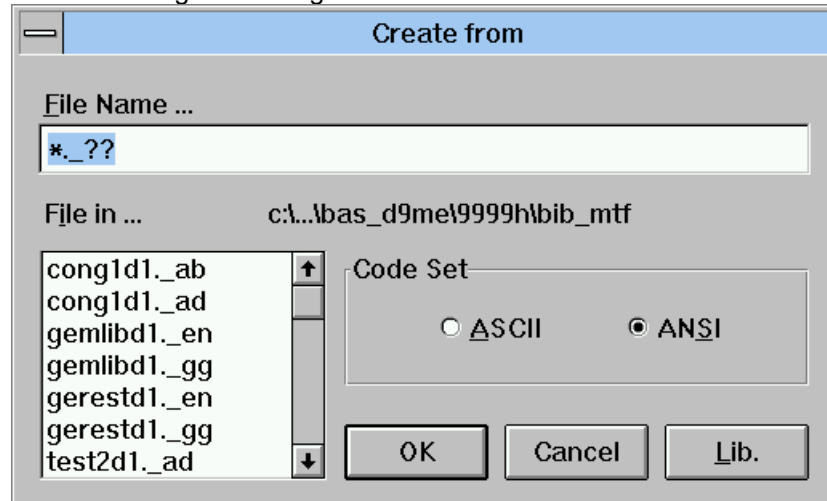
File Name
Enter the name of the file or select it in the list box.

File in
The file path.

Code Set
Select the format of the existing file: ASCII or ANSI.

OK
Selects the file chosen in the list box and opens the Create from... dialog box, identical to the Create dialog box.

Cancel
Closes the dialog box.

Lib.
Enters the file path of the current WorkStation library and refreshes the list box

NOTE   For text from another word processor, tabulation characters are converted to '>' and other characters that the WorkStation cannot interpret are converted to blanks.

The Print Options Dialog Box

This dialog box is displayed when you choose:
- **Print options** in the **Print** menu in the Table of Sections window
- **Print options** in the **File** menu in the Section window
- **Print options** in the **Print** menu in the Non-Formatted Description window

NOTE   The contents of this box will vary slightly according to the location where it was opened.
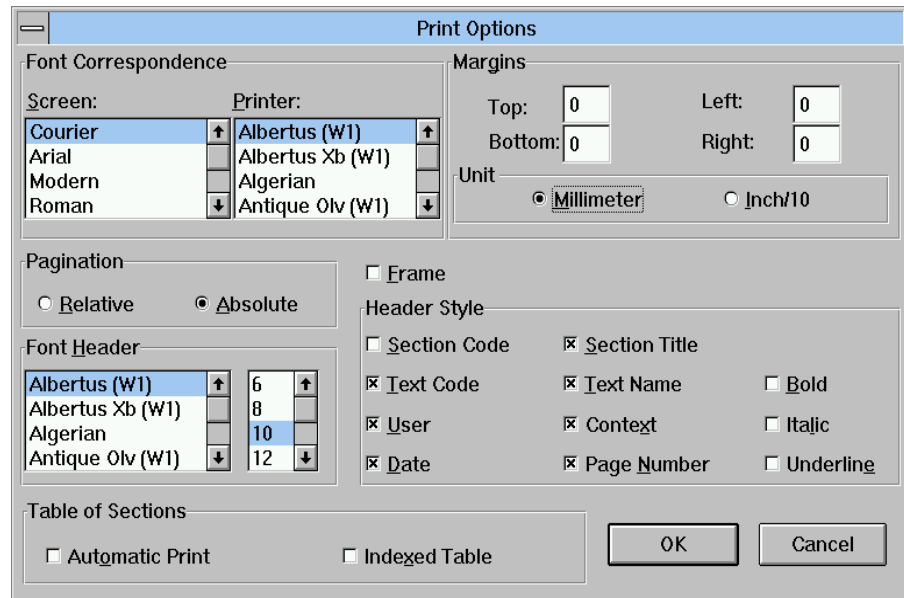
Font correspondence

The screen font is not always available for printing and vice-versa. These list boxes are thus used to ensure correspondence between screen and printer fonts.

To ensure correspondence, click on a screen font and then on the printer font which is to be associated with the screen font. By default, screen fonts correspond to printer fonts: however exact correspondence is not always possible.

Screen
Screen font.

Printer
Printer font.

Margins

Top, Bottom, Left, Right

Unit
Unit of measure for print margins: mm or inch/10.

Pagination (not available for Non-Formatted Description window)

> **Relative** Numbers the pages according to their Section, e.g. the third page of the fourth Section is numbered 4.3.

> **Absolute** Numbers the pages in sequence according to their position within the Text occurrence as a whole.

Frame
Allows you to print each page within a frame.

Header Style

Header layout:

```
CONTEXT                                                          DATE
USER                                                             PAGE
                    TEXT CODE - TEXT NAME
                   SECTION CODE - SECTION TITLE
```

The check boxes of the Header Style group allow you to specify the elements you want to print in the header. The bold/italic/underline styles apply to the four lines of the header.

Font Header
The list boxes display the fonts and the corresponding sizes that are used for the header. Click on a font, then select its size.

Table of Sections (available for the Table of Sections window only)
Prints the Table of Sections, i.e. the List of Sections, when you choose **Print Section(s)** in the **Print** menu in the Table of Sections window.

Automatic Print
If Text sections are selected and absolute pagination is used, only these sections are listed in the printed Table of Sections. If Text sections are selected and relative pagination is used, all sections are listed in the printed Table of Sections.

Indexed Table
Prints the page numbers of the sections.

OK
Modifications are saved, and the dialog box closes. If this dialog box was accessed via:
> – the Table of Sections or the Section window, print options are set for **all** Textual descriptions
> – the Non-Formatted Description window, print options are set for **all** Non-Formatted descriptions

Cancel
Changes are not saved and the dialog box is closed.

NOTE   The print parameters you define for the texts or the Non-Formatted description are saved for the when you open the next session.

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The Style Dialog Box

This dialog box is displayed for the following windows:
- – the Table of Sections window via **Style...** in the **Preferences** menu
- – the Non-Formatted Description window via **Style...** in the **Preferences** sub-menu of the **Options** menu

Depending on which window you opened it from, this dialog box allows you to define default styles for all the Sections of a Text or for all Non-formatted Descriptions.
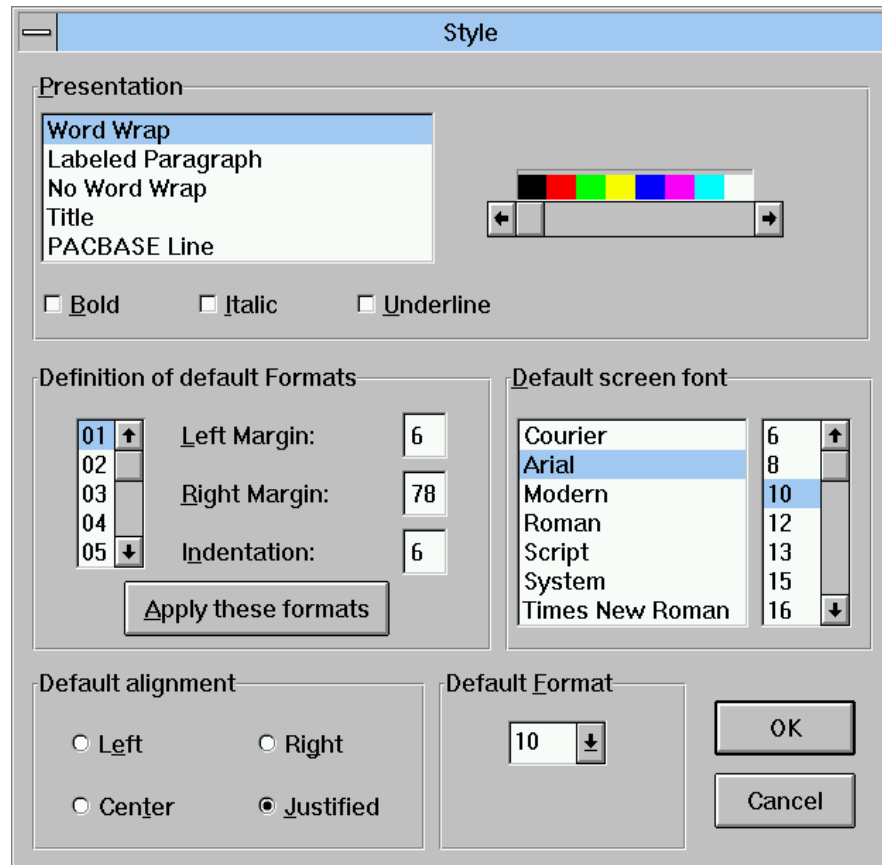
Presentation

You can assign a default display color and bold/italic/underline to each paragraph type.

For complete information concerning paragraph types, refer to subchapter "The Menu Bar of the Section Window". (For the Non-Formatted Description, refer to chapter "The Non-Formatted Description Window", subchapter "The Menu Bar of the Non-Formatted Description Window".)

To change the color, select a paragraph type, then a color on the color bar. The color applies to all existing, current and future Sections/Non-formatted Descriptions. To improve the legibility of the text/description, all titles may be for example displayed in red (WorkStation default option).

Word Wrap
Labeled Paragraph
No Word Wrap
Title
VisualAge Pacbase Line (available for the Table of Sections window only)

Bold/Italic/Underlined
These check boxes are available for all types of paragraph except VisualAge Pacbase Lines. The bold/italic/underline applies to all future Sections/Non-formatted Descriptions.

Definition of default formats

In this group you define or modify the default formats of the future Sections/Non-formatted Descriptions. If you enter inconsistent or incorrect values in these dialog boxes, they are highlighted and an error message is displayed. You can define up to ten formats by setting parameters for the margins and the indentation.

NOTE
If a Text or Non-Formatted description is downloaded, the formats defined in these dialog boxes take priority over those defined in the Download Texts or Download Non-Formatted Descriptions dialog boxes which are accessed via the WorkStation Manager Window.

Select a format from 01 to 10.

Left Margin
Enter a number (position on the Ruler).

EXAMPLE:
If the left margin is set to 5, the first character on each line of the corresponding paragraph will hold the sixth position, leaving 5 spaces on the left, except the first line if a value different from the left margin one is specified for the indentation.

Right Margin
Enter a number (position on the Ruler).

If the right margin is set to 75, the last character on each line of the corresponding paragraph will hold the seventy-fifth position, leaving 3 spaces on the right.

Indentation
This parameter spaces the first line of a paragraph from the left margin.

EXAMPLE:
If the left margin is set to 5 and you require a left indent of 6 characters, the **Indentation** value must be 11 (5 + 6).

For consistency with the host format management, the right margin value cannot exceed 78 characters. The margins associated with the standard default formats are as follows:

format 1	6-78
format 2	8-78
format 3	10-78
format 4	12-78
format 5	14-78
format 6	16-78
format 7	18-78
format 8	20-78
format 9	22-78
format 10	4-78

Apply formats (available for the Table of Sections window only)
This button is used to apply the new formats immediately to existing Sections (displayed in Table of Sections window).

Default font
The font used by default for future Sections/Non-Formatted Descriptions.

Default alignment
The alignment used by default for future Sections/Non-Formatted Descriptions.

Default format
The format used by default for future Sections/Non-Formatted Descriptions.

OK
Changes are saved and the dialog box is closed.

Cancel
Changes are not saved and the dialog box is closed.

The Spell Checker Installation Dialog Box

This dialog box is displayed for the following windows:
  – The Table of Sections window via **Spell Checker Installation...** in the **Preferences** menu
  – The Non-Formatted Description window via **Spell Checker Installation...** in the **Preferences** menu

This dialog box allows you to install and set parameters for one or more spell checkers (your own or commercial models).

Irrespective of which window the spell checkers were installed from, they can be used in both the Section and the Non-Formatted Description windows.
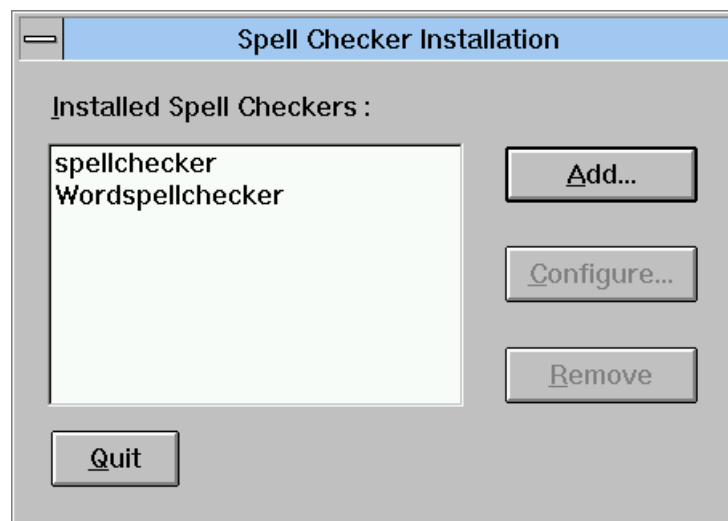
Add
   This button opens the dialog box below in which you can specify the spell checker and its parameters.

Configure
   This button, which is active when you select an installed spell checker from the list, opens the same dialog box as the Add button. In this case, the dialog box displays the parameters of the selected spell checker. You can modify these parameters.

Remove
   This button, which is active when you select an installed spell checker, removes it from the list.

Quit
   This button closes the dialog box.

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```
┌─────────────────────────────────────────────────────────────────────────────┐
│ Add                                                                      [X]   │
├─────────────────────────────────────────────────────────────────────────────┤
│ Spell Checker name :                                                          │
│ ┌──────────────────────────┐    ┌─────────┐ ┌───────────┐ ┌──────────┐       │
│ │Word Pro                  │    │   OK    │ │ Message...│ │  Cancel  │       │
│ └──────────────────────────┘    └─────────┘ └───────────┘ └──────────┘       │
│ ┌─Command line─────────────────────────────┐ ┌─Spell Checker file──────────┐ │
│ │                                           │ │ File name :                  │ │
│ │ d:\apps\lsm97\wordpro                     │ │ ┌──────────────────────────┐ │ │
│ │ ┌─────────────────┐ ┌──┐                  │ │ │c:\texte.spl             │ │ │
│ │ │ltsstart.exe    ▲│ │  │  Executable name:│ │ └──────────────────────────┘ │ │
│ │ │wordpro.exe      │ │  │                  │ │ ┌─Code Set─────────────────┐ │ │
│ │ │[..]             │ │  │ ┌──────────────┐ │ │ │                          │ │ │
│ │ │[expert]         │ │  │ │wordpro.exe   │ │ │ │ ● ANSI      ○ ASCII      │ │ │
│ │ │[graphics]       │ │  │ └──────────────┘ │ │ └──────────────────────────┘ │ │
│ │ │[icons]          │ │  │  Parameters :    │ │ ┌─Processing───────────────┐ │ │
│ │ │[scripts]       ▼│ │▼ │ ┌──────────────┐ │ │ │                          │ │ │
│ │ └─────────────────┘ └──┘ │              │ │ │ │ ● By paragraph ○ By line │ │ │
│ │                          └──────────────┘ │ │ └──────────────────────────┘ │ │
│ └───────────────────────────────────────────┘ └──────────────────────────────┘ │
└─────────────────────────────────────────────────────────────────────────────┘
```
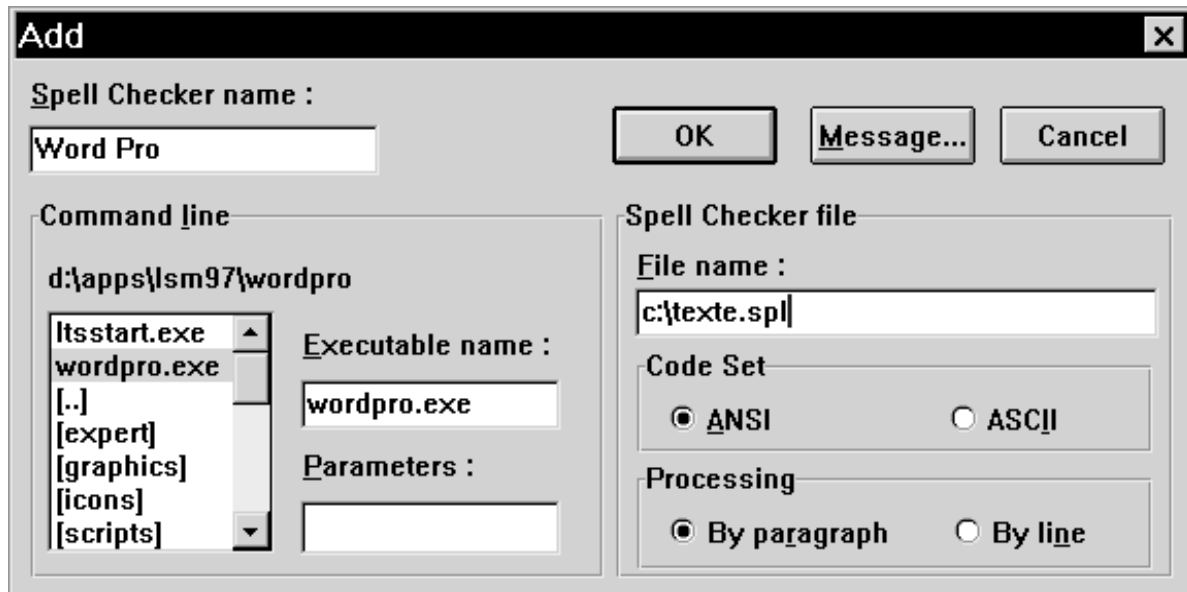
Spell Checker name
Enter the name of the spell checker (.EXE is not required). This name will appear as a label in the menu displayed via **Spell Checker** in the **Options** menu in the Section window.

Command line
Select the location of the spell checker.

Executable name
Enter the complete path, name and extension (not required) of the spell checker executable file. You can type it or select a line from the list box.

NOTE   For normal use, the executable file must actually be a spell checker.

Parameters
Enter parameters for the spell checker run-start command.

Spell Checker file

File name
The spell checker checks a copy of the text. When the check is completed, the original text will be updated with modifications, if any. Enter the file name and path to be used for this operation.

Code set
Specify the code set (ASCII or ANSI) in which the spell checker will work.

Processing
By paragraph
This command keeps the paragraph divisions of the original text in the copied text. This feature enables you to use grammar checkers.
By line
This command turns each line of the copied text into a paragraph. Use this command if the spell checker cannot work with long paragraphs.

OK
This button saves the entered parameters and closes the dialog box.

Message
   If you have developed your own spell checker, use this button to open a dialog box in which you specify parameters for communication between the WorkStation and your spell checker.

Cancel
   This button cancels the entered parameters and closes the dialog box.

The Save As Dialog Box

This dialog box is displayed via **Save as...** in the **File** menu in the Section window (and **Save as...** in the **File** menu in the Non-Formatted Description window). It enables you to duplicate the section onto another file.

```
┌─────────────────────────────────────────────────┐
│ ▭        Save as                                 │
├─────────────────────────────────────────────────┤
│ File Name:        ┌──────────────────────────┐   │
│                   └──────────────────────────┘   │
│  ┌Code Set─┐ ┌Type───────────────────────────┐   │
│  │         │ │                                │   │
│  │ ○ ANSI  │ │  ◉ Text only                   │   │
│  │         │ │                                │   │
│  │ ◉ ASCII │ │  ○ Text with formats           │   │
│  │         │ │                                │   │
│  └─────────┘ └────────────────────────────────┘  │
│       ┌──────────────┐    ┌──────────────┐       │
│       │     OK       │    │   Cancel     │       │
│       └──────────────┘    └──────────────┘       │
└─────────────────────────────────────────────────┘
```
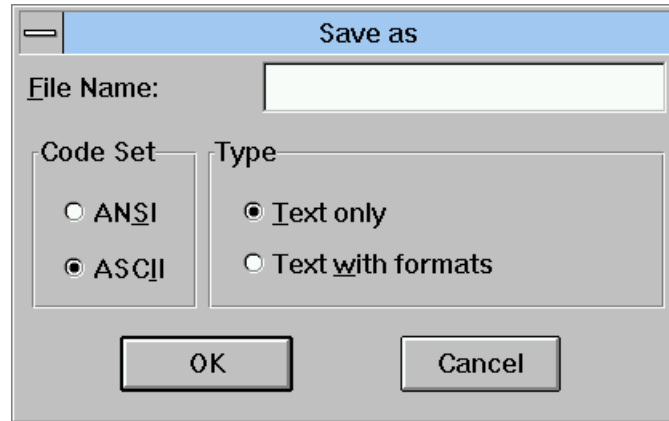
File Name
Enter the name of the file.

Code Set
Select the format of the existing file: ASCII or ANSI.

Type
Select what you want to save.

The Absolute Pagination Dialog Box

If, in the Print Options dialog box, you have selected the Absolute command for Pagination and the Page Number command for the Header Style (or for the Non-formatted Description window, only the Page Number), the following dialog box will be displayed when you select:

- **Print Section(s**) in the **Edit** menu in the Table of Contents window
- **Print Preview**, **Print Section** or **Print Pages** in the **File** menu in the Section window
- **Print Preview** or **Print Pages** in the **File** menu in the Non-formatted Description window

This dialog box will prompt you to input the number of the first page of the Section ("1" will be entered by default):
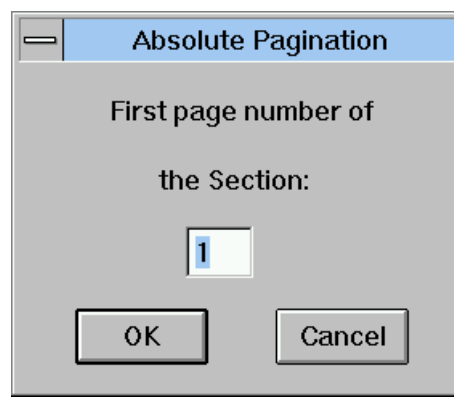
Press OK to continue the requested command.

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The Print Preview Window

This window is displayed via **Print Preview** in the **File** menu in the Section/Non-Formatted Description window. It shows you what the Section/Description will look like when it is printed.
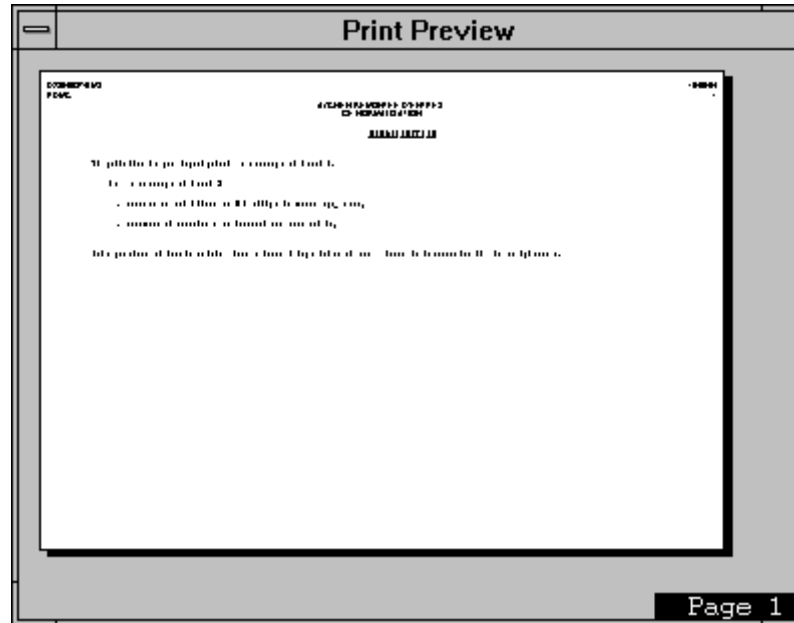
Print Preview displays an entire page at a reduced size: the page number is shown in the bottom right corner. In order to browse the Print Preview, press the PGDN or PGUP keys or use the vertical scroll bar.

In the Print Preview window there is a System menu which contains two commands: **Print Section/Description** and **Record page to print**. If you display a page in this window and select **Record page to print** and then display another page and select **Record page to print** (etc.), the pages you recorded to print will be printed when you select **Print pages**.

If pagination has not been performed or if pagination is not updated, the **Print Preview** command repaginates automatically.

DSREF000352A

The Print Pages Dialog Box

This dialog box is displayed via **Print Pages...** in the **File** menu in the Section window/Non-Formatted Description window (if applicable after closing the Absolute Pagination dialog box). In it you specify the order numbers of the pages within the Section/Non-Formatted Description (these numbers may be different from the page numbers).
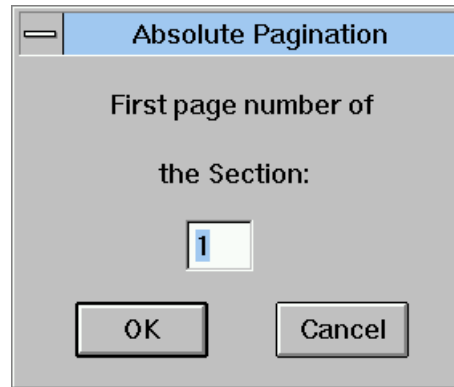
For example, if you want to print the first and second page of the second section which begins on page 5, enter 1 and 2 and not 5 and 6. Using the " - " character you can specify a page interval.

3 - 9	prints from page 3 to page 9 (inclusive)
- 9	prints from the first page to page 9
4 -	prints from page 4 to the last page in the section
3 5 8 - 12 14 - 20 23 -	prints page 3, page 5, from page 8 to page 12, from page 14 to page 20 and from page 23 to the last page

Press OK and the following dialog box will be displayed as the text is printed.
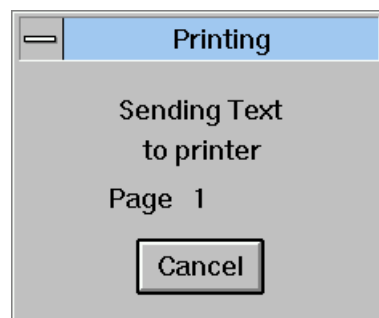
The Search Dialog Box

This dialog box is displayed when you select:

- **Search→In the Section...** or **Search→In all Sections...** in the **Search** menu in the Section window

- **Search** in the **Search** menu in the Non-Formatted Description window

NOTE   If a Text consists of only one Section, **Search→In all Sections...** is disabled.
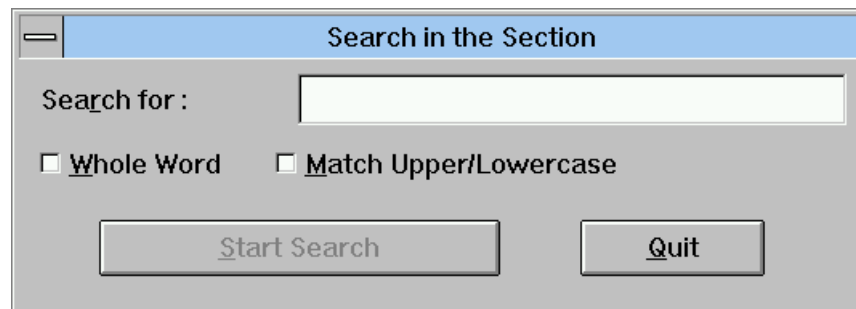
- enter the character string to **Search** for

- specify that the character string be searched for as a **Whole Word**

- choose **Match Upper/Lowercase:** if this command is selected, the search is performed on the string as entered, i.e. uppercase characters are differentiated from lowercase

- specify whether the character string be searched for **From the beginning of the Section**. If this option is not checked, the search starts in the current paragraph.

- Select **Close** to close the dialog box.

The search is activated by clicking on **Search**.

NOTE   When you close the **Search** dialog box, the last character string searched for in a Text or Non-Formatted Description as well as the search options are memorized. All these elements are automatically displayed when the dialog box is re-opened.

The Replace Dialog Box

This dialog box is displayed when you select:

- **Replace→In the Section...** or **Replace→In all Sections...** in the **Search** menu in the Section window

- **Replace** in the **Search** menu in the Non-Formatted Description window

NOTE   If a Text consists of only one Section, **Replace→In all Sections...** is disabled.

```
┌──────────────────────────────────────────────────────┐
│ ▭                        Replace                       │
├──────────────────────────────────────────────────────┤
│  Search for :      ┌──────────────────────────────┐   │
│                    │ choice                       │   │
│                    └──────────────────────────────┘   │
│  Replace with :    ┌──────────────────────────────┐   │
│                    │ command                      │   │
│                    └──────────────────────────────┘   │
│  □ Whole Word    □ Match Upper/Lowercase              │
│  ┌────────────────────────┐  ┌────────────────────┐   │
│  │      Start Search       │  │      Search        │   │
│  └────────────────────────┘  └────────────────────┘   │
│  ┌────────────────────────┐  ┌────────────────────┐   │
│  │    Replace Selection    │  │    Change All      │   │
│  └────────────────────────┘  └────────────────────┘   │
│               ┌────────────────┐                       │
│               │      Quit      │                       │
│               └────────────────┘                       │
└──────────────────────────────────────────────────────┘
```
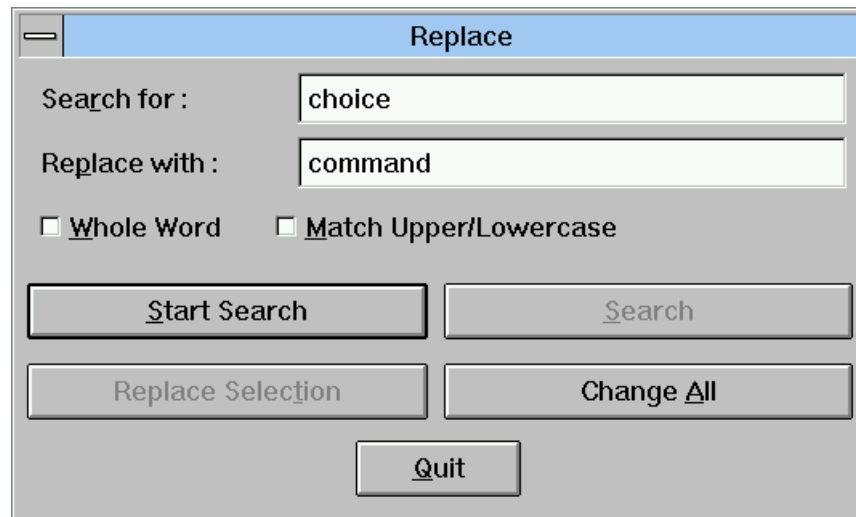
The following is the full list of buttons available in this dialog box:

Search for
Enter the character string to be searched for.

Replace with
Enter the character string to replace the character string being searched for.

Whole Word
Check to specify that the character string be searched for as a whole word.

Match Upper/Lowercase
Check this command to search for the string as entered, i.e. uppercase characters are differentiated from lowercase.

From beginning of Section
Check this command to search from the beginning of the Section.

Search (available when input is made in the "Search" field)
Press to start searching. When a character string is found it is highlighted. From this moment, the button will be No Change.

No Change
Select in order not to replace the character string found and continue the search.

Replace Selection
Select to replace the character string found.

Replace and Continue
Select to replace and continue searching. When a character string is found it is highlighted.

Change all the Section (available when starting the input in the "Search" field, using **Replace→In all Sections...**)

Select to replace the character string found in the current Section of the Text. Once the changes have been performed in the current Section, click on **Find Next**. This opens a message box in which you must confirm the replacement process in the next section.

Change All (available when starting the input in the "Search" field, using **Replace→In the Section...** for a Section or **Replace** for a Non-Formatted Description).

Select in order to change all occurrences of the character string found in the Section/Description.

Quit
Select to close the dialog box.

NOTES
• When you close the **Replace** Dialog Box, the last character string searched   and replaced in a text or a non formatted description, as well as the   replacement options, are memorized. All these elements will be automatically   displayed when reopening the box.

• You can type text in the section while the dialog box called by the **Search** or **Replace** options remains open.

The Go to... Dialog Box

This dialog box is displayed when you select:

- **Go to...** in the **Search** menu in the Section window
- **Go to...** in the **Search** menu in the Non-Formatted Description window
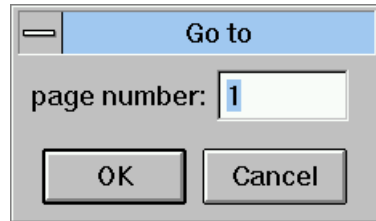
This dialog box allows you to enter the actual number of the page in the Section/Non-Formatted Description (it can be different from the printed page number if the page numbering does not begin at 1).

The Screen Fonts Dialog Box

This dialog box is displayed when you select **Fonts** in the **Characters** menu.
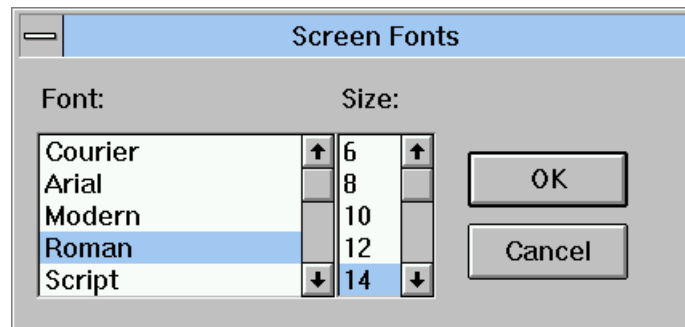
This dialog box enables you to select a font and its size for the current Section or Non-Formatted Description.

The Define Formats Dialog Box

This dialog box is displayed when you select:

•– **Define Formats...** in the **Options** menu in a Textual Description window

•– **Define Formats...** in the **Options** menu in a Non-Formatted Description

This dialog box allows you to modify the default formats defined in the Style dialog box (displayed in the Table of Contents window via **Style...** in the **Preferences** menu, or in the Non-Formatted Description window via **Preferences** in the **Options** menu). The formats defined in the Define Formats dialog box apply to the current Section/Non-Formatted Description, i.e. when you modify a Paragraph Format, all paragraphs with that format will be modified in your section.

This dialog box lists paragraph formats:
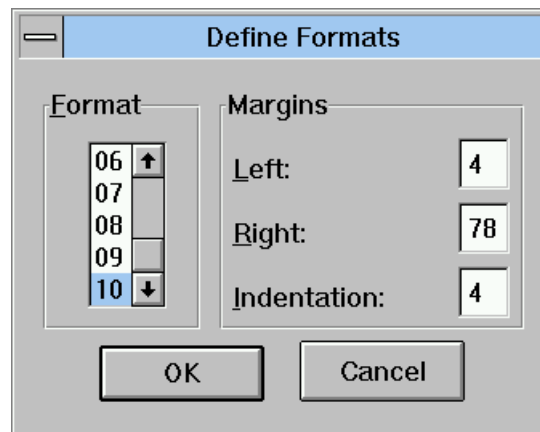
Ten paragraph formats can be defined including the **Left** and **Right** margins and **Indentation** parameters.

A margin is defined by a number, i.e. a position on the Ruler.

> For example, if the left margin is set to 5, the first character of each line of the corresponding paragraph will hold the sixth position, leaving 5 spaces on the left, except the first line if a different value from the left margin value is specified for the indentation

> If the right margin is set to 75, the last character of each line of the corresponding paragraph will hold the seventy-fifth position, leaving 3 spaces on the right

The **Indent** parameter spaces the first line of a paragraph from the left margin.

> For example, if the left margin is set to 5 and you require a left indent of 6 characters, the **Indent** value must be 11 (5 + 6).

When a section is saved, its paragraph formats are also saved.

If you assign incorrect values, you cannot close the dialog box and an error message appears.

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The Ruler

This ruler is displayed via **Ruler** in the **Options** menu in a Textual description Section window or a Non-Formatted Description window.
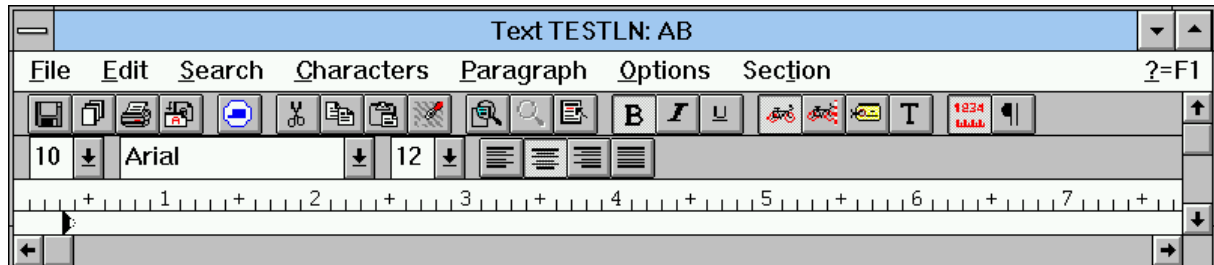
The Ruler is a horizontal scale which is displayed at the top of the Section window. Re-select the **Ruler** command to hide the Ruler. If you request the Ruler in one section, it will also be displayed in all other open sections. This option is memorized for every user and will be active when you next connect.

This command allows you to perform the same operations as **Define Formats** in the **Options** menu.

You may choose to:

- Apply another format to the paragraph(s): click on another format number or press Ctrl+No. (No. = 0 to 9, 0 identifying Paragraph Format No. 10)

- Modify the format:
  - The two black triangular markers control the left and right margins
  - The triangle points indicate the paragraph start and end positions
  - The indent marker appears as a white triangle in the left triangle if not used. Otherwise it appears as a black triangle.
- Use the alignment icons to align the selected paragraph(s): flush left (CTRL+L), centered (CTRL+Z), flush right (CTRL+R), or justified (CTRL+J), between the indent markers

NOTE   To create tabs (alignments inside lines), you must use blank characters. To ensure the alignments are correct, choose non-proportional screen font and printer fonts.

DSREF000352A

The Spell Checker Dialog Box

This dialog box appears when you choose **Spell Checker** in the **Options** menu in the Section window of a Textual Description or a Non-Formatted Description.

This dialog box displays the Spell Checker options:
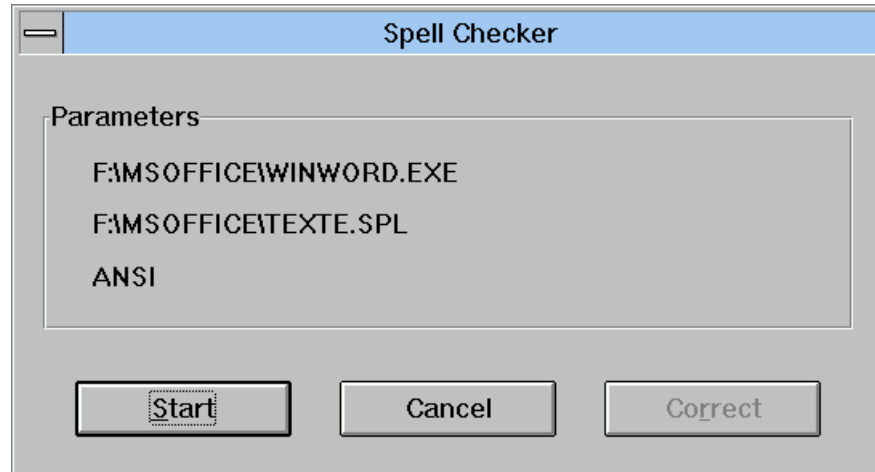
These options are memorized for every user and will be active when you next connect

The **Start** button triggers copying of the Section into the temporary file. (The text is stripped of all control characters.) The Spell Checker is activated, and you can correct the text. The corrected text is saved in the temporary file.

When using the Spell Checker, you can add, modify or delete characters or words. However, you cannot add or delete paragraphs.

When correction is finished, you return to the dialog box. If you select **Correct**, the text in the temporary file will be retrieved to update your section. You may **Cancel** the process and abandon all corrections made by the Spell Checker.

Chapter 12   The Non-Formatted Description Window

Functionalities

All the entities (except the standard VisualAge Pacbase entities) have a Non-Formatted description. This description can be used to enter free documentation for a given occurrence.

For some specific entities, there may be several Non-Formatted descriptions referring to a particular topic for the methodology being used. For example, the Phase entity in the MERISE methodology has two Non-Formatted description windows: "Non-Formatted description" and "Synchronization".

The Non-Formatted descriptions are processed by the Non-Formatted description window, which offers the same features as the Section window of the Textual description. This is why, in this chapter, you will find frequent references to chapter "The Textual Description Window" for all the dialog boxes that are common to both.

Getting to the Window

Since a Non-Formatted Description is managed locally, this window can be accessed whatever the connection type.

The occurrence must have been defined in the Specifications Database (except for drafts which are created in local mode). Its description must be downloaded onto the PC prior to working in local mode.

The background color of the Non-Formatted window can be changed in the WINDOWS configuration panel.

The Menu Bar of the Non-Formatted Description Window

Entity   This Cascaded menu contains commands that allow you to access the definition, lists, descriptions, cross-references of the current occurrence.

File   This menu contains commands that allow you to save, restore, paginate, print, set printing options and printer parameters and check the description according to the host constraints.

Edit   This menu contains text editing commands.

Search   This menu contains commands that allow you to search for character strings, change character strings, and go to a specified page.

Characters   This menu contains commands that allow you to select character style and font.

Paragraph   This menu contains commands that allow you to select paragraph types and formats and insert page breaks.

Options   This menu contains commands that allow you to define paragraph formats, display the Ruler and select the input mode (insert/typeover). You can also install and use Spell Checkers.

? = F1   This command calls the online help.

System Menu   In addition to standard commands, this menu contains a command to consult the current context.

                    For information concerning the context, refer to chapter "WorkStation Connection", subchapter "Context".

The Entity Menu

Entity   **Main Entity**   ➜ **Definition**
                                       Lists   ➜*Available lists*
                                       Descriptions   ➜*Available descriptions*
                                       X-References   ➜*Available X-references*
                                       ────────────────────
                                       Other Occurrence...
                    Related Entity...

For complete details about this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The File Menu

File   **Save**
                            Save as...
                            ━━━━━━━━━━━━━━━━━━

                            Restore
                            ━━━━━━━━━━━━━━━━━━

                            Paginate
                            Print Preview
                            Print Description
                            Print pages...
                            ━━━━━━━━━━━━━━━━━━

                            Print Options...
                            Printer...
                            ━━━━━━━━━━━━━━━━━━

                            Host Validations

Save   Saves the description. If the description contains more than 998 lines, it cannot be uploaded to the host. However, it is still saved locally. The message **Too many lines for upload** is displayed, and you can split the description or copy part of it in another description. This situation can be avoided by regularly checking the description with the Host Validations command.

Save as...   Opens the Save As dialog box. For details concerning this dialog box, refer to chapter "The Textual Description Window" subchapter "Auxiliary Dialog Boxes".

Restore   All the modifications carried out after the last save will be lost (a confirmation message is displayed). Press YES to redisplay the last saved version of the description.

Paginate   Inserts and updates automatic page breaks after you have typed and edited the description.

                            Automatic page breaks appear as thin dotted lines whereas manual page breaks appear as dark gray lines.

NOTE   Page numbers are shown in the bottom-right corner of the window as pagination proceeds.

Print Preview   Opens the Print Preview dialog box in which you can see your description as it will look when printed. See chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

                            If, in the Print Options dialog box, you have selected the Page Number command for the Header Style, the Absolute Pagination dialog box will prompt you to input the number of the first page of the Description.

Print pages...   Prints specific pages.

                            If, in the Print Options dialog box, you have selected the Page Number command for the Header Style, the Absolute Pagination dialog box will prompt you to input the number of the first page of the Description.

                            This command opens the Print Pages dialog box in which you specify the pages to be printed. See chapter "The Textual Descriptions Window", subchapter "Auxiliary Dialog Boxes".

Print Options...   Opens the Print Options dialog box.

For complete information, refer to chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

Printer...   Opens up a dialog box listing the printers connected to the PC. Select a printer and click **OK** button.

The **Configure...** button opens another dialog box that contains all parameters associated with the printer driver (i.e. paper format and orientation, specific characteristics, etc.).

Host Validations   This command lets you know at any time the number of lines that your description would occupy when uploaded on the host. If the text has more than 950 lines (the maximum authorized for a description on the host), this command displays a message.

This command also checks the number of characters per word (word wrap paragraph), and displays a message if:

- A word contains more than 30 characters
- The label of a paragraph contains more than 15 characters

The Edit Menu

Edit   **Undo Typing (Formatting, Type)**
                          Redo Typing
                          —————————————————————
                          Cut
                          Copy
                          Paste
                          —————————————————————
                          Concatenate
                          —————————————————————
                          Delete

Undo Typing   The **Undo** command reverses your last editing action.

Cut   Deletes the selected character string from the description and transfers it to the Clipboard.

Copy   Copies the selected character string to the Clipboard.

Paste   Inserts the contents of the Clipboard into the description where the cursor is positioned, or replaces the selection if any.

Concatenate   Adds the selected character string to the Clipboard contents.

Delete   Deletes the selected elements, without storing them in the Clipboard.

The Search Menu

Search   **Search...**
                        Replace...
                        ─────────────────
                        Go to...

Search...   Opens up the Search dialog box. For complete details concerning the Search
                        dialog box, refer to chapter "The Textual Description Window", subchapter
                        "Auxiliary Dialog Boxes".

Replace...   Opens the Replace dialog box. For complete details concerning the Replace
                        dialog box, refer to chapter "The Textual Description Window", subchapter
                        "Auxiliary Dialog Boxes".

Go to...   Opens the Go To dialog box. For complete details concerning the Go To dialog
                        box, refer to chapter "The Textual Description Window", subchapter "Auxiliary
                        Dialog Boxes".

The Characters Menu

Characters   **Plain Text**
Bold
Italic
Underline
────────────────────────
List of Fonts
────────────────────────
Inferior Size
Superior Size
────────────────────────
Fonts...

All commands in this menu apply to the selected paragraph(s) only.

Plain Text   Removes all text enhancements (bold, italic, underline).

Bold   Makes characters bold, or removes the bold format.

Italic   Makes characters italic, or removes the italic format.

Underline   Underlines characters, or removes the underline format.

List of fonts

The list of fonts varies according to the fonts installed in the operating system in use. The current paragraph will be formatted according to the font selected in the list.

NOTE   When a new font is selected in this menu, the font size which is automatically selected corresponds as closely as possible to the size of the previous font.

Inferior Size
Superior Size   Reduces or enlarges the size of the character font, if a smaller or larger size is available.

Fonts...   Opens up a dialog box allowing you to select both the font type and size.

The Paragraph Menu

Paragraph   **Word Wrap**
                       No Word Wrap
                       ━━━━━━━━━━━━━━━━━━━━━━━

                       Labeled Paragraph
                       Title
                       ━━━━━━━━━━━━━━━━━━━━━━━

                       Page Break
                       ━━━━━━━━━━━━━━━━━━━━━━━

                       Alignment...

All commands in this menu (except Page Break) apply to the selected paragraph(s).

When a new paragraph is created, the system automatically applies the format of the preceding paragraph.

The following two commands are mutually exclusive.

Word Wrap   Continuous text input with automatic word-wrap.

                       Words in this type of paragraph cannot exceed 30 characters. This will prevent
                       the truncation of words exceeding 30 characters when your text is printed in a
                       Document. You can verify that the text does not contain such words by
                       selecting **Host Validations** in the **File** menu.

                       However the WorkStation does not impose any limitation on word length.

                       WORD WRAP paragraphs may be indented. For complete information, refer to the
                       description in the "Define Formats" dialog box in chapter "The Textual
                       Description Window", subchapter "Auxiliary Dialog Boxes".

No Word Wrap   The length of a No Word Wrap line can not exceed 254 characters. A "beep"
                       will indicate when the end of the line is reached.

                       The paragraph will be printed as entered, i.e. without re-formatting. This may be
                       suitable for charts with columns, provided that you use a non proportional font,
                       in which all characters have the same width (the Courier font for example).

       NOTE   If, after pasting text into a paragraph in No Word Wrap mode, the line contains
                       more than 254 characters, the text will switch to Word Wrap mode. Simply
                       delete the excess characters to switch back to No Word Wrap mode.

The following commands are optional. They can be used together and combined with the Word Wrap
and No Word Wrap commands.

Labeled Paragraph A labeled paragraph has its first character string as a left negative indent. Its
                       use is symbolized by a left-oriented arrow sign after the indent. The label cannot
                       exceed 30 characters. (The WorkStation will "beep" if you exceed this limit.)
                       Warning: when this paragraph is validated via the **Host Validations** command,
                       a message warns you if the label exceeds 15 characters.

       NOTE   The character string used for the paragraph label may be truncated when
                       printed if it is too long for the left margin of the format used.

                       The ampersand (&) can be used to associate several words in the label.

                       Example: The character string "This&is&a&label and this is the text..." will
                            produce the following left negative indent:

This is a label   and this is the text.

                         The purpose of this sentence is to create several lines of text for an example
                         of negative indent.

Title   This command is used to insert titles within a Non-Formatted description. A title
                         can be set on several lines. If you create a new paragraph after a Title
                         paragraph, the new paragraph is automatically created without the title format.

NOTE   If you want to underline a title which has a label, only the label will be
                         underlined.

Page Break   Allows you to position a page break or to cancel a positioned page break (**Undo
                         Page Break**) before the selected paragraph.

                         This kind of page break appears as a dark gray line (automatic page breaks
                         appear as thin dotted lines).

NOTE   When the dialog box opens up, it shows the parameters of the selected
                         paragraph. If more than one paragraph is selected, the parameters of the
                         selected paragraphs are displayed if the parameters are the same in all
                         selected paragraphs (if not, no parameters are displayed). If several paragraphs
                         have been selected, you can select the alignment and the format for all of the
                         selected paragraphs.

The Options Menu

Options   **Define Formats...**
                ────────────────────────────
                Ruler
                Paragraph Mark
                ────────────────────────────
                Insert/Typeover
                ────────────────────────────
                Spell Checker   **➔ *Spell Checker names***
                ────────────────────────────
                Preferences   **➔Style...**
                                                      Spell Checker installation...

The formats defined by the following two commands apply to all paragraphs in this description:

Define formats...   Opens the Define formats... dialog box which allows you to specify default formats.

                Refer to chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

Ruler   Displays the Ruler (command is checked when the Ruler is displayed). This option is memorized for every user, and will be active when you next connect.

                For more information, refer to chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

Paragraph marks   Select this command (command is checked) to display paragraph marks or re-select the command (the check mark disappears) to hide the paragraph marks. If you request paragraph marks in one section, they will be displayed in all other open sections.

Typeover/Insert mode
                Toggles between typeover and insert modes.

Spell Checker   This command opens a Cascaded menu that contains any of the installed Spell Checkers. The names displayed are the names entered when the Spell Checker was installed. For more information, refer to chapter "The Textual Description Window", subchapter "Auxiliary Dialog Boxes".

Preferences   **➔Style...**
                   Spell Checker installation...

Style...   Opens a dialog box in which you can specify a default presentation for all non-formatted descriptions.

                For complete information, refer to chapter "The Textual Description Window" subchapter The Menu Bar of the Table of Sections Window".

Spell Checker installation...

                Opens a dialog box which allows you to install and parameterize one or more of your own spell checkers or spell checkers which are currently available on the market.

The Help command

?=F1   Calls online help.

Chapter 13   The Formatted Description Window

Functionalities

Use the Formatted Description window to do the following:

- Consult and update occurrence descriptions in the Specifications Database in real time.

  This window displays various sets of formatted and numbered lines, each set being specific to a description.

  Input in certain fields creates automatic cross-references within the Specifications Database. For example, the Data Element Calls description of the Segment entity creates automatic cross-references between the Data Elements and the Segment.

- Consult and update General Documentation of any occurrence (equivalent to the -GC screen for the VisualAge Pacbase standard entities).

- Consult online help for the Description.

The colors of all these fields can be modified using the **Logical Screens** dialog box which can be accessed via the WorkStation Manager window. See the chapter "The WorkStation Manager Window", subchapter "Auxiliary Dialog Boxes".

Getting to the Window

A host connection is required.

Enter an occurrence in the Occurrence field of the Entity dialog box and select a description in the Description part of the Entity dialog box.

For more details on the various ways to specify an occurrence code in the Entity Dialog Box or on descriptions, see the chapter "Navigation in the WorkStation".

Occurrence code input made easy

You can use the drag and drop technique to fill in the occurrence code in a Definition window (target window) from a host list, a Formatted Description or another Definition window (source window).

- Open simultaneously the Definition window and the Formatted Description, the host list or another Definition window.

- Select an occurrence code in the source window by clicking the mouse's left button and drag the mouse to the target window while keeping the button pressed.

- Release the button above a field which accepts an occurrence code of the same entity.

The Formatted Description Window Menu Bar

Entity
This Cascaded menu contains commands that allow you to access the definition, lists, descriptions and cross-references of the selected occurrence.

Update+Display
This menu allows you to update the Formatted Description of the occurrence.

Special choices
Allows you to find differences between sessions, search and replace character strings and renumber lines.

View...
Allows you to display and to change the Library sub-network and screen presentation.

Options
This menu allows you to set a branching mode once you have created or modified a description by duplication, or deleted a description from the Description window of another occurrence.

Screen
This menu allows you to copy and print the current window.

? = F1
This command allows you to access online help. For a complete description, see subchapter "The Auxiliary Window: The Help Window".

System Menu
In addition to standard commands, the system menu allows you to consult the context of the current window.

Function keys and mouse
For the use of function keys and mouse in this screen, see the Appendix at the end of this manual.

The Entity Menu

Entity   **Main Entity**   ➜ **Definition**
                              Lists   ➜*Available lists*
                              Descriptions   ➜*Available descriptions*
                              X-References   ➜*Available x-references*
                              ─────────────────
                              Other Occurrence...
            Related Entity...
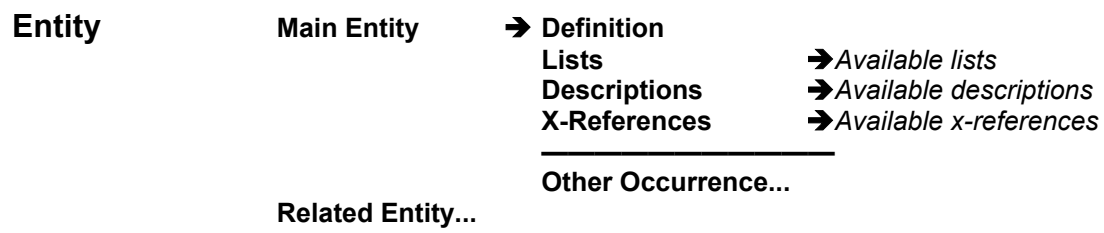
For full details of this menu, see the chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The Update+Display Menu

Update+Display

Same page
Next page
Top
From...
─────────────────────

Repositioning   ➔   **Type of memorization**

Same page   Updates and redisplays the current page.
                     This choice is displayed only if you have modified the contents of the window.
                     (Equivalent host choice CH: JI).

Next page   If you have not modified the contents of the window, this choice displays the
                     next page. If there is no next page, the same page is redisplayed.
                     If you have modified the contents of the window, this choice updates the current
                     page and displays the next page. If there is no next page, the same page is
                     redisplayed. if the update was unsuccessful, an error message and the current
                     page are displayed.
                     (Equivalent host choice CH: JF)

Top   Displays the first page of the Formatted Description.
                     If you have modified the contents of the window and if the update was
                     unsuccessful, an error message and the current page are displayed.

From...   Updates the current page and opens the From... dialog box in which you enter
                     the position from which the description is to be displayed.
                     if the update was unsuccessful, an error message and the current page are
                     displayed.

                     Each position you indicate in this dialog box will be memorized. These positions
                     can be requested again via the **Repositioning** choice.

                     For complete details of the From... dialog box, refer to chapter "Navigation in the
                     WorkStation", subchapter "Auxiliary Dialog Boxes".

Repositioning   ➔   **Type of memorization**

                     Opens the Position Memorization dialog box. In this box, select the type of
                     memorization you want:

                     Explicit Memorization
                         This type of memorization memorizes each display position specified via the
                         From command of the **Display** menu as a sub-choice of the Repositioning
                         choice.

                     Implicit Memorization
                         This type of memorization memorizes each current position you obtained
                         through a simple transmit as a sub-choice of the Repositioning choice.

NOTE   You can select both types of memorization in the Position Memorization
                     dialog box. The Repositioning choice can store up to 20 positions while the
                     window remains open.

The Special Choices Menu

Special choices

Differences between sessions...
━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━

Search string...
Replace string...
Renumber...

Differences between sessions...

This command is operational in the following descriptions:

- Programs (CH: P ------ B, -CP, -CD, -SC, -W, -P, -CP, -XP, -GO, -CR)

- Screens   (CH: O ------ B, -CP, -CS, -CE, -W, -P, -CP, -XP, -CR, -GE, -GO, -GG)

- Data Elements   (CH: E ------ D, -GE, -CR)

- Segments (CH: S ---- SS, -SE, -CE,-GE, -GO, -GG, -CR)

- Database Blocks   (CH: B ------ DH, -DC, DT, DR, -GO, -GG, -CR)

- Volume   (CH: V ------ D, -CR)

- Comments (CH: - ------ GC)

- Report   (CH: R --- D, -L, -CE, -CR)

For full information, see the *Character Mode User Interface Guide*, Chapter "On-Line Updating", Subchapter "Differences between Sessions".

This command opens the Difference between Sessions dialog box in which you request the session number (and version) you require instead of the session of your current context.

For a detailed description of this dialog box, see the subchapter "Auxiliary Dialog Boxes".

Search string...
Replace string...

These commands are operational in the following descriptions:

- Screen Procedural Code   (CH: O ------ P)

- Screen Work Areas   (CH: O ------ W)

- Macro-structure calls in the Screen   (CH: O ------ CP)

- Program Procedural Code   (CH: P ------ P)

- Program Work Areas   (CH: P ------ W)

- Reverse Engineered Source Code   (CH: P ------ SC)

- Procedural Code (Cobol)   (CH: P ------ 9)

- Macro-structure calls in the Program   (CH: P ------ CP)

and in the following cross-references:

- Used in the Screen   (CH: O ------ XP)

- Used in the Program   (CH: P ------ XP)

Search string...

Opens the Search dialog box in which you enter the character string to be searched for.

For a detailed description of this dialog box, see subchapter "Auxiliary Dialog Boxes".

Replace string...

Opens up the Replace dialog box in which you enter the character string to be replaced and the new character string.

For a detailed description of this dialog box, see the subchapter "Auxiliary Dialog Boxes".

Renumber...

The Renumber facility is operational in the following screens:

▪ Screen Procedural Code	(CH: O ------ P)
▪ Screen Work Areas	(CH: O ------ W)
▪ Screen Call of Elements	(CH: O ------ CE)
▪ Segment Call of Elements	(CH: S ------ CE)
▪ Program Procedural Code	(CH: P ------ P)
▪ Program Work Areas	(CH: P ------ W)
▪ Reverse Engineered Source Code	(CH: P ------ SC)
▪ Procedural Code (Cobol)	(CH: P ------ 9)

For full information, see the Character Mode *User Interface* Guide, Chapter "Text Editing Facilities", Subchapter "Line Renumbering".

This command opens the Renumber dialog box in which you may specify a line renumbering increment (default value: 20).

For a description of this dialog box, see subchapter "Auxiliary Dialog Boxes".

The View... Command

View...   Opens the View dialog box.

This command is available with the following Formatted Description windows:

- General Documentation of occurrences of any entity (C1, C2):
  General Documentation

- Screen and Program entities (C1, C2, C3):
  Beginning Insertions
  Work Areas
  Procedural Code
  Procedure Titles & Conditions
  Procedural Code (COBOL)
  Procedural Code (8)

- Screen entity (C1, C2):
  Call of Elements

- Program Entity (C1, C2)
  Procedures generated

- Segment entity (C1, C2, C3):
  Call of Elements

- Report entity (C1, C2):
  Structures

- Document (C1, C2):
  Table of Contents

For information on the C1, C2, and C3 views, refer to the Host Reference Documentation which corresponds to the specific entity.

This command allows you to display Formatted Description windows according to different views (C1, C2, C3), as available when working in Emulation mode. Select icons to change the Database sub-network and the display option.

You may open a Formatted Description window several times so as to visualize simultaneously the various "views" available for one occurrence.

For a complete description of the View dialog box, see the chapter "The Host Occurrence List Window", subchapter "Auxiliary Dialog Boxes".

The Options Menu

Options   **Stay on Source**
                     Go to Target

This menu allows you to set a branching mode once you have created or modified a description by duplication or deleted a description from the Description window of another occurrence. A check mark next to a command indicates the current mode.

Duplication operating mode:
Type over the source occurrence code with the target occurrence code. Attention should be paid to the correspondence of description line identifiers.

For complete details on duplication of descriptions, see the *Character Mode User Interface* Guide*:*

- Chapter "On-Line Updating"

- Chapter "Text Editing Facilities".

Special case: Program and Screen Entities
The lines of the Formatted description entitled Procedural Code for an occurrence of a **Program** can be copied into the Formatted description entitled Procedural Code for an occurrence of a **Screen** and vice-versa. Replace the entity and occurrence codes in the heading of the source screen with the target entity and occurrences codes. (The same can be done for the Formatted description entitled Work Areas.)

Stay on Source   Displays the description of the source occurrence, after update.

Go to Target   Displays the description of the target occurrence, after update.

The Screen Menu

Screen Menu   **Copy Host Screen**
Print Host Screen...

Copy Host Screen

Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...

Prints the current Host Screen.

The Help Command

?=F1   This command allows you to access the host online help.

For full details see subchapter "The Auxiliary Window: the Help Window."

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

The Auxiliary Window: The Help Window

Two types of help are available on Formatted Description windows:

- Input help to load unprotected fields with authorized values

- General help on the open Description window

Input help

To access the input help window corresponding to help on an input field, position the cursor on the field, select **?=F1** on the menu bar or press F1. A help page corresponding to the field in question appears.
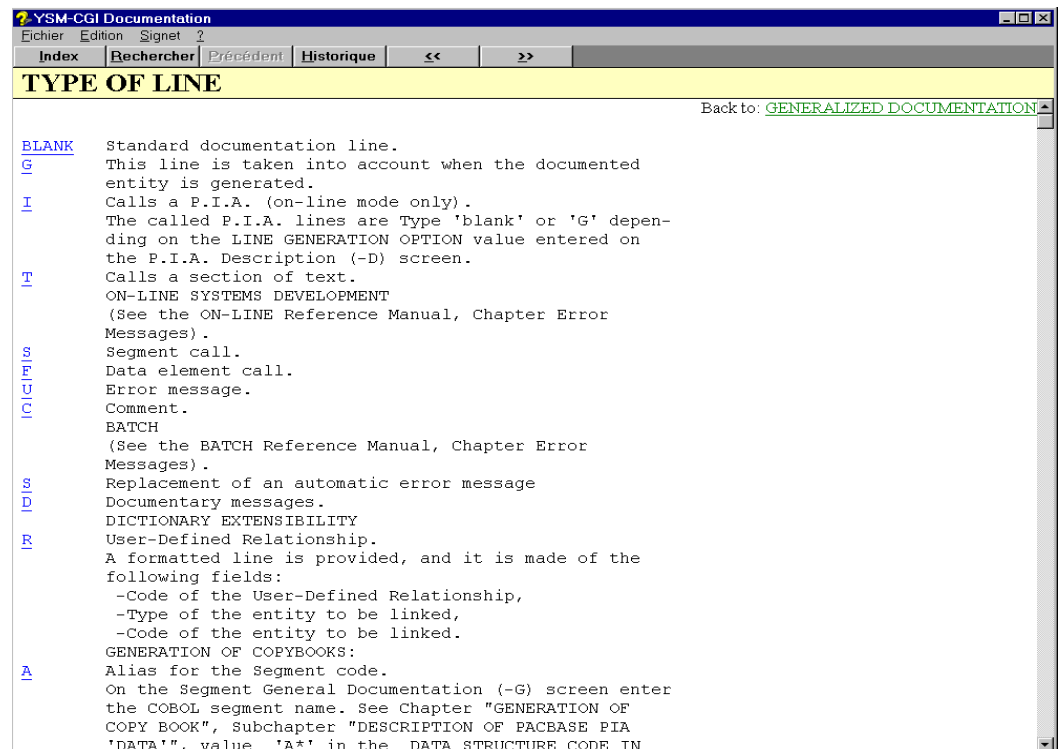
If values have been defined for the field, the help page displays the various authorized values with explanations. If you select a value (underlined and located on the left of the screen), the value is input directly and the help page closes.

The values entered in a field are referenced against the list of authorized values for the field. This verification is performed each time the cursor leaves a field. If the value entered is not one of the authorized values, an error message appears requesting confirmation of the entry. If you confirm the entry, the incorrect value is accepted (it may subsequently be refused by the host) and the cursor is positioned in the next field. If you do not confirm the entry, the cursor is repositioned in the field for a new entry.

NOTE   If you request online help on the occurrence code of a Formatted Description window, general screen help appears as there is no specific help on the occurrence code of a description.

General Help

To access the general help window on a Formatted Description window, position the cursor outside an input field and select **?=F1** on the menu bar or press F1.

```
? YSM-CGI Documentation                                                    _ □ ✕
Fichier  Edition  Signet  ?
    Index    Rechercher  Précédent  Historique       <<            >>
GENERALIZED DOCUMENTATION
                                                          Back to: General index
```

```
                        THE GENERAL DOCUMENTATION SCREEN
                        ===============================

The General Documentation screen (-G) has the following purposes:
. To associate documentation with most entities.
. To  enter complementary technical descriptions used to generate
  database Blocks,

  Refer to the Database Description manuals.
. To  describe error messages and Help texts for Screens and Data
  Structures,

  Refer  to the "O.L.S.D." and "Client/Server" Reference Manuals,
  Chapter  "Error  Messages  -  Help Function", and to the "Batch
  Systems   Development"   Reference   Manual,   Chapter   "Error
  Messages".
. To specify User Relationships.

  Refer  to  the  "Dictionary  Extensibility"  Reference  Manual,
  Chapter "The User-Defined Relationship".
. To customize SQL accesses.

  Refer   to   the   "Relational  Database  Description"  Reference
  Manual,  Chapter  "SQL  Accesses",  Subchapter  "Customized SQL
  Accesses".

The  use  of  the  Parameterized  Input  Aid  entity (P.I.A.) may
facilitate and standardize data entry on this screen.

GENERAL CHARACTERISTICS
```

A list of data elements constituting the Formatted Description window appears at the end of the page. These are hypertext links you can use to navigate through the different data elements.

GENERALIZED DOCUMENTATION

```
COPYING GENERAL DOCUMENTATION LINES
-----------------------------------

The  user  may  overkey the entity code with another entity code.
This  will  not  affect  the original documentation lines, but it
will replicate them for the other entity.

N Both entities must be of the same type.

  If  the  original  lines  include the lines of a called P.I.A.,
  they  will  also  be  duplicated,  except for user input on the
  variable parts of the P.I.A. lines.
```

LINE NUMBER
TYPE OF LINE
CODE OF PARAMETERIZED INPUT AID
COMMENT
COMMENT / SECOND PART
PRINTED LABEL FOR LEVEL n

Auxiliary Dialog Boxes

The Differences between Sessions Dialog Box

This dialog box is displayed via the Formatted Description window (via **Differences between Sessions...** in the **Special Choices** menu).

In the Difference between Sessions dialog box you request the session number (and version) you require instead of the session of your current context. (Equivalent host choice: CH: .D......).

If you want to actually upgrade the session of your current context with the differences found in the session indicated in this dialog box, select the Upgrade check box. (Equivalent host choice: CH: .M......)

When you request the differences between sessions, a check mark appears by this command. This indicates that the WorkStation is in Differences between Sessions mode: when you press ENTER to display the next page, the WorkStation will continue to calculate the difference between sessions. To exit this mode, choose **Differences between sessions** in the menu or choose another command.

The Search Dialog Box

This dialog box is displayed via the Formatted Description window (via **Search String...** in the **Special Choices** menu).

In this dialog box, you enter the character string to be searched for. The default delimiter is the blank character.

If the string contains one or more blank characters, specify a unique character as delimiter (not included in the string).

The radio buttons allow you to choose between:

Equivalent host choice   CH: .S/CHARACTER STRING/

The Replace Dialog Box

This dialog box is displayed via the Formatted Description window (via **Replace String...** in the **Special Choices** menu).

In this dialog box you enter the character string to be replaced and the new character string. The default delimiter is the blank character.
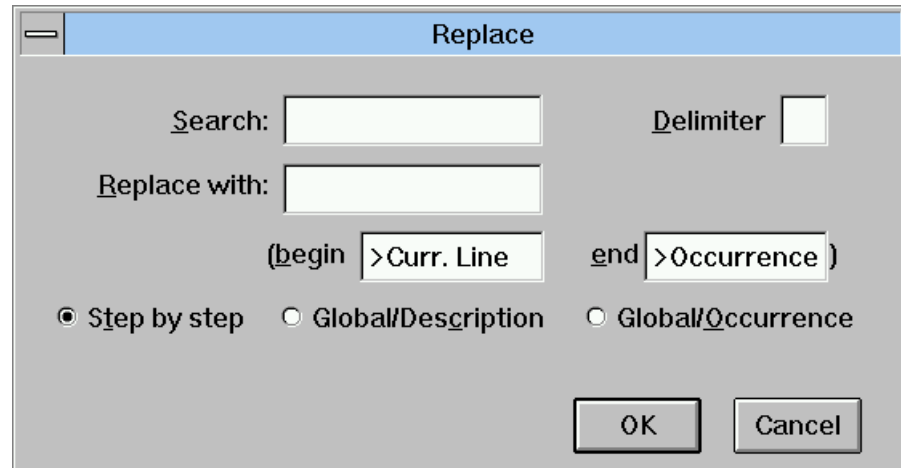
If the string contains one or more blank characters, specify a unique character as delimiter (not included in the string).

You may also use beginning and ending keys to define the scope of the search.

The radio buttons allow you to choose between:

  A step-by-step replacement (default)
(Equivalent host choice: CH: .C1/STRING1/STRING2/)

  A global replacement for a description
(Equivalent host choice: CH: .C2/STRING1/STRING2/)

  A global replacement for an occurrence
(Equivalent host choice: CH: .C3/STRING1/STRING2/)
The global replacement (the last two commands) is performed in one go, and you are notified on completion of the number of replacements and the number of lines changed. When the new string is longer than the old one, the global replacement stops at the first replacement where truncation occurs and continues step-by-step.

The Renumber Dialog Box

This dialog box is displayed via the Formatted Description window (via **Renumber...** in the **Special Choices** menu).

In it you specify a line renumbering increment (default value: 20).
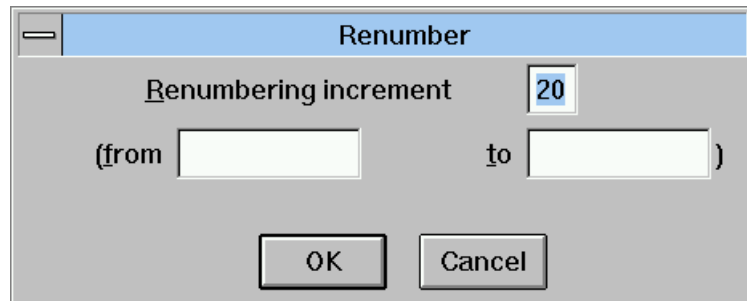
You may also use beginning and ending keys to define the scope of the renumbering. Renumbering begins by default on the first line displayed and continues until the end of the entity (limit is one hundred lines). Press ENTER to renumber the next one hundred lines.

(Equivalent host choice   CH: **.**Rnn)

For full information, see the Character Mode *User Interface* Guide, Chapter "Text Editing Facilities".

Chapter 14   The Chart Facility Window

Functionalities

The Chart Facility window is available for the Free Entity only.

NOTE   For a complete description of the Free Entity, refer to chapter "The Free Entity".

This window allows you to draw all tables, reports, etc.

When the description created with Chart Facility is called into a Document, it is printed exactly as it was entered, without any kind of formatting.

The standard format for the Chart Facility window is 80 characters by 24 lines.

The maximum format is 264 characters by 100 lines.

Input   The Default Input mode in this window is TYPEOVER. The INSERT key toggles to INSERT mode.

Cursor   Moves the cursor by mouse or keyboard commands:

- Standard direction keys
- TAB: next tab position
- SHIFT-TAB: preceding tab position
- CTRL-[→]:   next word
- CTRL-[←]:   preceding word
- [↖]:   beginning of the line
- CTRL-[↖]:   first word on the line
- END: end of the line
- CTRL-END: last word on the line
- ENTER: beginning of the next line
                          (for the last line: beginning of the line)
- PAGE UP: preceding page
- CTRL-PAGE UP: first page
- PAGE DOWN: next page
- CTRL-PAGE DOWN: last page
- ESCAPE: cancel changes on current line only

UPLOAD NOTES The '_' character (used by itself) is translated by a blank space when the chart facility is uploaded (and also when downloaded).

The first lines of a chart facility, uploaded on the host, contain tabulations. To identify these lines, there is a "T" in the fourth position of the "Line" column.

Getting to the Window

Select a Chart Facility description from the Description List in the Entity dialog box of the Free Entity.

For details about lists and descriptions in the Entity dialog box, refer to chapter "Navigation in the WorkStation".

The Menu Bar of the Chart Facility Window

Entity   This Cascaded menu contains commands that allow you to access the definition, lists, descriptions and cross-references of the current occurrence of the Free Entity.

File   Local saving, restoring and printing.

Edit   This menu features standard edit functions.

Format   This menu is used to set the chart size and tab positions.

Options   This menu is used to set the ruler and line number display options.

System Menu   Allows you to consult the current context.

                    For complete information, refer to chapter "WorkStation", subchapter "Context".

The Entity Menu

Entity   **Main Entity**   ➜ **Definition**
                                         Lists   ➜*Available lists*
                                         Descriptions   ➜*Available descriptions*
                                         X-References   ➜*Available x-references*
                                         ────────────────────
                                         Other Occurrence...
                    Related Entity...

For complete details of this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The File Menu

File   **Save**
                    Restore
                    ─────────────
                    Print
                    Printer...

Save   Saves the description locally.

Restore   Restores the last saved description. All changes made since the last save will be lost. A message box appears: click **OK** to restore the last saved description.

Print   Allows you to print the description.

Printer...   Opens a dialog box that lists the printers connected to the PC. Select a printer from this list and click **OK**.

                    When you click on the Configure... button, another dialog box opens which contains the parameters associated with the printer driver (paper format and orientation, specific characteristics, etc.)

The Edit Menu

Edit

Add Line

———————————————————————

Select Line
Select Block
UnSelect

———————————————————————

Copy
Copy + Keep Selection
Paste

———————————————————————

Move
Delete
Delete Current Line
Retrieve

If no line or block is selected, the following commands are active: **Add Line**, **Select Line**, **Select Block**, **Delete Current Line** and **Retrieve**. The other commands become active once a line or a block has been selected.

Add Line
Adds a line below the line on which the cursor is positioned. The addition of lines is limited to the number of lines defined via **Size** in the **Format** menu.

The F2 key is a short-cut key.

Select Line
Selects the line on which the cursor is positioned.

In order to select several consecutive lines, place the cursor on the first line and select this command. Then place the cursor on the last line and select this command again. The first and last lines and all lines in between will be highlighted.

When line numbers are displayed in the left margin, lines can be selected by clicking on these numbers.

Select Block
In order to select a block (rectangle section), position the cursor on the upper left corner of the section, activate **Select Block**. Then position the cursor on the lower right corner of the section and select this command again.

UnSelect
De-selects the selected line(s) or block.

Copy
Duplicates the selected line(s) or block.

If you select one or more lines, they will be copied below the selected line (or lines) on which the cursor is placed. If a block is selected, it is copied to where the cursor is placed. To copy the selection into another chart, position the cursor in the target field and use **Paste**.

Copy + Keep Selection
Duplicates the selected line(s) or block. Once duplicated, elements remain selected.

Paste
Inserts the contents of the Clipboard into another chart, to where the cursor is placed.

If the length of the description defined in the Size dialog box is likely to be exceeded, a message is displayed to asks you whether you want to paste or not.

If necessary, the format of the target description is modified in order to take the inserted text into account.

Move   Moves the selected line(s) or block to where the cursor is positioned. Once moved, elements are de-selected.

If a line (or lines) is selected, it is moved below the selected line (or lines) on which the cursor is placed. If a block is selected, it is moved to where the cursor is placed.

Delete   Deletes the selected line(s) or block.

Delete Current Line   Deletes the line on which the cursor is positioned.

Retrieve   Use this command to retrieve, one by one, up to ten deleted lines (a deleted block cannot be retrieved).

The Format Menu

Format   **Size...**
                    Tabs...

Dimensions...   Opens a dialog box in which you can define the dimensions of the chart facility. For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Tabs...   Opens a dialog box in which you can view and/or update tab stops. For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The Options Menu

Options   **Show Ruler**
                    Display line numbers

When a command in this menu is active, it is checked.

Show ruler   Displays a graduated ruler and tab stops identified by ">" marks.

Display line numbers
                    Displays 3-digit line numbers in the left margin.

Auxiliary Dialog Boxes

The Size Dialog Box

This dialog box is displayed via the Chart Facility window (via **Size...** in the Format menu). It allows you to define the size of the chart.
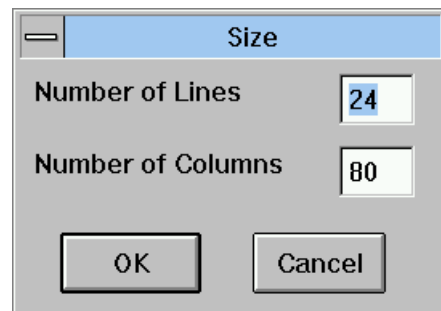
- Number of Lines: default value 24, maximum 100

- Number of Columns: default value 80, maximum 264

Once the size is set, the Chart Facility window is adjusted accordingly. If you reduce the size of the Chart Facility window, the lines that are not contained in the reduced Chart Facility window will be erased.

You can create a description smaller than the standard format. If you do, this description will have standard format. If the description is larger than the standard format, this description will have the same format, when it is next opened, as when it was created.

The Tab Input Dialog Box

This dialog box is displayed via the Chart Facility window (via **Tabs...** in the Format window). It allows you to consult and/or update tab positions.

A tab position is defined by a number which corresponds to a place on a ruler (see **Show Ruler** in the **Options** menu).
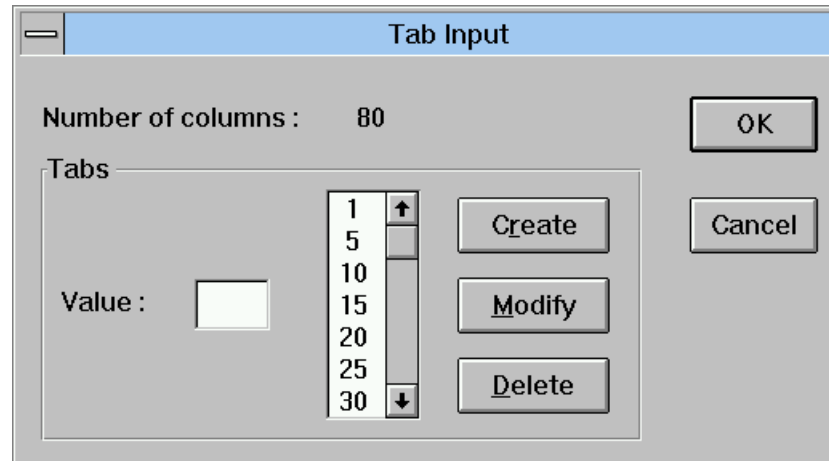
The dialog box contains:

- An area displaying the number of columns specified in the Size dialog box

- A list box that lists the tab positions (by default 1, 5, 10, etc.)

- An input area for you to specify tab positions

- Three buttons (Create, Modify and Delete) for update operations

- OK and Cancel buttons

To create a tab position, enter the appropriate number and click on **Create**.

To modify a tab position, select the number in the list box, type over the value in the input field and click on **Modify**.

To delete a tab position, select the number in the list box and click on **Delete**.

When you change tab positions, text in the Chart Facility window created with the old tab positions remains the same.

Chapter 15   The Data Extraction Windows

Introduction

Local Screen Mapping, described in the next chapter "The Local Mapping and Simulation Windows", requires the local presence of an extract from the Specifications Database. This extract (called the Local Repository) consists of definitions and descriptions of selected Attributes/Data Elements. This chapter describes the extraction process of the Local Repository.

In order to obtain a Local Repository, you must extract the relevant Attributes / Data Elements from the Specifications Database. This is the purpose of the Data Extraction windows.

One of the Data Extraction windows, called the Data Element Extraction window, contains the extraction diagram. Most of the entities displayed in this extraction diagram directly or indirectly call Attribute or Data Elements.

> **When you select an occurrence for extraction, only the Attributes / Data Elements called (directly or indirectly) in this occurrence are extracted for consultation only. The occurrence itself is not extracted.**

Getting to the Windows

A host connection is required.

Access the Data Extraction windows from the WorkStation Manager window using **Data Extraction** in the **Host-Access** menu.

The Data Extraction feature includes the following windows:

1. The first window displayed (access described above) is the Data Element Extraction window. It displays an Entity-Relationship Extraction diagram.

2. Access the Host Occurrence List window by clicking an entity **Host-Access** button in this extraction diagram.

3. The Extraction Requests window opens automatically when you select occurrences for extraction, or when you select **Show List** in the **Requests** menu in the Data Element Extraction window.

4. Access the Local Repository window by selecting **Local Repository!** in the Data Element Extraction window.

NOTE   The Data Element Extraction window can also be accessed from the **Launch** menu in the Local Mapping window.

Functionalities of the Data Element Extraction Window

The Data Element Extraction window displays an extraction diagram.

This extraction diagram displays all the entities from which it is possible to extract Attributes / Data Elements occurrences:

> The extraction diagram displayed on your WorkStation corresponds to the methodology installed.
>
> All examples given in this chapter, including the previous extraction diagram, correspond to the Merise methodology. For information concerning your methodology, refer to the on-line help in the WorkStation.
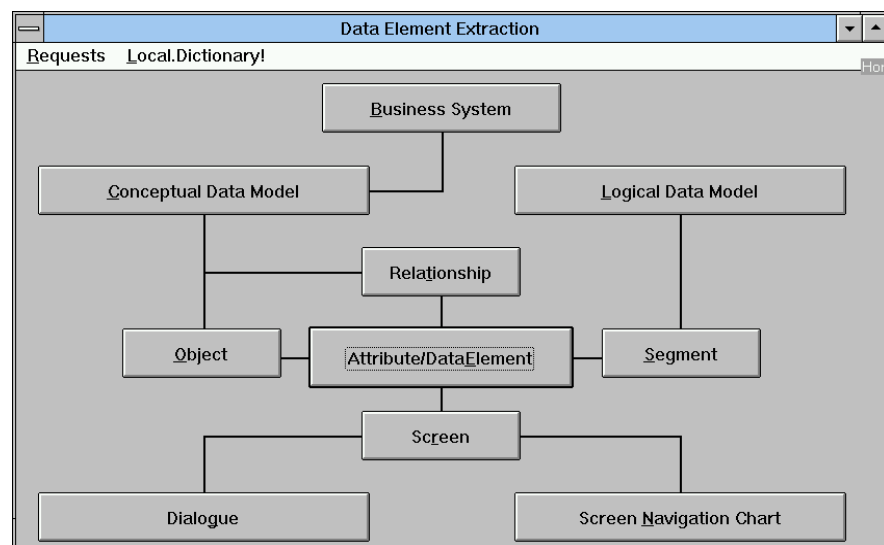
There are two ways to select occurrences of these entities: (1) access their Host Occurrence List or (2) access a given occurrence directly if you know its code beforehand.

1. Click on an entity button. This opens a From... dialog box in which you enter a Start Key (i.e. an occurrence code). The list of host occurrences for the specified entity is displayed.

    See subchapter "Introduction to the Host Occurrence List Window".

2. Press the SHIFT key and click on an entity button. The New Extraction Request dialog box opens up in which you enter an occurrence code for a new extraction request. Enter the occurrence code to be added to the Extraction Requests window.

    See subchapter "The Extraction Requests Window".

The Menu Bar of the Data Element Extraction Window

The Requests Menu

Requests   **Show List/Hide List**
                      _____

                      Save
                      Restore

Show List   Opens up the Extraction Requests window, which lists occurrences already
                      selected for extraction. If the list is already displayed the command label is
                      Hide List. Select it to hide the list.

                      See subchapter "The Extraction Requests Window".

Save   Saves Extraction Requests.

Restore   Restores the Extraction Requests: all changes made in the extraction requests
                      since the last save will be lost.

The Local Repository! Command

Local Repository!

                      Opens up the Local Repository window which lists all the Attribute / Data
                      Element occurrences already extracted from the Specifications Database. This
                      local Repository is for consultation only. The descriptions of the Data Elements
                      contained cannot be modified. This list is updated after each extraction or after
                      deletion of data elements considered as useless locally.

                      See subchapter "The Local Repository Window".

Functionalities of the Host Occurrence List Window

The Host Occurrence List window allows you to:

• Consult online the Specifications Database contents in the form of occurrence lists sorted by occurrence code

• Select occurrences in order to extract their Attributes / Data Elements from the Specifications Database

Code	Name	Libr.
AB	MLD LOCATION	*APR
AB1T	ABONNEMENT	*APR
AR	AR	0625
AR00	AR00	0625
BB	TEST EXTRACTION	0385
BB00	TEST EXTRACTION	0770
BB05	TEST EXTRACTION	0473
BB10	TEST EXTRACTION	0770
BB20	TEST EXTRACTION	0385
BC	DBD RELATIONNEL	*CEN
BC10	SEGMENT DBD	0368
BC20	TEST DBDR	*CEN
BC30	Test date oracle	0273
BC40	test	0067
BC50	test	0067
BC90	SEGMENT DBD	*CEN
BC99	BC99	0250

(Window title: Segment — menus: Display Selection!)

The window displays:

• The occurrence code

• The occurrence name

• An asterisk (*) in the Libr. column if the occurrence is a child Attribute/ Data Element or (a child) Object

• A plus (+) (only in the Attribute/Data Element list) if the occurrence has a defined internal format (only these types of occurrences can be extracted)

• The code of the Library where the occurrence is defined, or the session number if the occurrence is defined in the connection Library

The Menu Bar of the Host Occurrence List Window

The Entity Menu

Entity   **Main entity**   ➔ **Definition...**
                                          Lists   ➔ *lists*
                                          Descriptions   ➔ *descriptions*
                                          X-references   ➔ *X-references*
                                          ─────────────────
                                          Different occurrence...
                      Related entity...

For full details of this menu, see the chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The Display Menu

Display   **Next Page**
                         Same Page
                         _____

                         Top
                         From...

Next Page   Displays the next page of the Host Occurrence List.

    NOTE   Pressing the ENTER key has the same effect.

Same Page   Re-displays the same page. This command is used to display an updated
                         version of the Host Occurrence List. For example, use this command to view
                         new occurrences which may have been defined after the opening of this
                         window.

Top   Re-displays the list from the beginning.

From...   Opens the From... dialog box in which you enter the position from which the list
                         is to be displayed.

                         For a complete description of the From... dialog box, refer to chapter
                         "Navigation in the WorkStation", subchapter "Auxiliary Dialog Boxes".

The Selection Menu

Selection   **Selection!**
                         Elementary Components

Selection!   Adds the selected occurrence(s) to the Extraction Requests window.

                         Automatically opens the Extraction Requests window.

Elementary Components

The elementary components (shown next to their corresponding entity below) are available for the following entities:

- Business System: Conceptual Data Model
- Conceptual Data Model (CDM):   Objects, Relationships
- Logical Data Model (LDM):   Segments
- Screen Flow Chart: Screens
- Dialog   Screens

NOTE   These elementary components are displayed in the Extraction Diagram.

When the Host Occurrence List window is open for any one of these entities, their corresponding elementary components appear as a command in the Selection menu.

These commands are used to add the *elementary component* of the selected occurrence to the Extraction Requests window. They automatically open the Extraction Requests window.

For details regarding extraction, see subchapter "The Extraction Requests Window".

Functionalities of the Extraction Requests Window

The Extraction Requests window allows you to consult and modify your extraction requests.

Extraction Requests			
Edit	**Extraction**		
Entity	**Code**	**Name**	**Libr.**
DOM	DOM	ptil	0825
DOM	DOMP	ptil	*APR
DOM	FADOM	Domaine créé par FA Modif FB	0287
RUB	.BAN52	Contenu du Graphe	*APR
RUB	.LIB63	Description Non Formaté	*APR

The list contains:

- The entity local code

- The occurrence code

- The occurrence name

- The Library code

The Menu Bar of the Extraction Requests Window

The Edit Menu

Edit   **Delete**
                            Delete All Lines
                            —————————
                            Add *PASWD (IMS only)

Delete   Deletes the selected Extraction Request line.

Delete All Lines   Deletes all Extraction Request lines.

Add *PASWD (IMS only)
                            Adds the special Data Element PASWD to the list of extraction requests (for IMS host only).

    NOTE   The special Data Element ERMSG is always automatically extracted.

The Extraction Menu

Extraction   **Extraction only**
                        File deletion + Extraction

The Data Element extraction process is a "Cascaded process" which follows the structure of the extraction diagram. For example:

If you click on **Business System**, the Business System Host Occurrence List window opens. Select an occurrence and **Selection!** in the **Selection** menu: the occurrence is stored in the Extraction Requests window.

When you select **Extraction only** in the **Extraction** menu of the Extraction Requests window, the following is performed automatically:

*   The occurrence is selected and disappears

*   The CDMs included in the previous occurrence are displayed one-by-one in the Extraction Requests window

    (each CDM is selected, one-by-one, and all the Objects and Relationships included in each CDM are added to the Extraction Requests window)

*   Each Object/Relationship included in the previous CDMs is selected, one-by-one, and added to the Extraction Requests window

    (each Attribute / Data Element is extracted and added to the Local Repository)

If the extracted Data Element is already present in the Local Repository, it is refreshed.

Data pertaining to Parent Data Elements are also extracted.

The extraction process may be stopped at any time via the dialog box displayed during the extraction, however all Attributes / Data Elements of the occurrence currently being processed will be fully extracted.

Extraction only   Triggers the extraction of the Attributes / Data Elements for the occurrences listed in the window. The extracted Attributes / Data Elements are added to, or refresh, the Local Repository.

File deletion + Extraction

Deletes the existing Local Repository file and triggers the extraction process for the occurrences listed in the window. The Local Repository then contains the result of the extraction. This allows you to renew the entities of the existing Local Repository.

Functionalities of the Local Repository Window

The Local Repository window allows you to consult and modify the list of extracted Data Elements.

Local Dictionary	
Contents...	Delete!
.BAN52	Contenu du Graphe
.CODOC	CodOcc
.DOMP	Domaine Père
.EVRP	test ptil
.LIB63	Description Non Formaté
BCC	DATE C
BCG	DATE g
ERMSG	*** Error Message ***
MBCODD	RUBRIQUE FILLE : APPEL DANS
MBRUBA	RUBRIQUE ELEMENTAIRE apr
MBRUBB	RUBRIQUE ELEMENTAIRE

Mouse functionalities:

- right click: branch to the definition and description of the selected occurrence

- left click: selection or shift selection

- Ctrl + left click: multiple selection / de- selection line-by-line

- Shift + left click: multiple selection by block

NOTES   If a local map is open during an extraction, its Local Repository window is updated with the result of the extraction.

If you delete Data Elements (present in the open map) from the Local Repository window, they will be deleted from the map if you save the map. (If you want to keep the Data Elements in the map do not save the map.)

The Menu Bar of the Local Repository Window

The Contents... Command

Contents...   Select a line in the Local Repository window and this command to open up the Data Elements Contents dialog box. This dialog box contains the formats, labels and values of the selected Data Element.

To open the Contents dialog box for the selected Data Element, you can also click on a line in the Local Repository window with the right mouse button.

Selecting a new occurrence with the right mouse button in the Local Repository window will change the contents in this dialog box for the selected occurrence.

The Delete! Command

Delete!   Deletes the selected line from the list: the Attribute / Data Element occurrence selected will be removed from the Local Repository. (This does not delete the occurrence itself.) You can remove several Attributes / Data Elements at the same time if you select several lines.

Chapter 16   The Local Mapping and Simulation Windows

Introduction

The Local Mapping and Simulation features are only operational for the Screen and C/S Screen (Pacbench module only) entities. These features use the Local Repository which is extracted from the Specifications Database. (See chapter The Data Extraction Windows".)

The Local Mapping feature allows the same operations as the Host Mapping screen (CH: O......M). In addition, Local Mapping benefits from all the user-friendliness offered by the graphical user interface and the mouse.

When a local map is loaded or when the map size is modified, scroll bars appear and make it possible to visualize the non-visible parts if the display area is not big enough to contain it totally.

Once the screen map is built with the Local Mapping feature, field positioning and characteristics can be checked by using Local Simulation. With Local Simulation you see the Screen map as it will be displayed during actual execution.

The Screen Description (Call of Elements) is implicitly updated once the Screen map is uploaded to the Specifications Database.

For complete information (including information concerning screen branching), refer to the *Online Systems Development Manual*, chapter "Definition and Description of a Dialog or Screen", subchapter "Screen Mapping, and chapter "Dialog Simulation".

Local Mapping & Simulation

DSREF000352A
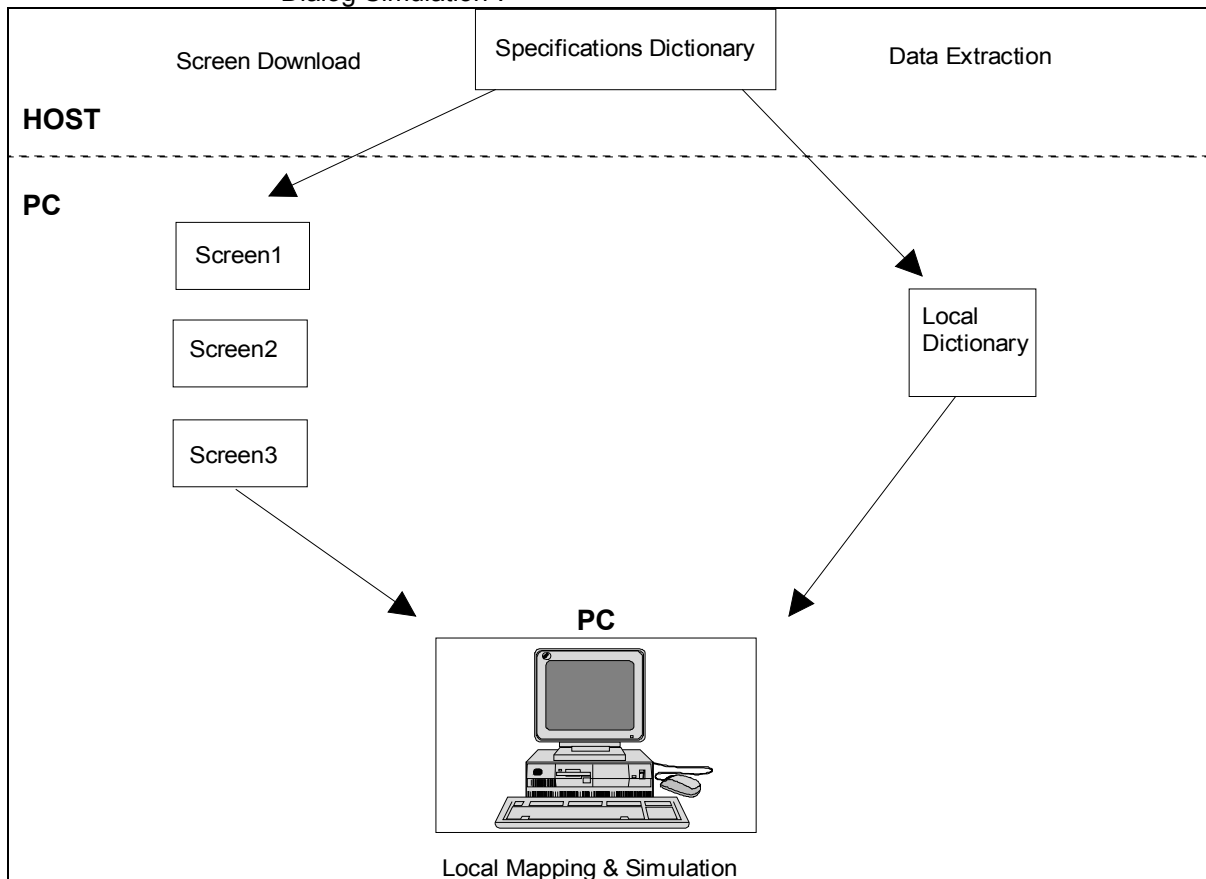
Functionalities of Local Mapping

Before proceeding to mapping operations, make sure of the following:

- The Screen is defined as well as the Dialog to which it belongs

- All Screens called in the map are downloaded and all Data Elements used in the Screen map are extracted from the Specifications Database

  If the WorkStation finds that some called Screens or Data Elements used in the map are missing (RUB = Data Element in the MERISE methodology), it displays their list and offers to download or extract them.

  For complete details on Data Extraction, refer to chapter "The Data Extraction Windows".

  Downloading a map will download the called Screens and prompts you to download the branched Screens. The download of the associated Screens is parameterized by the option chosen via **Screen** in the **Download** sub-menu of the **Preferences** menu in the WorkStation Manager window. The confirmation dialog box (in the case of a calling Screen) includes a "Cancel" button to stop the download of the calling Screen. If an associated Screen has itself associated Screens, the download of these Screens is also parameterized by the same option.

Use the mouse for mapping operations:

- For selecting, positioning or moving one or several elements in the map

- For changing the characteristics of a selected element

- For creating or modifying a Repetitive category

- For scrolling down, up, right and left with the scroll bars. The presence of these bars depends on the number of lines and columns of the screen to be mapped (**General characteristics...** in the **Presentation** menu)

  The location of the mouse pointer in the window is indicated (line and column position) in the upper-right hand corner of the window.

Getting to the Local Mapping Window

Access the Local Mapping feature:

- From the Description list (Local Mapping) of the Screen Entity dialog box

- From the Local Maps list of the Screen Entity dialog box

- From the Local Simulation window, via **Local Mapping** in the **Actions** menu

This access - being local - does not require a connection to the host.

Category Management

Triangular marks in the left margin of the Local Mapping window define the Repetitive category. The area between the marks is the Repetitive category. The area above the marks is the Heading. The area below the marks is the Screen Bottom.

These marks may be moved up and down so as to exclude or include fields from or in the Repetitive category, respectively. In such cases, the number of lines per occurrence and the number of occurrences in the Repetitive are updated. When the upper triangle mark is moved the space separating the items in the repetitive category is increased/decreased. When you move the lower triangle mark you increase or decrease the number of repetitions of the items in the repetitive category.

Screen elements may belong to a category without being physically present in the corresponding area. For complete information, refer to the Update dialog boxes in subchapter "Auxiliary Dialog Boxes".

Adding Elements to the Map

- To add a Data Element to the Screen map:
  - Select the **Data Element...** command of the **Elements** menu
  - Double-click the desired Data Element in the displayed Local Repository
  - Position the cursor on the desired location on the Screen map (the form of the cursor indicates that a Data Element is being added)
  - Click to position the Data Element on the map. Press ESCAPE or click on the right mouse button to stop the operation
  - The category to which the element belongs is automatically deduced from its location on the map. To change categories, see "Category Management"

- To add a Label to the Screen map:

  - Select **Label** in the **Elements** menu, click on the map and key in the label (maximum length: 30 characters) directly on the map

  - Press ENTER, click mouse or select a menu to end the label input mode (and validate it). To erase the label entered, press ESC

  - A label may be one character repeated n times. In this case, enter "nnn*". "*" stands for the character to be repeated and "nnn" is a three digit number (number of repetitions)

  - The category to which the label belongs is automatically deduced from its location on the map. To change categories, see "Category Management"

- To add a Dialog Title or Screen (contents or title) to the Screen map:

  - Select **Screen...** in the **Elements** menu

  - Select a Screen or Dialog from the displayed list

  - Click on the Title or Contents radio buttons

  - Double-click on the desired Screen/Dialog

    NOTE:
      For a Dialog, only the title can be added.

  - Position the cursor on the desired location on the Screen map (the form of the cursor indicates that a Screen map is being added)

  - Click to position the title or contents on the map. Press ESCAPE or click on the right mouse button to stop the operation

  - The category to which the title or contents belong is automatically deduced from its location on the map. To change categories, see "Category Management"

NOTE   (when adding a Dialog Title to the Screen map): When the Screen map that you are working on belongs to a certain Dialog, e.g. PT, the following will occur:

  If a **different** Dialog, e.g. DF, is selected to be placed on the screen, the title of this Dialog will appear where you place this Dialog on the Screen map.

  However, if you select the **same** Dialog (in this case, PT), the title of the current Screen will appear where you place this Dialog on the Screen map. For complete information, refer to the *Online Systems Development Manual.*

Updating Elements in the Map

To update an element on the map, double-click on it. A dialog box will open. For details concerning these dialog boxes, refer to the corresponding Update Dialog Box in subchapter "Auxiliary Dialog Boxes".

Selections

To select an element (field, label, or screen), click on it with the left mouse button: the selected element is framed by a dotted line.To de-select, use the right mouse button.

When several elements of a map are superimposed and you want to select one of them, press ALT and click to select each element in turn.

To select a group of elements, point to the upper-left corner of the area which contains the desired group and drag the mouse without releasing the button until the rectangle outlines all the elements of the group. Release the mouse button: each selected element is framed by a dotted line.

You can move, cut, copy, paste and delete a selection. See the **Edit** menu.

The Menu Bar of the Local Mapping Window

Entity   This Cascaded menu contains commands that allow you to access the definition, lists, descriptions and cross-references of the current occurrence of the Screen entity.

File   This menu allows you to save, restore, print and change printer parameters.

Elements   This menu allows you to add a Data Element, a Label, or a Screen to the map.

Edit   This menu allows you to copy, cut, paste, delete or repaint.

Presentation This menu allows you to modify the general characteristics of the Screen and field attributes and to modify Data Element presentation in the Repetitive and Screen Bottom categories.

Launch Menu   This menu allows you to open the Local Simulation and the Data Element Extraction windows.

System Menu   In addition to the standard commands, this menu contains a command that displays the current context.

                  For information concerning the context, refer to chapter "WorkStation Connection", subchapter "Context".

The Entity Menu

Entity   **Main Entity**   ➔ **Definition**
                                        Lists   ➔*Available lists*
                                        Descriptions   ➔*Available descriptions*
                                        X-References   ➔*Available x-references*
                                        ─────────────────────
                                        Other Occurrence...
                     Related Entity...
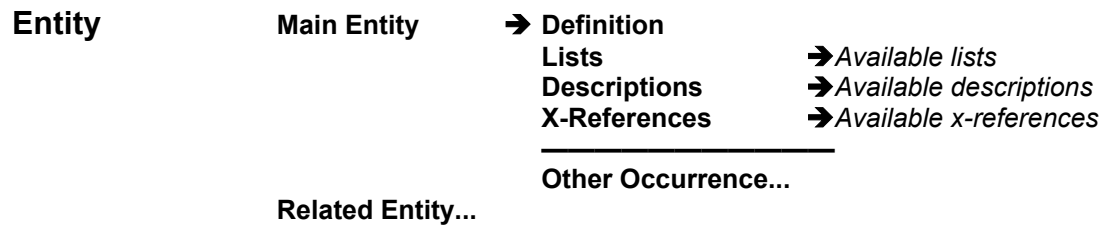
For complete details about this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The File Menu

File   **Save**
                      ─────────────

                      Restore
                      ─────────────

                      Print
                      Printer...

Save   Saves the current screen map. If the downloaded map includes relative
                      positions, they will be automatically changed to absolute positions.

                      You should save the map before requesting the screen simulation. See the
                      Simulation! command.

                      If your map contains overlapping elements, a dialog box opens to inform you of
                      overlapping elements. It displays a list of the codes of the overlapping elements,
                      their location and their type: for the Merise methodology R = Data Element, and
                      for all other methodologies D = Data Element. When you finish consulting this
                      list, click OK to close the window and to save the map.

Restore   Restores the last saved map.

Print   Prints the Screen map. A dialog box allows you to cancel printing.

Printer...   Opens a dialog box listing the printers connected to your PC. Select a printer
                      from this list and click **OK**.

                      If you click on the Configure... button, another dialog box opens which contains
                      the parameters associated with the printer driver (paper format and orientation,
                      specific characteristics, etc.).

The Elements Menu

Elements   **Data Element...**
                      Label
                      Screen...

When you add an element to the Screen map, the position of the element must be consistent with the size of the map. The first character of the element will be inserted where you click the cursor. If the element is too long and cannot be inserted in this particular place, a message offers to shift it to the left or upward, if possible. This may also happen when you try to move an element or group of elements.

Data Element...   Opens the Local Repository window which lists extracted Data Elements.

                       For details concerning how to add Data Elements in this list to the map, refer to subchapter "Functionalities" under Adding Elements to the Map.

                       For complete details concerning how to add Data Elements to this window, refer to chapter "The Data Extraction Windows", subchapter "The Local Repository Window".

Label   Select this command, click on the map and key in the label (maximum length: 30 characters) directly on the map.

                       For complete details concerning how to add Labels to the map, refer to subchapter "Functionalities" under "Adding Elements to the Map".

Screen...   Opens the list of downloaded Screens and Dialogs.

                       For complete details concerning how to add Screens and Dialogs to the map, refer to subchapter "Functionalities" under Adding Elements to the Map.

The Edit Menu

Edit   **Cut**
                            Copy
                            Paste
                            ───────────────────
                            Delete
                            ───────────────────
                            Repaint

Cut   Erases the selected group from the map and transfers it to the Clipboard.

Copy   Copies the selected group from the map to the Clipboard.

Paste   Calls the group from the Clipboard and places it on the map where you position
                            the cursor after activation of this command.
                            This command is active only when the Clipboard contains a group compatible
                            with a Screen map.

Delete   Deletes the selection without modifying the Clipboard contents.

Repaint   Repaints the Screen map.

The Presentation Menu

Presentation   **General characteristics...**
                      Display Attributes...
                      ─────────────────────────
                      Repetitive...
                      Screen Bottom...
                      ─────────────────────────
                      Preferences...

This menu allows you to set the Screen and the Data Element general characteristics and display attributes, as well as those of the Repetitive and Screen Bottom categories.

Some of the options in the dialog boxes opened by the following two commands are also set via the Screen Definition window (Pacbench only).

General characteristics...

Opens the General Characteristics dialog box in which you set the Screen general characteristics (default values are set in the Definition screen of the Dialog).

For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Display Attributes...

Opens the Display Attributes dialog box in which you set the Screen field, label, and error message display attributes (default values are set in the Definition screen of the Dialog). Color attributes are only visualized on the local mapping window. The other attributes are visualized during simulation.

For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Repetitive...   Available if the repetitive category exists. Opens the Repetitive Category dialog box in which you set the label type of the repetitive category. The default option is set in the dialog box (in its Data Element Label Type section) obtained via **General Characteristics...** in the **Presentation** menu.

For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Screen Bottom...   Available if the screen bottom category exists. Opens the Screen Bottom category dialog box in which you set the label type of the screen bottom category. The default option is set in the dialog box (in its Data Element Label Type section) obtained via **General Characteristics...** in the **Presentation** menu.

For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Preferences...   This command leads you to the Preferences dialog box common to both local mapping and simulation.

For a description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Launch Menu

Launch   **Simulation**
                      Data Extraction

Simulation   Displays the Local Simulation window. If a Local Simulation Window is already open for this map, this command opens a new Simulation window.

Save your local map before to request its simulation. You can request an automatic backup before the simulation (with or without any confirmation message) from the **Preferences...** command from the **Presentation** menu in the Local Mapping window.

If you haven't saved your map while you've carried out modifications, your simulation will be obsolete. If the Simulation window is already open, save the map in the Local Mapping window and use the **Repaint** command from the **Actions** menu to simulate the current map.

The screen branching is possible during the local simulation. For more information, refer to the Online Systems Developement Manual.

Data Extraction   Displays the Data Element Extraction window. For a description of this window, refer to chapter "Data Extraction".

Functionalities of Local Simulation

A screen simulation may be requested if a map of the Screen exists locally. For complete details on Local Mapping, refer to the Local Mapping subchapters.

Input fields on the simulation screen are identified by the cursor shape (an underscore). Protected fields are identified by a highlighted cursor. You can display field attributes via **Attributes** in the **Preferences** menu.

Colors set through the Display Attributes dialog box or in Definition screen of the Dialog are effective in the Local Simulation if the Host Colors mode is selected via **Colors...** in the **Preferences** Menu in the Local Simulation window.

Since you can modify the size of the simulation window, and since the simulated screen might be bigger than the display space in the window, vertical and horizontal scroll bars are available to help you move in the window.

Save your local map before requesting its simulation. You can request an automatic save before simulation (with or without confirmation message) via **Preferences...** in the **Presentation** menu in the Local Mapping window.

If you do not save the map and if you have made modifications, you will obtain an obsolete map simulation. However, if the simulation window is already opened, save the map in the local mapping window and use **Repaint** in the **Action** menu in the Local Simulation window to simulate the current state of the map.

Screen branching is possible during Local Simulation. For complete information, refer to the *Online Systems Development Manual.*

Getting to the Local Simulation Window

Access the Local Simulation:

- From the Screen Local Mapping window, via the **Simulation!** command

- From the Screen Entity dialog box or the Cascaded menu of a window of the same occurrence of the entity

This access - being local - does not require a host connection.

The Menu Bar of the Local Simulation Window

Entity   This Cascaded menu contains commands that allow you to access the definition, lists, descriptions and cross-references of the current occurrence of the Screen entity.

Actions   This menu features the following facilities: print, printer parameters, access to local mapping, and repaint.

Preferences   This menu allows you to specify the colors of the simulation and to display the attributes of the input fields.

System Menu   In addition to the standard commands, this menu contains a command that displays the current context.

For more information, refer to chapter "WorkStation Connection", subchapter "Context".

The Entity Menu

Entity   **Main Entity**   ➜ **Definition**
                                            Lists   ➜*Available lists*
                                            Descriptions   ➜*Available descriptions*
                                            X-References   ➜*Available x-references*
                                            ─────────────────
                                            Other Occurrence...
                      Related Entity...

For complete details about this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The Actions Menu

Actions   **Print**
                      Printer...
                      ──────────
                      Local Mapping
                      ──────────
                      Repaint

Print   Prints the simulated screen. A dialog box allows you to cancel printing.

Printer...   Opens a dialog box listing the printers connected to the PC.

                      Another dialog box opens containing the parameters associated with the printer driver (paper format and orientation, specific characteristics, etc.).

Local Mapping   Opens the Local Mapping window for the current Screen map. If the Local Mapping window is already open, it is reactivated.

Repaint   Incorporates changes saved during Local Mapping into the Local Simulation of the Screen.

The Preferences Menu

Preferences Menu
Print mode...
Colors...
Attributes

Print mode...   Displays a dialog box in which you indicate which colors the simulation will be printed in (black and white or color).

Colors...   Displays the Colors dialog box in which you change the colors of this window.

                        For more information refer to subchapter "Auxiliary Dialog Boxes".

Attributes   Allows you to display the attributes of the input fields. A check mark indicates that this display is active.

Auxiliary Dialog Boxes

The Data Element Update Dialog Box

This dialog box is displayed when you double-click on a Data Element in the Local Mapping window.
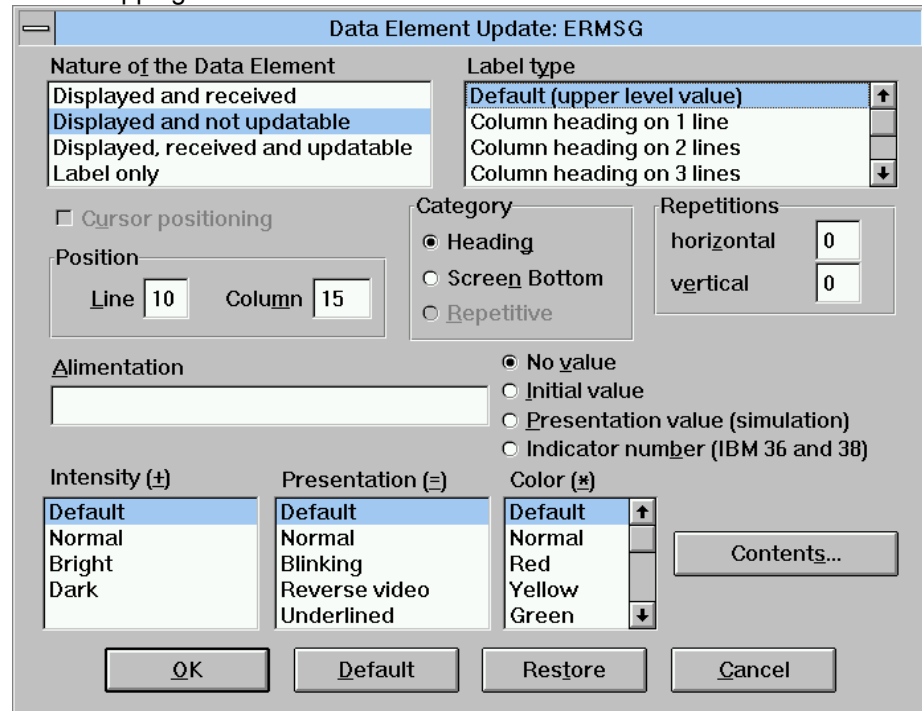
Nature of the Data Element
Select the nature of the Data Element. Set the default Data Element nature via **Preferences...** in the **Presentation** menu.

Label type
Select the type of label. If you select a column heading in this list box and it does not exist for the Data Element, the long label will be used. In order to see the column label and long label, select the **Contents...** button to open the Contents dialog box.

Cursor positioning
Use this option to place the cursor on the Data Element during simulation. (This option is available only if the Data Element field is updatable.) If no Data Element has been specified as cursor bearer, the cursor will automatically be positioned on the first screen input field when simulated.

Position
Indicate the position of the Data Element, i.e. the **Line** and **Column**.

Category
Select the category of the Data Element.

You can transfer a Data Element from the Heading to the Screen Bottom category (and vice-versa) or from the Repetitive category to the Heading or Screen Bottom categories without changing its physical position on the map. To do so, change its category in this Data Element Update dialog box.

Transferring a Data Element to the Repetitive category is possible only by physically locating the Data Element in the Repetitive category. See "Category Management" in subchapter "Functionalities".

Repetitions
Indicate the number of times the Data Element is repeated horizontally and vertically.

Literal
In the edit box, enter the value to be loaded into the Data Element. Select **No value** and the value in the edit box is not taken into account. Select **Initial value** and the value in the edit box is used as the initial value for the Data Element. Select **Presentation value (simulation)** and the value in the edit box is used only during the simulation. Select **Indicator number (IBM 36 and 38)** and the value in the edit box is used as a indicator number for IBM 36 and 38.

For a description of these values, refer to the *OLSD Manual* chapter "Definition and Description of a Dialogue or Screen", subchapter "Screen Call of Elements (-CE)" under Type of Literal.

Intensity
Select the intensity display attribute of the Data Element.

Presentation
Select the presentation display attribute of the Data Element.

Color
Select the color display attribute of the Data Element.

Contents...
Opens the Contents dialog box of the selected Data Element. This dialog box contains the name, format, length, label, and presentation value.

OK
Select this button to save the changes made and close this dialog box.

Default
Select this button to update this dialog box with the default values of the Data Element in the local repository.

Restore
Select this button to cancel all modifications made in this dialog box since the last save and to restore the last saved values in this dialog box.

Cancel
Select this button to cancel all modifications made in this dialog box since the last save and to close the dialog box.

The Label Update Dialog Box

This dialog box is displayed when you double-click on a Label in the Local Mapping window.

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Enter the label itself.

Line
    Enter the line position of the label.

Column
    Enter the column position of the label.

Intensity
    Select the intensity of the label.

Presentation
    Select the presentation of the label.

Color
    Select the color of the label.

OK
    Select this button to save the changes made in this dialog box and to close this dialog box.

Default
    Select this button to update this dialog box with the default values (values defined in the Definition screen of the Screen).

Restore
    Select this button to cancel all modifications made in this dialog box since the last save and to restore the last saved values in this dialog box.

Cancel
    Select this button to cancel all modifications made in this dialog box since the last save and to close the dialog box.

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The Called Screen/Dialog Update Box

This dialog box is displayed when you double-click on a called Screen/Dialog in the Local Mapping window.
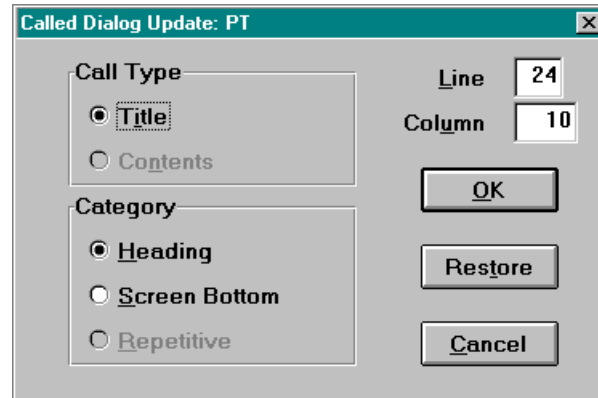
Call Type
Select what will be called in the map, the title or contents of the Screen/Dialog.

Line
Indicate the location (the line) of the called Screen/Dialog.

Column
Indicate the location (the column) of the called Screen/Dialog.

Category
Select the category of the called Screen/Dialog.

You can transfer a Screen/Dialog from the Heading to the Screen Bottom category (and vice-versa) or from the Repetitive category to the Heading or Screen Bottom categories without changing its physical position on the map. To do so, change its category in this Screen/Dialog Update dialog box.

Transferring a Data Element to the Repetitive category is possible only by physically locating the Data Element in the Repetitive category. See Category Management in subchapter "Functionalities".

OK
Select this button to save the changes made in this dialog box and to close this dialog box.

Restore
Select this button to cancel all modifications made in this dialog box since the last save and to restore the last saved values in this dialog box.

Cancel
Select this button to cancel all modifications made in this dialog box since the last save and to close the dialog box.

The General Characteristics Dialog Box

This dialog box is displayed via **General characteristics...** in the **Presentation** menu in the Local Mapping window. In this dialog box you set the Screen general characteristics (default values are set in the Definition screen of the Dialog):
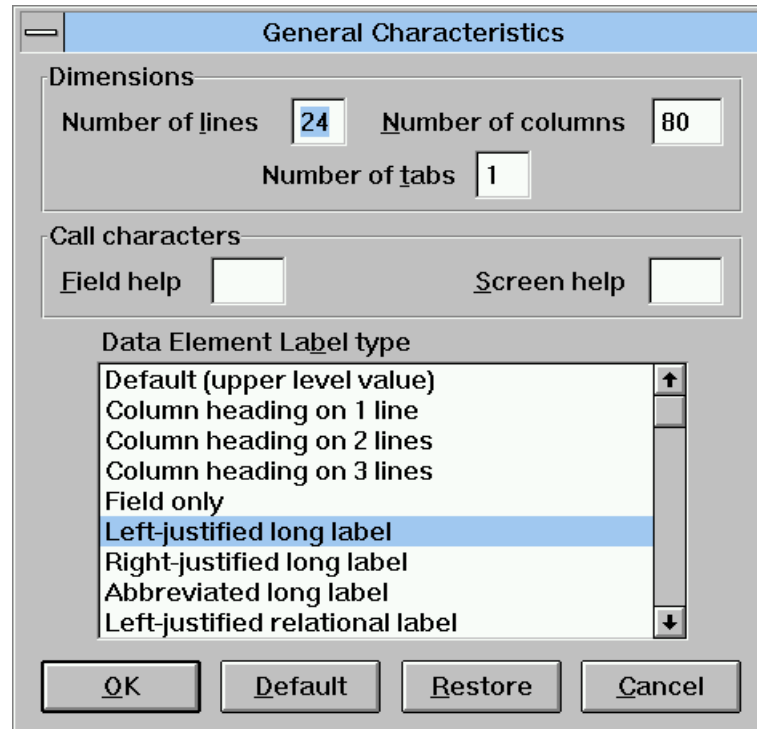
Dimensions

Number of lines/Number of columns
Indicate the number of lines and columns for the screen. When you reduce the size of a screen which already contains elements, a check is performed. The screen must have enough lines and columns to display all the existing elements. If you change the size of a screen a message will notify you if it is too small. This message will also propose to change the size of the screen to the smallest size possible (the minimum size that contains all elements of the screen).

Number of tabs
This value is used for host mapping only. This value is also set in the Definition screen of the Screen. See the *OLSD Manual*.

Call characters
Call characters are used to call the help function. Indicate the character (i.e. ?) to be used to call the **Data Element help** (when the character is placed in a Data Element) and the **Screen help** (when the character is placed in the choice field).

Data Element Label type
Set the Data Element Label Type of the header category.

The Display Attributes Dialog Box

This dialog box is displayed via **Display Attributes...** in the **Presentation** menu in the Local Mapping window:

In this dialog box you set the screen field, label, and error message display attributes (i.e. intensity, presentation, color). Default values are set in the Definition screen of the Dialog. Color attributes are only visualized on the local mapping window. The other attributes are visualized during simulation.
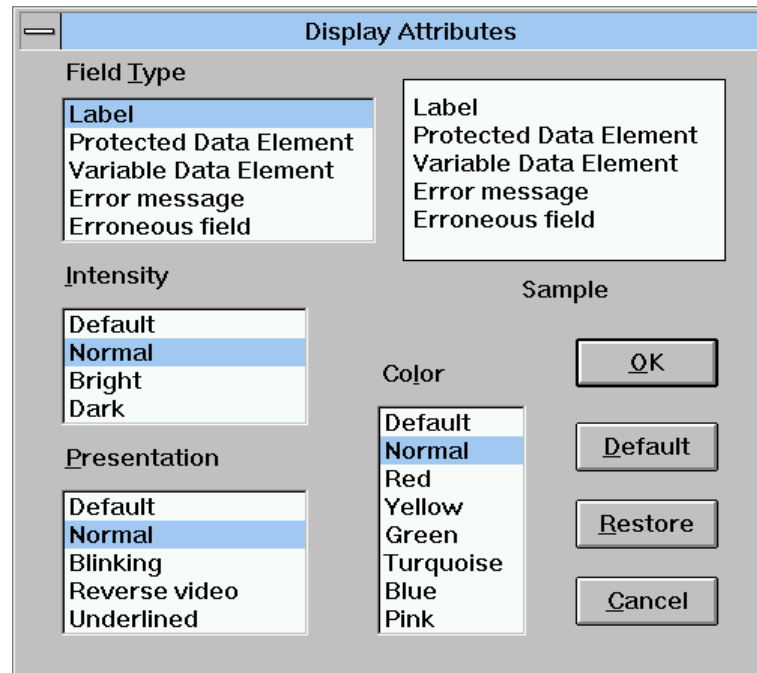
Field Type

When you select a field type, its current intensity, color and presentation will be highlighted in the corresponding lists. An example of the field type with its current intensity, color and presentation is shown in the sample part of the dialog box.

To change the intensity, color and presentation of a field type, select a non-highlighted **Intensity**, **Color** and **Presentation**. The result is shown in the **Sample** part of the dialog box.

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The Repetitive Category Dialog Box

This dialog box is displayed via **Repetitive...** (available if the repetitive category exists) in the **Presentation** menu in the Local Mapping window:
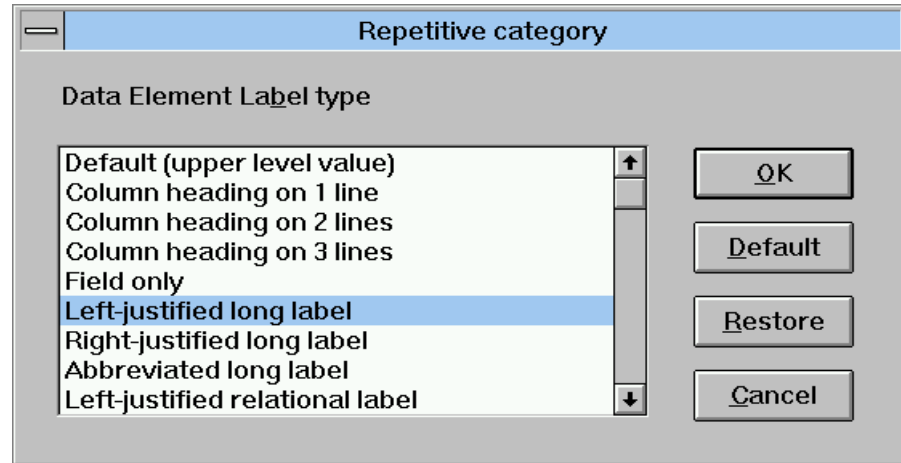
In this dialog box you set the **Data Element Label Type** of the repetitive category. The default option is set in the dialog box (in its Data Element Label Type section) obtained via **General Characteristics...** in the **Presentation** menu.

The Screen Bottom Category Dialog Box

This dialog box is displayed via **Screen Bottom...** (available if the screen bottom category exists) in the **Presentation** menu in the Local Mapping window:
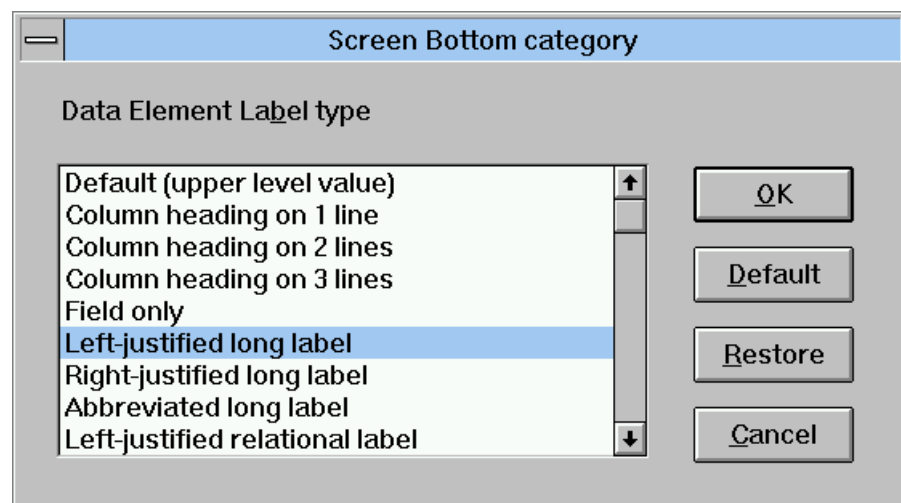
In this dialog box you set the **Data Element Label Type** of the screen bottom category. The default option is set in the dialog box (in its Data Element Label Type section) obtained via **General Characteristics...** in the **Presentation** menu.

The Preferences Dialog Box

This dialog box is displayed via the Local Mapping window (via **Preferences...** in the **Presentation** menu). In this dialog box you set the default options for the Data Elements used during mapping:
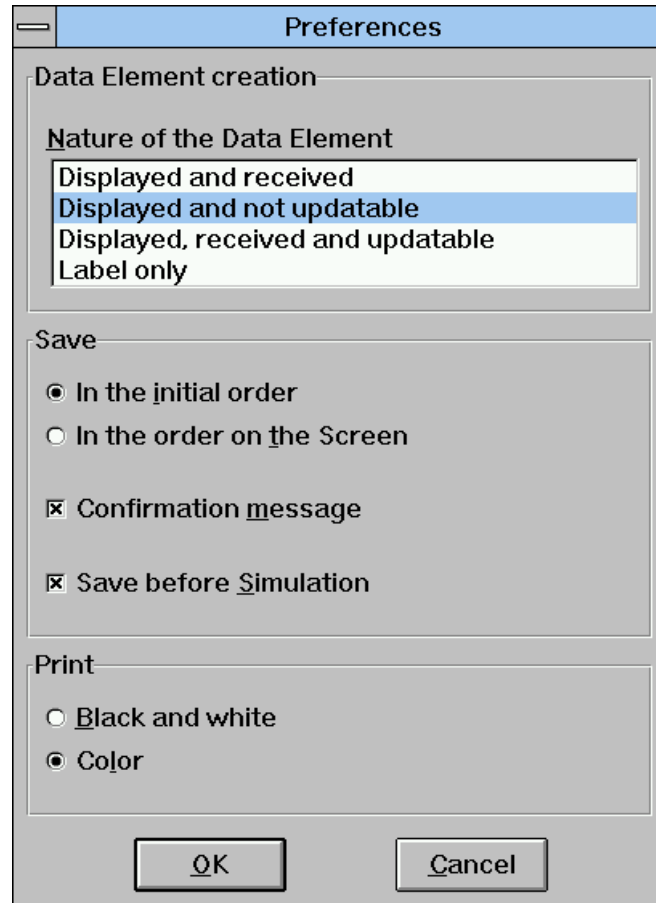
Data Element creation

> **Nature of the Data Element**
> Select the nature (default) of Data Elements placed in the map.

Save
> With the following options you indicate how elements in the map will be saved (**In the initial order/In the order on the Screen**) and if confirmation messages will be displayed (**Confirmation message**) and if the map will be automatically saved before simulation (**Save before Simulation**).

Print
> With this option you indicate which colors the map will be printed in (black and white or color).

The Colors Dialog Box

This dialog box is displayed via the Local Simulation window (via **Colors...** in the **Preferences** menu) and via the Host Simulation window (via the System menu). In this dialog box you can change the colors of the window:
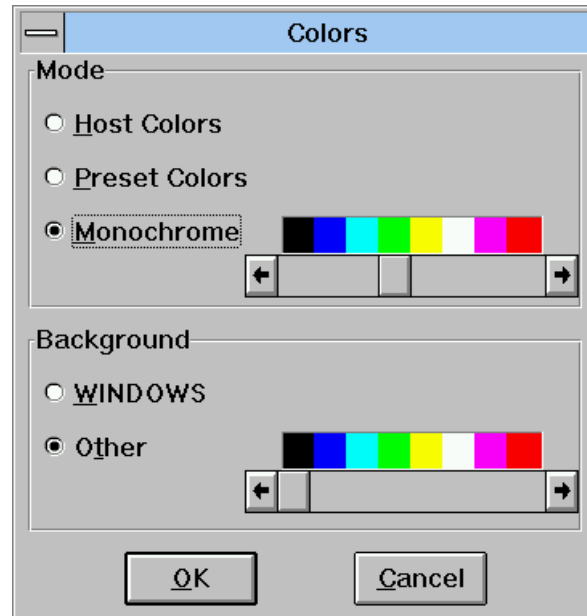
Mode

Host Color
The character colors will be the colors defined for the Host screen.

Preset Color
The character colors (by field) will be the colors predefined for the WorkStation.

Monochrome
The character color will be the color selected on the scroll bar

Background

WINDOWS
The background color will be the background color defined in WINDOWS.

Other
The background color will be the color selected on the scroll bar.

Chapter 17   The Host Mapping and Simulation Windows

Introduction

Host mapping is used to build a screen map using Data Elements in the Specifications Database.

Host mapping is performed in two stages:

- The first step, corresponding to the **Host Screen Mapping (Field Positions)** window, consists of positioning fields in the window with special characters

- The second step, corresponding to the **Host Screen Mapping (Contents)** window, consists of entering the codes of the Data Elements, as defined in the Specifications Database. This causes the characteristics of each element to appear automatically on the screen map

Once the screen map is built, field positioning and characteristics can be checked with the Host Simulation feature which allows you to see the screen map as it would be displayed during actual execution. This Simulation displays the Map as it will appear during execution.

NOTE

Host mapping and simulation operations are implemented in the same way as they are on the standard host system.

Therefore, for complete information, refer to the *Online Systems Development Manual*: chapter "Definition" and "Description of a Dialog or Screen", subchapter "Screen Mapping", and chapter "Dialog Simulation".

Functionalities of Host Mapping

A screen map is built in two steps: first using the Host Screen Mapping (Field Positions) window. Using special characters (described below), position the Screen fields onto the blank workspace, or delimit the modification field and press the ENTER key.

Function	Special Character (Default Value)
field beginning delimiter (bg:)	<
field end delimiter (end:)	>
relative positioning (rel:)	£
absolute positioning (abs:)	$
modification request (mod:)	?

Second using the Host Screen Mapping (Contents) window. The system assigns an order number to previously positioned fields. It then prompts you to enter the element code for the first field (Position 1) on the command line at the bottom of the screen. Once the ENTER key is pressed, the first field is displayed and the system prompts you to enter the second field code.

System Limit

You cannot open another window which requires host access during this second host mapping step as communication is held by this window (the **Entity** menu is grayed).

The actual update of the Specifications Database takes place when you close the Host Mapping window.

Function Keys and Mouse Control

See the Appendix at the end of this manual.

Getting to the Host Mapping Window

Host Mapping requires a host connection and is specific to the Screen entity.

You can access this window from the Entity dialog box or the Cascaded menu of a window of the same occurrence.

The Menu Bar of the Host Mapping Window

The Entity Menu

Entity   **Screen**   ➔ **Definition**
                                        Lists   ➔*Available lists*
                                        Descriptions   ➔*Available descriptions*
                                        X-References   ➔*Available x-references*
                                        ──────────────────
                                        Other Occurrence...
                    Data Element...

For complete details about this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The Update+Display Menu

Update+Display
                    Update
                    ──────────────────────────
                    Top
                    From...
                    ──────────────────────────
                    Field Positioning

Update   This command is equivalent to pressing the ENTER key.

Top   Available for Mapping (Field Positions) only. It allows you to position the cursor at the beginning of the Screen map. This is particularly useful when the map is larger than the Mapping window.

From...   Available for Mapping (Field Positions) only. It opens the From... dialog box in which you enter a Start key. Enter the Line Number from which you wish to display the Screen map. If you wish the display to start from a given column, check **Column Positioning** and enter the desired Column Number.

                    For a complete description of the From... dialog box, refer to chapter "Navigation in the WorkStation".

Field Positioning Returns from Mapping (Contents) to Screen Mapping (Field Positions). This command is not available for Screen Mapping (Field Positions).

The Screen Menu

Screen Menu   **Copy Host Screen**
Print Host Screen...

Copy Host Screen

Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...

Prints the current Host Screen.

Functionalities of Host Simulation

This window is specific to the Screen entity.

If screen branching has been defined (by using a Data Element or Function Key), the Host Simulation window allows you to simulate it, provided that a screen map has been described for each screen branching.

When you open the Host Simulation window via the Entity dialog box, select the From... button. A dialog box will open in which you specify a function key to use in order to exit the window (IBM hosts only).

Another dialog box opens in which you select the type of screen to simulate:
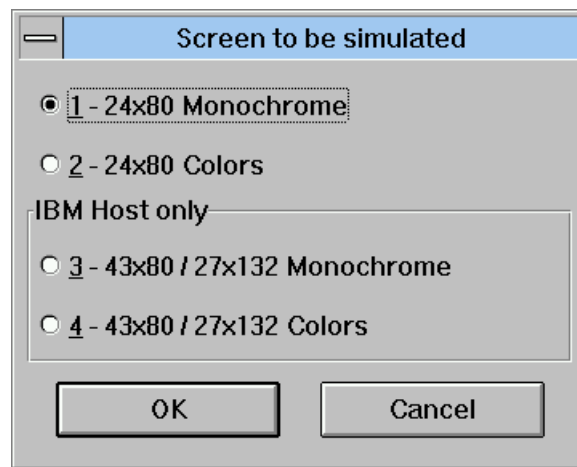
1 - 24x80 Monochrome

Allows you to simulate a 24x80 map without color attributes. The equivalent host operation code is C1.

2 - 24x80 Colors

Allows you to simulate a 24x80 map with color attributes. The equivalent host operation code is C3.

3 - 43x80 / 27x132 Monochrome

Allows you to simulate a 24x80 or a 27x132 map without color attributes. The equivalent host operation code is C4.

4 - 43x80 / 27x132 Colors

Allows you to simulate a 24x80 or a 27x132 map with color attributes. The equivalent host operation code is C5.

After selecting a screen type and clicking OK, one of two things will occur:

1. If there are no overlapping fields, the system will simulate the screen or dialog.

2. If field overlaps/overflows are detected, the system will display a message indicating so.

SIMULATION EXIT

There are several ways to exit from the Host Simulation window:

•• Pressing the function key that you defined in the dialog box just before opening the Host Simulation window

•• If the Conversation End has been specified (in the Called Data Elements screen), entering the corresponding command or press the appropriate key

•• Pressing the F2 key (if no other key has been specified in the dialog box before opening the Host Simulation window)

•• Selecting Close in the System Menu

KEYBOARD   The ENTER key is interpreted as a simple transmit. The function keys are:

ALT - 1 to ALT - +	⇒	PF1 to PF12
CTRL - 1 to CTRL +	⇒	PF13 to PF24

Getting to the Host Simulation Window

Host Simulation requires a host connection and is specific to the Screen entity.

You can access the window from the Entity dialog box or the Cascaded menu in a window of the same occurrence.

The Menu Bar of the Host Simulation Window

The Colors… Menu

Colors...   Displays the Colors dialog box. Refer to chapter "The Local Mapping and Simulation Windows", subchapter "Auxiliary Dialog Boxes".

The Screen Menu

Screen Menu   **Copy Host Screen**
                    Print Host Screen...

Copy Host Screen

                    Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...

                    Prints the current Host Screen.

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

                    For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

Chapter 18   The Local Specific Code Window

Functionalities

The Local Specific Code Window is a local word processor window for the different Program, Screen, Screen C/S and Business component specific processing lines.

- Work Areas (-W)

- Procedural codes (-P)

- Procedural codes (-8)

- COBOL procedural codes (-9)

- Reverse Program Structure (-SC)

Getting to the Window

You can access the Local Specific Code Window either with a local or a host connection.

In the Entity Dialog Box, select "Local Specific Code". A dialog box asks you to select which description you want to edit. (If no description already exists, the dialog box will display two choices: **Work Areas** (-W) and **Procedural Code** (-P).

If you select a description and click OK, the Local Specific Code opens and displays the description in a screen with the same functionalities as a PC word processor.

In addition to the menu bar, a right click on one of the description lines displays a pop-up menu which displays the actions which can be carried out (the **Entity** menu if you click an occurrence code, the **Edit** menu with the Go To function (+ function code) if you click a function code, or the **Edit** menu if you click on any other line).

When your work is finished, you must upload the Program or Screen descriptions in order to take your updates into account (refer to chapter "Local List Window").

The Different Description Lines

The Local Specific Code Window manages three types of lines: specific lines, external lines and tags. In order to differentiate them, the lines are displayed with different colors (refer to subchapter "Auxiliary Dialog Boxes", **Colors** dialog box).

Specific lines

Specific lines are lines specific to the description, stored in the work library. These lines can be directly manipulated, created, modified, or deleted in the Local Specific Code Window.

External lines

The external lines are lines from a higher library, macro-structure calls and VisualAge Pacbase generated lines. These lines are fixed: their position is set by the sub-function number and the line number given in their own context. Their contents cannot be modified.

The external lines appear in the description being edited. You must give the specific lines free line numbers to display the specific and the external lines at the same time.

Nevertheless, you can choose not to display an external line by creating an internal line in the same position but in the foreground (enter it by overwriting). The external line is then overwritten (but still exists) and its contents is no longer displayed.

You cannot modify external lines because they are from other contexts: they appear in the current description but can be modified in their own context only. In your description, they are displayed in the background and internal lines are displayed in the foreground.

Tags

These lines are displayed at the beginning of each group. A group is a set of lines hierarchically linked. In most cases (except old programs), a group corresponds to a sub-function (for the -P) or to the beginning of the line number (for the -W).

The beginning of group tag is displayed on a gray-green background, whereas other tags are displayed on a gray background.

The tags display the main group information of the: function code, sub-function code, level, beginning of line number (for the -W), etc.

For the -P, -8, -9 and -SC, a specific line necessarily belongs to a group. Therefore, when the description is empty, you must create a group before entering a specific line.

Overwriting lines

When an internal line overwrites an external line, it is displayed in black with a small rectangle whose color corresponds to that of the overwritten line. In order to display the external line which was overwritten, click on the colored rectangle.

This rule also applies when external lines overwrite each other (for example, a -W line of a program overwriting a -W line of a macro-structure). If two macro-structures called in the current library overwrite each other (neither one causing generation), they are represented by an empty line preceded by a green rectangle.

If a line existing during download is deleted in the edit phase, it is removed from the screen but it is stored in the memory for host updating.

Information on Selection

If you press the SHIFT key, the current selection is extended to the new cursor position.

You can also carry out a selection by pressing the SHIFT key and clicking with the mouse, or by pressing the left mouse button and moving the cursor, keeping the button pressed.

You can then copy, delete or mask the selection.

Menu Bar of the Local Specific Code Window

Entity   This Cascaded menu contains commands that allow you to access the definition, lists, descriptions and cross-references of the selected occurrence.

File   This menu contains commands that allow you to record, restore, close and print the description or access another specific code description.

Edit   This menu contains commands that allow you to add a line or a group, delete a line, copy or cut into the clipboard, paste from the clipboard, and mask the selected lines.

Search   This menu contains commands that allow you to search for and replace character strings, to position and to reach a specific mark.

Options   This menu contains commands that allow you to display the line numbers, the action codes corresponding to the updates performed, the extended operators, the sub-function levels and the source areas. It also allows you to take into account external lines, to enter lower case letters, to increment the line numbers and to choose the display colors or the character font.

?=F1   This command allows you to access the host online help.

System Menu   This menu contains, in addition to its standard commands, a command allowing you to consult the window context.

                    For more information about the context, refer to chapter "WorkStation Connection", subchapter "Context".

The Entity Menu

Entity   **Main Entity**   ➜ **Definition**
                                           Lists   ➜*Available lists*
                                           Descriptions   ➜*Available descriptions*
                                           X-References   ➜*Available x-references*
                                           ─────────────────────
                                           Other Occurrence...
                     Related Entity...

For complete details about this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The File Menu

File   **Open**   ➜*Available Specific code descriptions*
                     Close
                     Save
                     Restore

Open   Displays a sub-menu which allows you to choose branching to one of the specific code descriptions already available locally for this occurrence.

                     Command represented by the icons in the toolbar.

Close   Closes the current description.

                     If you have not saved your updates, a dialog box asks you if you want to do so.

Save   Saves the current description.

                     The command is represented by the icon in the toolbar.

Restore   All the modifications carried out after the last save will be lost (a confirmation message is displayed). Press YES to redisplay the last saved version of the description.

                     The command is represented by the icon in the toolbar.

Print   Print the current description, the current group or groups spaces.

                     Command represented by the icon in the toolbar.

Printer...   Configures the printing.

The Edit Menu

Edit   **Add a line**
                        Add a group
                        ─────────────
                        Cut
                        Copy
                        Paste
                        ─────────────
                        Delete line / group
                        ─────────────
                        Mask

Add a line   Creates a line after the current line.

                        The number of the new line is calculated according to the standard numbering increment step.

                        If the numbering increment step is too large to insert a line between two existing lines, a line number is automatically created and/or the previous lines and/or the following lines are renumbered.

                        If renumbering is not possible (no more free numbers), a message is displayed to warn you that creation is not possible.

Add a group   Opens the **Add a group** dialog box in which you can enter the parameters of the function and/or sub-function which will be created after the current line. For a detailed description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Delete line   Deletes the current line.

                        The deletion of a group line automatically implies the deletion of all group lines. The deletion of the only specific line in a group also implies deletion of the group.

                        If you delete several selected lines and the selection contains one or more title lines (or tags), the following simple lines will be attached to the group immediately preceding them. A message box opens for you to confirm this concatenation.

                        The first simple line of a function must have an operator with parameter ($x) or SUP or N value. Therefore you cannot delete the first simple line if the second line, which will become the first, does not have one of these three values.

                        The command is represented by the 🗑 icon in the toolbar.

Cut   Copies the selection into the clipboard and deletes the selection (the external lines are not deleted).

                        The command is represented by the ✂ icon in the toolbar.

Copy	Copies the selection onto the clipboard, without deleting the selection.
	If you copy function tags onto the clipboard, these lines will be considered as sub-function tags when pasting (it is not possible to paste functions).
	The command is represented by the ▦ icon in the toolbar.
Paste	Copies the contents of the clipboard into the description.
	If a selection exists for a field, this selection is overwritten by the contents of the clipboard. If no selection exists, the clipboard is added to the contents of the description, at the cursor position.
	For a line (or a group of lines), the contents of the clipboard is inserted after the current line.
	If you paste a function, it automatically becomes a sub-function and its hierarchical level switches to 6.
	The command is represented by the ▦ icon in the toolbar.
Mask	Allows you to mask the current selection.
	The masked lines are replaced by a single line when displayed, indicating the number of masked lines.
	If the current line is a masking line, this command becomes **Unmask** as does the icon on the tool bar. To unmask lines, click with the right mouse button on a masked line. A contextual pop-up menu opens and asks you if you want to unmask any or all of the lines.
	The command is represented by the ▦ icon in the toolbar.

The Search Menu

Search	**Search...**
	Replace...
	———————
	Go to...
	———————
	Set Mark...
	Go to Mark ➔ *Positions memorized*
	———————
	Return
Search...	Opens the **Search...** dialog box in which you specify the character string to search for in the function. For a detailed description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".
	The command is represented by the ▦ icon in the toolbar.
	The **Search Next** command in the dialog box is represented by the ▦ icon in the toolbar.

Replace...   Opens the **Replace...** dialog box in which you specify the character string to be replaced. For a detailed description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The command is represented by the icon in the toolbar.

Go to...   Opens the **Go to...** dialog box in which you specify the function, the sub-function or the number you wish to go to. For a detailed description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The command is represented by the icon in the toolbar.

Set Mark...   Opens the **Set Mark...** dialog box in which you can memorize positions (3 main positions and 17 secondary positions). For a detailed description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The command is represented by the icon in the toolbar.

Go to Mark   Allows you to position the cursor directly on one of the main or secondary memorized positions.

Access to the 3 main positions represented by the icons in the toolbar.

Return   Memorizes the initial line of the screen when you used the "Go to..." function. This command allows you to return to this initial line.

The command is represented by the icon in the toolbar.

The Options Menu

Options   **Line Numbers**
                        Action codes
                        Extended columns
                        Processing level
                        Source
                        _____
                        Use external lines
                        Use lower case
                        Confirm Save
                        Default Increment...
                        _____
                        Colors...
                        Fonts ...

Line numbers   Toggles the line number display.

The line numbers are displayed in increasing order. They are automatically managed by the system which generates them according to the position of the line in the screen.

If you choose to display the line numbers, you can modify them or create new ones, but the automatic numbering remains active in order to avoid disorganization of all the other lines and make sure that each existing number is higher than that of the previous line and lower than that of the following line.

The command is represented by the [icon] icon in the toolbar.

Action codes   Displays the action codes which indicate the modifications carried out on the description since the last download or upload on the host.

When this mode is activated, updates are prohibited.

The command is represented by the [icon] icon in the toolbar.

Extended columns
Allows you to display the right part of the "Operands" and "Conditions" fields.

Processing level
Allows you to display the processing levels for the simple lines.

Source   Allows you to display the origin of the external lines (library/session, macro-structure code).

Use external lines

Creates a specific line when you modify an external line.

As soon as you enter the first character on an external line:

- If the option is positioned, an image of the line is created on the foreground and its content appears in the input fields. You can then insert your updates

- If the option is not positioned, the line is no longer displayed (the fields are initialized as blank)

Use lower case

Allows you to enter letters in lower case. However, even if the command is enabled, upper case letters are systematically used for some fields such as operator code, line type and condition type.

Confirm Save

Displays a confirmation message during the save.

Default Increment...

Opens the **Default Increment...** dialog box in which you can indicate the default increment step for the sub-functions and line numbers. For a detailed description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Colors...   Opens the **Colors...** dialog box in which you can modify the default display colors of the screen lines. For a detailed description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The command is represented by the [icon] icon in the toolbar.

Fonts...   Opens the **Available Screen Fonts** dialog box in which you can select a font and the size of the characters.

The command is represented by the [icon] icon in the toolbar.

The Help Command

?=F1   Calls on-line help.
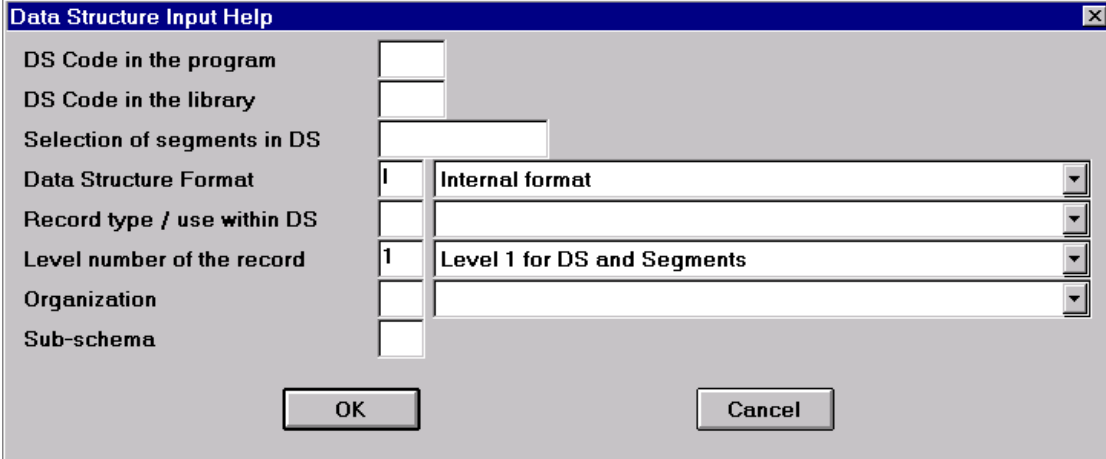
Auxiliary Dialog Boxes

The Data Structure Input Help Dialog Box

This dialog box is displayed when the letter F is entered in column S (Type of Line or Data Element Format) of a -W line.

The "DS Code in the Program" and "Selection of segments in DS" fields can be filled in with a $n value parameter.

For more details on the F-Type of Line or Data Element Format, see the *Structured Code* manual, Chapter "Modifying the Working-Storage/Linkage Section", subchapter "Work Areas Screen (-W).

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The Add a Group Dialog Box

This dialog box is displayed when you select **Add a group** in the **Edit** menu.

By default, it always displays the group identifier of your current edit position. You can modify this default identifier, making sure that you do not assign an identifier which already exists.

This dialog box varies according to the type of description in which you want to add a group, but:

• If you want to add a group in the -W lines, the dialog box is as follows:

```
┌─────────────────────────────────────────┐
│ ─ │          Add Group                   │
├─────────────────────────────────────────┤
│                                          │
│  Code for Placement          │ AB │      │
│                                          │
│  Line number                 │ 000 │     │
│                                          │
│   ┌──────────┐      ┌──────────┐         │
│   │   OK     │      │  Cancel  │         │
│   └──────────┘      └──────────┘         │
└─────────────────────────────────────────┘
```
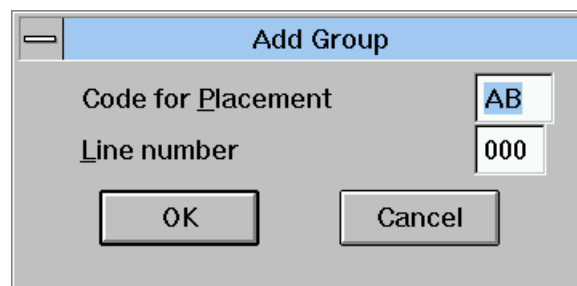
This dialog box displays the two values according to the already existing values.

• If you want to add a group in the -P, -SC and -8 lines, the dialog box is as follows:

```
┌─────────────────────────────────────────┐
│ ─ │          Add Group                   │
├─────────────────────────────────────────┤
│                                          │
│  Function              │ AA │            │
│                                          │
│  Subfunction           │    │            │
│                                          │
│  Line number           │ 000 │           │
│                                          │
│  Level                 │ 05 │            │
│   ┌──────────┐   ┌──────────┐            │
│   │   OK     │   │  Cancel  │            │
│   └──────────┘   └──────────┘            │
└─────────────────────────────────────────┘
```
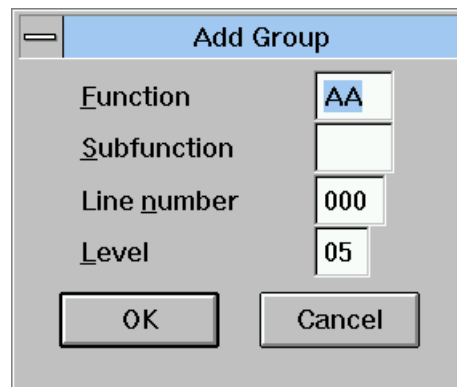
All these values are default values, according to already existing values.

The level is required for functions.

IMPORTANT: Group identifiers can be modified directly on the tags.

The Search Dialog Box

This dialog box is displayed when you select **Search...** in the **Search** menu, press PF9 or activate the corresponding icon.
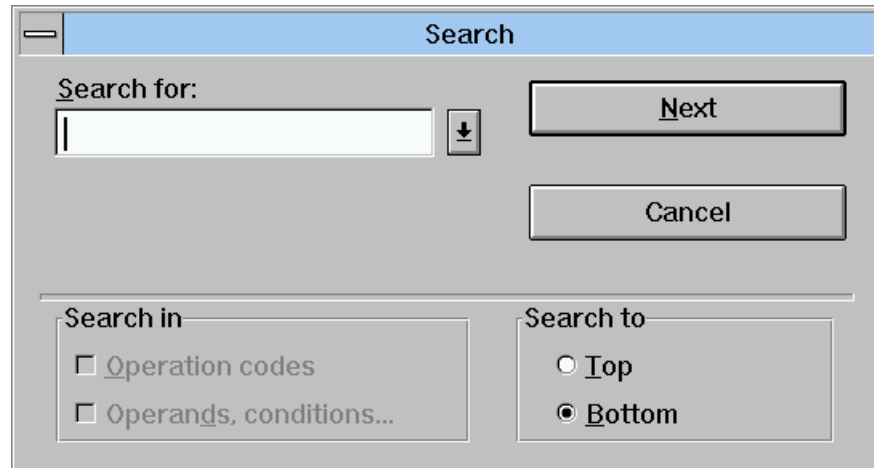
- Enter the character string to be searched for or select it in the help list (the last 10 strings searched for are memorized)

- Indicate if you want to search for the character string in the operation codes or in the operands and conditions by selecting one of the radio buttons in the **Search in** group

- Indicate the search direction by selecting one of the radio buttons or the **Search to** group

The search begins when you press **Next**.

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The Replace Dialog Box

This dialog box is displayed when you select the **Replace...** in the **Edit** menu, when you press PF10 or when you activate the corresponding icon.
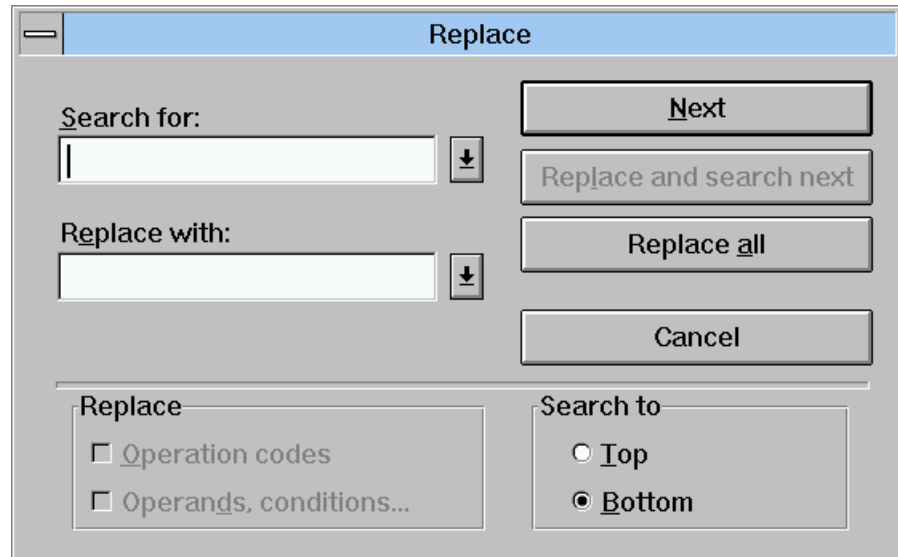
- Enter the character string to be searched for and the replacement string or select them in the help lists (the last 10 strings searched for are memorized in the first help list: the replacement strings memorized in the second help list are the last 10 which have been entered in the program, not the last 10 entered in the dialog box)

- Indicate whether you want to replace the character string in the operation codes or in the operands and conditions by selecting one of the radio buttons in the **Replace** group

- Indicate the direction of the replace operation by selecting one of the radio buttons in the **Search to** group

The dialog box contains the following buttons:

Next
Select to ignore the character string found and continue the search.

Replace and find next
Select to replace and continue the search. When a character string is found, it is highlighted.

Replace all
Select to replace all occurrences of the character string specified.

Caution: You can replace character strings in the specific lines only.

NOTE   Unless the **Use lower case** command is enabled, replacement character strings is with letters in upper case.

The Go to... Dialog Box

This dialog box appears when you select **Go to...** in the **Search** menu, press PF4 or activate the corresponding icon.
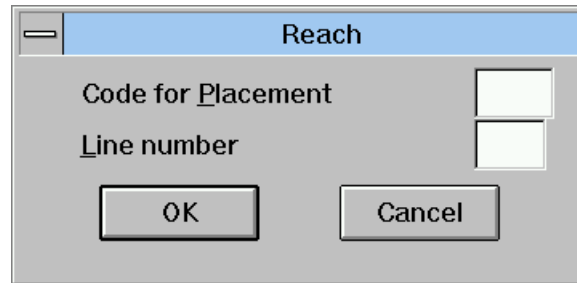
If you want to go to a sub-function, you must specify its function code, otherwise the Go to... dialog box will position the cursor on the first occurrence of this sub-function.

Similarly, if you want to go to a line number, you must specify the function and sub-function codes which include this line number.

The Set Mark Dialog Box

This dialog box appears when you select **Set mark** in the **Search** menu or when you activate the corresponding icon.
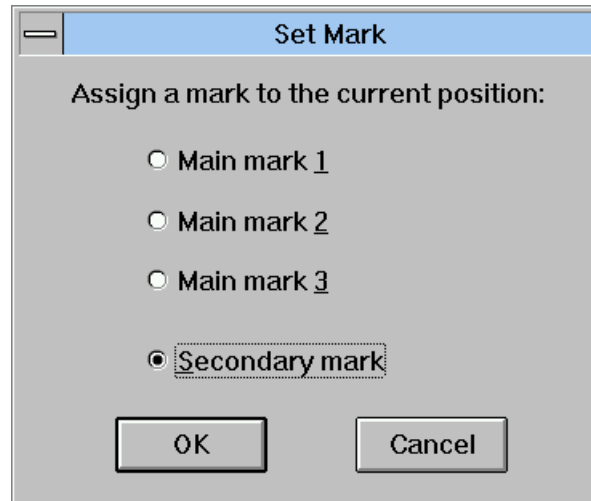
The position memorized is the first line of the screen displayed when you select this command. The function and sub-function codes and the line number are displayed in brackets.

In order to set a mark to an initial position in the description, just select one of the radio buttons in the dialog box.

The three main marks are those indicating regular positions.

A secondary mark is a less-used position. You can select up to 17 secondary marks.

The Default Increment Dialog Box

This dialog box is displayed when you select the **Default Increment** in the **Options** menu. It is varies according to the description in which you are positioned:

- If you are in a -P, -8 or -SC description, the following dialog box is displayed:
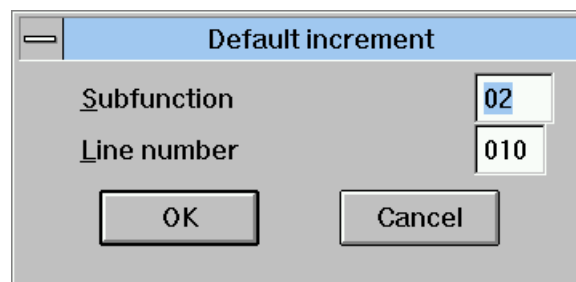
This dialog box displays the default increment step for the sub-functions and line numbers.

These increment steps will apply during creation of a group or of a line.

- If you are in a -W description, the following dialog box is displayed:
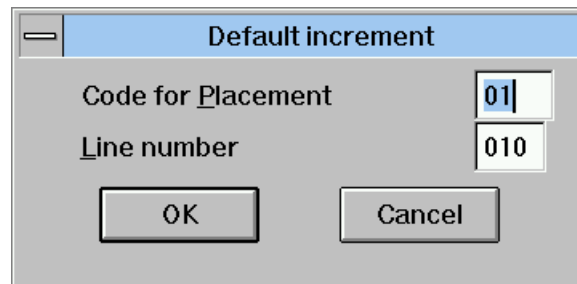
This dialog box displays the default increment step for the beginnings of line numbers and the line numbers.

- If you are in a -9 description, the following dialog box is displayed:
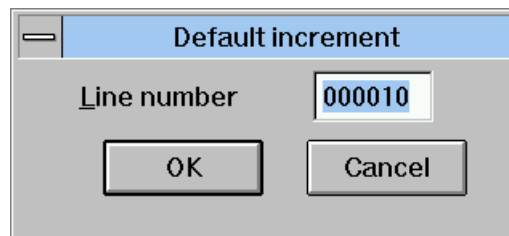
The Colors Dialog Box

This dialog box is displayed when you select the **Colors** in the **Options** menu.
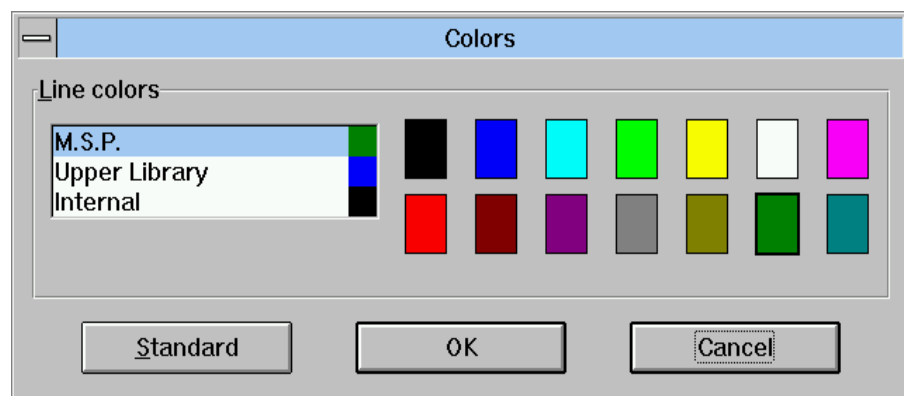
The default colors are:

Macro-structure lines	green
Higher library lines	blue
Internal lines	black
Group header lines	gray
Group header text lines	black
Function header lines	green
Function header text lines	black

In order to change these colors, click on the line corresponding to the line category then click on **Modify**. A standard Windows colors dialog box appears. You can choose standard colors or define your own customized colors.

If you change the colors, you can restore the default colors by pressing the **Standard** button.

The Available Screen Fonts Dialog Box

This dialog box is displayed when you select **Fonts** in the **Options** menu.
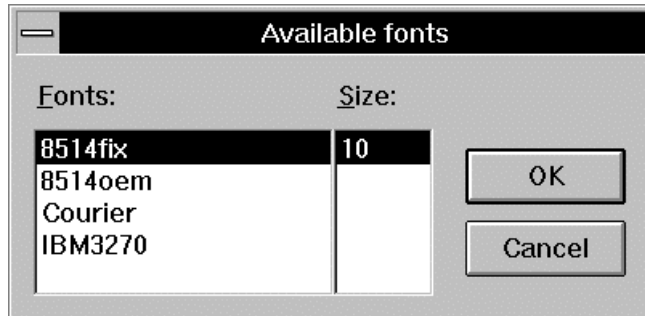
The Print Dialog Box

This dialog box is displayed when you select the command **Print ...** in the **File** menu.
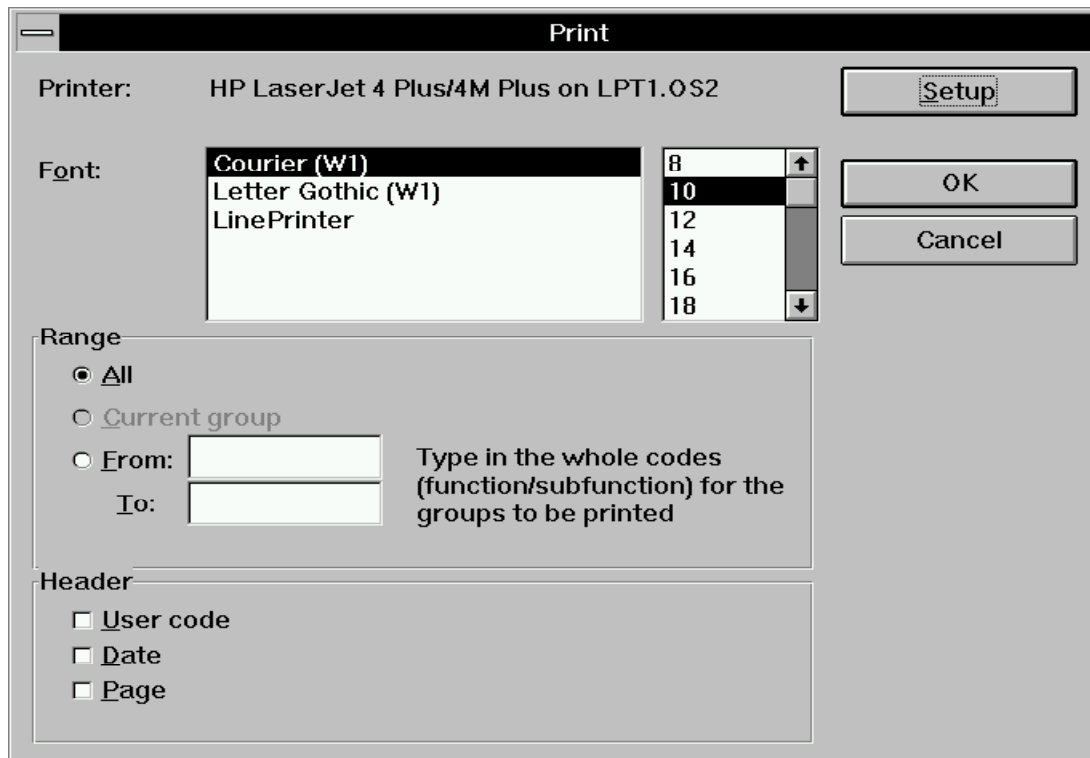
The Printer's Setup box

A standard Windows dialog box is displayed when you select the command **Printer...** in the **File** menu.

This dialog box allows you to select a printer and to define the printing's orientation and the paper's orientation.

Moving in the Window

This subchapter describes the moves that can be performed with the keyboard.

- Move in a field:
  - Home   ==>   Beginning of the current field
  - End   ==>   End of the current field
  - Right arrow   ==>   Next character in the Edit field
  - Left arrow   ==>   Previous character in the Edit field
  - CTRL+Right arrow   ==>   Next word in the Edit field
  - CTRL+Left arrow   ==>   Previous word in the Edit field

- Move in a line:
  - TAB   ==>   Next field (first field in the next line for the last field in the line)
  - SHIFT+TAB   ==>   Previous field (last field in the previous line for the first field in the line)
  - ALT+Home   ==>   First field in the line
  - ALT+End   ==>   Last field in the line

- Move between the lines:
  - Up arrow   ==>   Previous line
  - Down arrow   ==>   Next line
  - PgUp   ==>   Previous page
  - PgDn   ==>   Next page

- Move in a group:
  - CTRL-PgUp   ==>   First field in the first line of the previous group
  - CTRL-PgDn   ==>   First field in the first line of the next group

- Move in a function for the -P, -SC and -8 :
  - CTRL-Alt-PgUp   ==>   First field in the first line of the previous function
  - CTRL-Alt-PgDn   ==>   First field in the first line of the next function

- Move in a description:
  - CTRL-Alt-Home   ==>   First field of the description
  - CTRL-Alt-End   ==>   Last field of the description

The groups are sorted by hierarchical level: elementary fields with level 99 are not considered as groups in move operations.

You can also use the vertical scroll bar to move in the description.

When moving via the keyboard, the current line remains displayed and lines are scrolled if necessary, whereas when moving via the scroll bar the current line may not be visible.

Chapter 19 The call of segments (semi-local) Window

Functionalities

The Call of Segments (semi-local) Window enables you to describe the segments called by the occurrences of the Screen Entity (On-line Systems Development Function) or the Character-mode Client Component and Business Component Entities (Pacbench C/S).

The Call of Segments (semi-local) Window requires a host connection. The data displayed in the window is read by the host, processed locally and updated during save. Only the processes are performed locally. Unlike the graphic and textual descriptions, the segment description is not stored locally. In the event of an interruption during the process (for instance a power failure) however, a recovery mechanism allows you to restore the description to its previous status.

The save can be performed during a work session (**Upload** command) or at the end of a session.

The contents of the window is similar to the O......CS screen.

This screen is documented in the following Manuals:

- *Online Systems Development*, chapter "Description of a transaction", subchapter "Screen Call of Segments"
- or *Pacbench C/S Business Logic and TUI Clients* Manual, chapter "Call of Segments", for the Business Component and TUI Client.

When developing a host for a VisualAge Pacbase application, consult the *Developer's Documentation / eBusiness Applications: Business Logic*, chapter "Business Component".

NOTE   You can open only one Call of Segments (semi-local) Window at the same time.

Getting to the Window

The Call of Segments (semi-local) Window is only available with the Pacbench module.

In the Screen Dialog Box, enter an occurrence in the Occurrence Code field and choose Call of Segments (semi-local) in the Description list.

For more details on the various ways to specify an occurrence code in the Entity Dialog Box or on descriptions, refer to chapter "Navigation in the WorkStation".

Segment Presentation by Use/Category

The Call of Segments (semi-local) Window is split into 6 sub-windows, called "panels". Each panel corresponds to one use and one category of segment process: in a column, you will find the panels dedicated to the same use mode (Receive or Send), and in a column those dedicated to the same process category (Initialization, Body (iterative) or Termination).

NOTE   Initialization corresponds to Header, Body (iterative) to Repetitive and Termination to Bottom of the Screen in the terminology used in VisualAge Pacbase documentation.
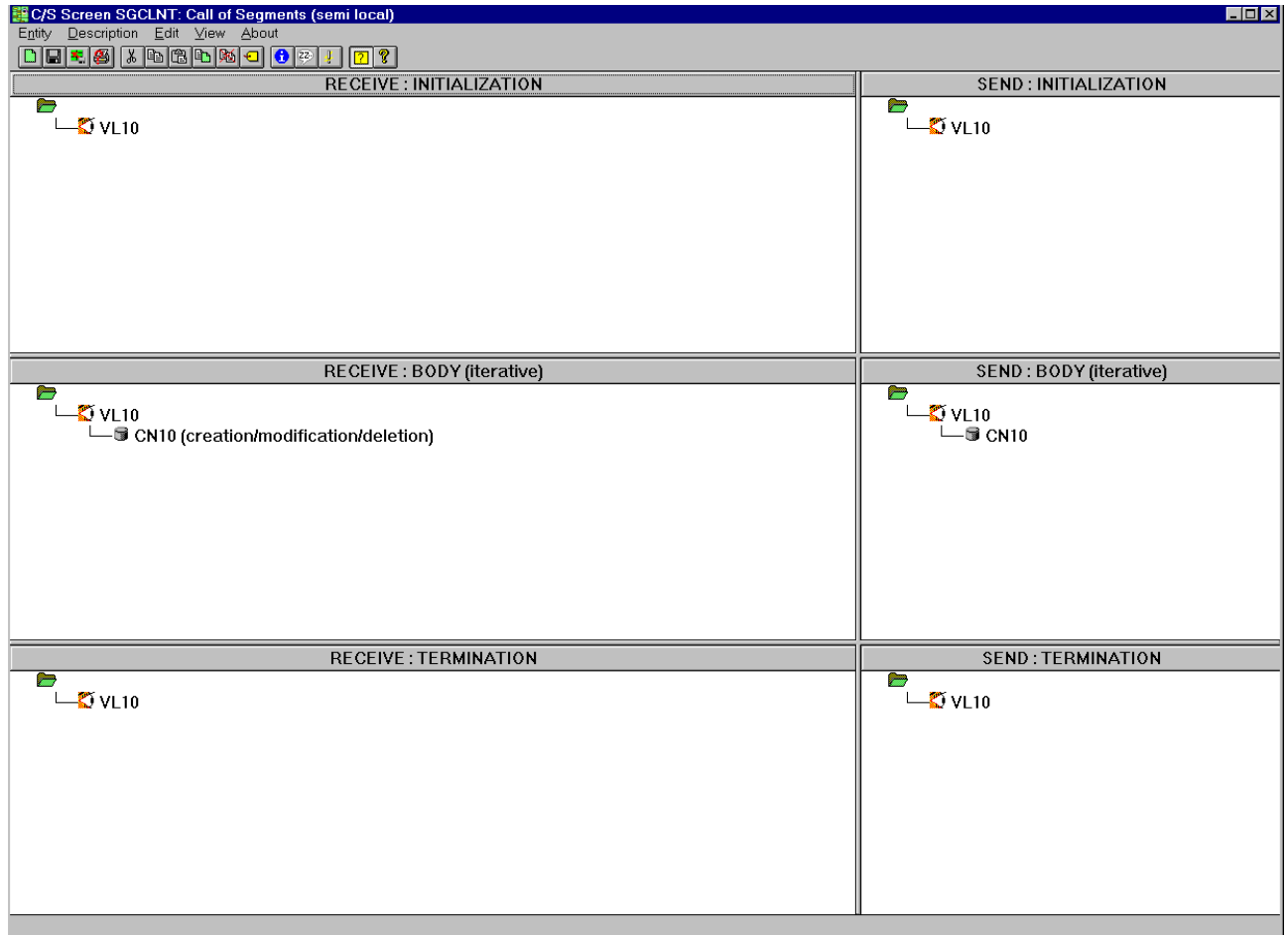
The symbol in the upper left corner of each panel stands for the root which is the starting point of the graphic tree but takes no real part in the description.

Each panel comprises two parts:

• The title, reminding the use mode and the process category

• The list box, where the called segments are displayed

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NOTES

- The panel titles are also buttons. You can click them to open an info-box summarizing the mode of use and the process category for the pane

- You can resize the column width and the line height of the panels by clicking and dragging the mouse pointer to the size you wish

- If the list box is too small to display all segments, use the vertical scroll bar to visualize the parts which were previously not visible

Each called segment code is preceded by an icon representing its organization and, in the "Reception" column only, is followed by a label summarizing its use. In the "Emission" column, when there is no label (most frequent case), use may be "Used for display". However, Client Component use, provided the Segment organization is X, can be "Host call for selection" or "Host call for customized procedures". In the second case, the label is explicitly specified.

In a list, the dependence of the segments is represented by a tree structure. The left-to-right order for displaying the segments corresponds to the process order. The segments which depend on the same segment are displayed with the same indentation.

Example :
In the panel entitled RECEPTION: INITIALIZATION, the precedence / dependence relationships between segments are represented as follows:

- Segments AA01 and FF12 are free segments because they have neither preceding nor depending segments

- AZ15 has two depending segments, AZ1B and AZ1C, but no preceding segment. AZ1B and AZ1C are on the same hierarchical level because they have the same preceding segment

- Segment AZ1B has both a preceding segment (AZ15) and a depending segment (AZ2B)

For more details on the functionalities that allow you to create or modify segment calls, refer to subchapters "The Menu Bar of the Calls of Segment (semi-local) Window" and "Auxiliary Dialog Boxes".

The Menu Bar of the Call of Segments (semi-local) Window

Entity   This Cascaded menu contains commands that allow you to access the definition, lists, description and cross-references of the current occurrence.

Description   This menu allows you to reset, upload, restore and quit the current description, and configure the printer.

Edit   This menu allows you to copy, cut, paste, add, delete or rename a segment.

View   This menu allows you to display or hide the toolbar and the status bar, to display the errors that occurred during the last upload, display the information about the current segment and the list of unused segments, and to move the focus from one panel to the other.

About...   This menu allows you to display information relating to the window.

System Menu   In addition to the standard commands, this menu contains a command for consulting the context of the window.

                                 For information about the context, refer to chapter "WorkStation Connection", subchapter "Context".

                                 In addition to the menu bar and the toolbar in the Call of Segments (semi-local) Window, described later in this chapter, a pop-up menu appears when you right-click on a segment or a logical view. The commands available in this menu allow you to access the definition, lists, description and cross-references of this segment or logical view.

The Entity Menu

Entity Definition

Lists   ➜*Available*
Lists
Descriptions   ➜*Available*
Descriptions
X-references   ➜*Available X-*
references
────────────────
Other Occurrence...

For complete details about this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The Description Menu

Description   **Reset**
                     Upload
                     Restore

                     ──────────
                     Printer...
                     ──────────────────

                     Quit

Reset   Displays an empty multi-panel window, by removing the specified segment calls, to enable you to write the current description again.

                     The command is represented by the ▢ icon on the toolbar.

Upload   Updates the current description on the host.

                     The command is represented by the ▢ icon on the toolbar.

Restore   Restores the description as it was in the last saved version.

                     The command is represented by the ▢ icon on the toolbar.

Printer...   Configures the printer.

                     The command is represented by the ▢ icon on the toolbar.

Exit   Closes the window (application) and displays a message box asking you to confirm that you wish to save any modifications (i.e. host update).

The Edit Menu

Edit   **Cut**
                              Copy
                              Paste
                              ───────────────────
                              Add segment
                              Delete segment
                              Rename segment

Cut   Transfers the selection from the current description onto the Clipboard.

                              When you transfer a segment, all depending segments are also transferred.

                              The command is represented by the ✂ icon on the toolbar.

NOTE   To move a segment, instead of using **Cut/Copy**, left-click on the segment
                              with the mouse to select and drag it to the required pane. Once in the pane,
                              hold the mouse button down until the preceding segment (or the root) of the
                              segment to be moved is highlighted, then release the button. The segment is
                              removed from the original pane.

Copy   Duplicates the selection and places it onto the Clipboard.

                              When you copy a segment, all depending segments are also copied.

                              The command is represented by the 📋 icon on the toolbar.

NOTE   To copy a segment, instead of using **Copy/Paste**, left-click on the segment
                              with your mouse to select it and drag it to the required pane. Once you are in
                              the pane, hold the mouse button down until the preceding segment (or the
                              root) of the segment to be moved is highlighted. Press the CTRL key, then
                              release the mouse button.

Paste   Places the contents of the Clipboard at the cursor position.

                              The command is represented by the 📋 icon on the toolbar.

Add segment   Opens the Add segment dialog box which allows you to enter a new segment
                              code, or the Characteristics of the new logical view dialog box, which allows you
                              to enter the code and base code of the logical view.

                              The command is represented by the 📋 icon on the toolbar.

                              For more details about those two dialog boxes, refer to subchapter "Auxiliary
                              Dialog Boxes".

Delete segment   Deletes the selected segment.

                              When you delete a segment, all depending segments are also deleted. A
                              message box opens requesting confirmation.

                              The command is represented by the 📋 icon on the toolbar.

Rename segment   Opens the Renaming Segment dialog box which allows you to enter a new code for the selected segment.

The command is represented by the icon on the toolbar.

For more details about those two dialog boxes, refer to subchapter "Auxiliary Dialog Boxes".

The View Menu

| View | **Toolbar**
Status bar
ToolTips
Upload status
──────────────────
Segment Information
Unused segments
──────────────────
Previous pane
Next pane |

Toolbar   Displays or hides the toolbar.

The icons on the toolbar are documented as they occur in this subchapter.

Status bar   Displays or hides the status bar.

When the command is active, the status bar appears at the bottom of the window.

The status bar displays:

- The action performed by a menu command or by the current icon

- The code, organization and external name of the segment where the mouse pointer is located

ToolTips   Shows or hides ToolTips.

The command is represented by the [?] icon on the toolbar.

Upload status   Opens the Upload errors dialog box which displays any errors which occurred during the last upload. For more details about this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The command is represented by the icon on the toolbar.

Segment Information

Allows you to access the following dialog boxes:

- Characteristics of the segment, which allows you to define the physical/use and logical characteristics of the segment to be added and to consult/modify the characteristics of the current segment

- Characteristics of the logical view (Business Component only), which allows you to consult or modify the code or base code of the selected logical view

For more details about those two dialog boxes, refer to subchapter "Auxiliary Dialog Boxes".

The command is represented by the icon on the toolbar.

Unused segments

Displays the List of unused segments dialog Box. This dialog box allows you to consult, create, modify and cancel a segment which is called but not displayed because it is unused.

For more details about this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

The command is represented by the icon on the toolbar.

Previous pane   Moves the focus from the current to the previous pane.

Equivalent to the key combination SHIFT+F6.

Next pane   Moves the focus from the current to the next pane.

Equivalent to the F6 key.

When a panel is focused, you can use the keyboard arrow keys to move from one segment to another within the pane.

The About... Menu

About...   Opens the About... dialog box

The command is represented by the icon on the toolbar.

Auxiliary Dialog Boxes

The Add Segment Dialog Box

This dialog box is displayed when you choose **Add segment...** in the **Edit** menu or click the corresponding icon on the toolbar.
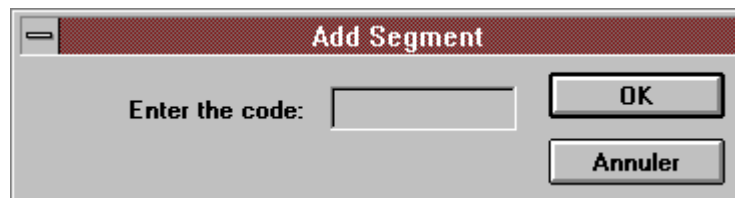
To specify a segment, select its preceding segment or, in the case of a segment under the root, select the root. Choose **Add segment...** or click the corresponding icon, enter a code for the new segment, then click OK. The Characteristics of the Segment dialog box opens up. You can specify the physical and/or use characteristics of the segment as well as its logical characteristics. The code of the new segment appears in the tree structure one level lower than that of the selected segment.

The Characteristics of the New Logical View Dialog Box

This dialog box is displayed when you choose **Add segment...** in the **Edit** menu or click the corresponding icon on the toolbar.
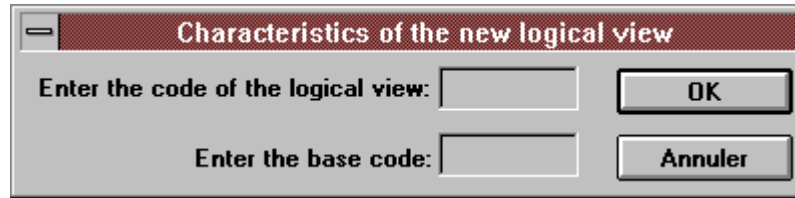
To specify a logical view, select the root in one of the six panes. Choose **Add segment...** in the **Edit** menu or click the corresponding icon on the toolbar. Enter the code and base code of the logical view in the input fields. If you do not complete the **Base code** field, this code is by default the same as that of the logical view. Click OK: the code of the logical view is displayed simultaneously in the six panes, just under the root.

NOTE

The segment directly under the root is a logical view when called in a business component which is one of the following types:

- S   Business Component
- E   Business Component (with access to error labels)
- MS   Host Monitor
- SI   Initialization Host
- ST   Termination Host
- FM   Communications monitor
- MV   Communications monitor (simple mode)

The Renaming Dialog Box

This dialog box is displayed when you choose **Rename segment...** in the **Edit** menu or click the corresponding command on the toolbar.
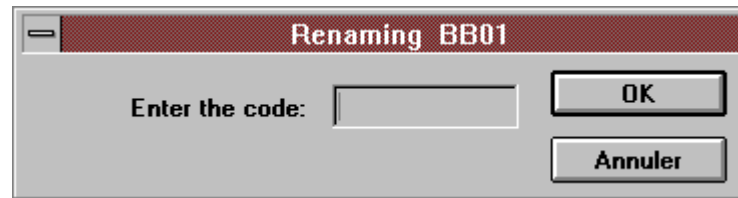
To rename a segment, select it, then choose **Rename segment...** in the **Edit** menu or click the corresponding icon on the toolbar. Enter the new segment code in the dialog box that opens up, then click OK.

A renamed segment keeps its precedence and dependence relationships with other segments. When you rename a segment displayed in several panes, the change is passed on all the occurrences of the segment.

The Characteristics of the Segment Dialog Box

There are several ways to access this dialog box.

- To get information about an existing segment, follow these steps:

  - Select a segment, then choose the **Segment information** command in the **View** menu or click the corresponding icon on the toolbar, or

  - Double-click on a segment in any pane.

- The Characteristics of the segment Dialog Box also appears when you add a segment, allowing you to define its general characteristics

There are five variants of this dialog box. Only the framed part, in the following figure, changes according to the organization type. The following figure displays one of the variants (V and W organizations), along with partial screen captures that illustrate the other possible graphical aspects of this variable part. The different fields constituting the variable part are detailed at the end of this section.

DL/1 organization (D)   PACTABLE organization (G)   Relational organization (H)   Server call organization (X)
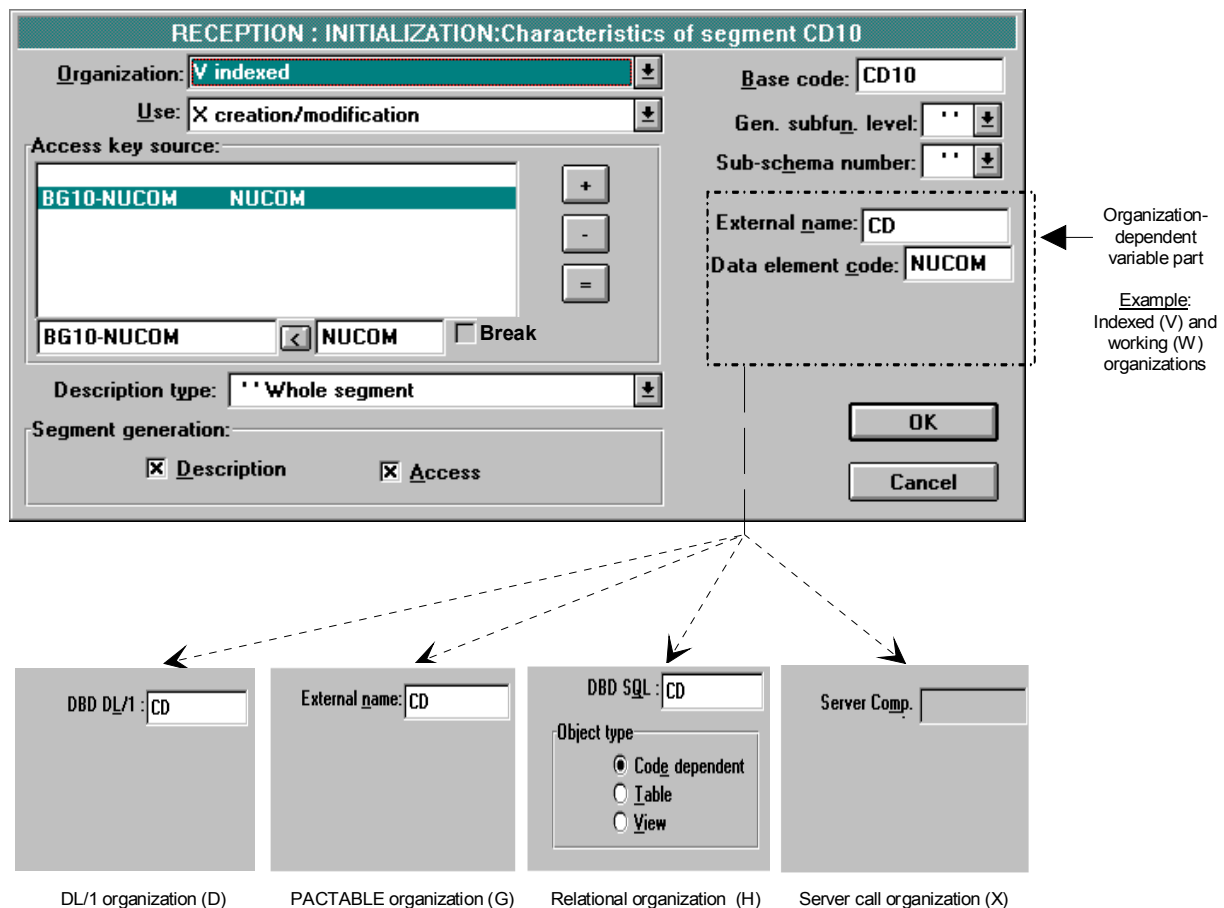
For details about the values of the various fields in this dialog box, refer to:

- *Online Systems Development* Manual, chapter "Description of a Transaction", subchapter "Screen call of Segments (-CS)"

- *Pacbench C/S Business Logic and TUI Clients* Manual, chapter "Call of Segments", for the Business Component and TUI Client.

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You will find below the exact label for each field (**bold type**) in the dialog box in subchapters in the Manuals mentioned above.

- For the **Organization** field, refer to ORGANIZATION.

  To select a value, click on the arrow on the right of the edit box and choose a value in the drop-down list. Each value is followed by its explicit label.

  The selected value in the list changes the graphical aspect of the dialog box (see above). For more details about the various contextual fields, refer to the end of this section.

- For the **Use** field, refer to USE IN DISPLAY or USE IN RECEPTION, or, if it is a Business Component, USE IN VALIDATION/UPDATE or USE IN SELECTION

  Select a value in the drop-down list. Each value is followed by its explicit label.

NOTE   The value list in the **Use** field varies according to the selected organization type and the use mode (Reception or Display).

- For the **Access key source** field, refer to ACCESS KEY SOURCE and ACCESS KEY (DATA ELEMENT CODE).

  For the check box **Break** (in the **Access key source** area), refer to CONTROL BREAK INDICATOR FOR DISPLAY, or, if it is a Server Component, CONTROL BREAK INDICATOR FOR SELECT.

  The **Access key source** field comprises a list box and buttons for modifying it. The list box is divided into three columns:

  - The left column displays the access key source to the segment

  - The central column displays the data element codes for segment access

  - The right column displays the break (if any)

  To specify an access key source and a data element code for a segment access, follow these steps:

  - Enter the data element code for segment access in the right input field and, if necessary, the key source in the left input field (fields below the list box), or

  - Enter the data element code, then, if necessary, click ◄. This button automatically fills the key source field, comprising the screen code (in a C/S Screen) or the logical view code (in a Business component) and the data element code.

    To add, delete or modify a line in this **Access key source** field, use the buttons on the right.

- The [+] button adds the input data under the current line.
  - To add a line, specify the access key source and the data element code, activate as necessary the **Break** check box, then click the button
  - To repeat a line, select the line in the list and click the button. The line is duplicated under the current line

- The [-] button deletes the current line.

  To do so, select the line in the list and click on the button.

▪ The [=] button modifies the current line.

To do so, select a line in the list, modify the concerned input field(s), activate or de-activate the **Break** check box, then click the button.

The line containing the new values replaces the current line in the list.

NOTE   The first line in the list is a dummy line. When you select it, you can insert an item at the top of the list.

It is not possible to upload more than 99 loading lines for a given category.

• For the **Description type** field, refer to DESCRIPTION TYPE. To select a value, click on the arrow on the right of the edit box and choose a value in the drop-down list. Each value is followed by its explicit label

• For the **Generation** field, refer to GENERATION LIMITATION. You need to activate at least one of the two check boxes: **Description** and/or **Access**

• For the **Base code** field, refer to SEGMENT CODE

• For the **Gen. subfun. level** field, refer to LEVEL OF GENERATED SUBFUNCTIONS

To select a value, click on the arrow on the right of the edit box and choose a value in the drop-down list.

• For the **Sub-schema number** field, refer to SUB-SCHEMA NUMBER

To select a value, click on the arrow on the right of the edit box and choose a value in the drop-down list.

• For the fields varying according to the selected organization type:

▪ Refer to EXTERNAL NAME OF THE FILE for the following fields:

(Label)	(*Organization*)
- **DBD DL/1**	G, V and W
- **DBD SQL** and **Object type**	H
- **Server Comp. Code**	X

▪ Refer to ACCESS KEY SOURCE (DATA ELEMENT CODE) for the following field:

(Label)	(*Organization*)
- **Data element**	V and W

Once the values in the fields are set, click OK to validate the information entered or modified. Click Cancel if you do not wish to save the modifications.

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The Characteristics of the Logical View Dialog Box

To access this dialog box, used to consult/modify the code or the code in a logical view database, you must:

- Select a logical view, then choose **Segment Information** in the **View** menu or click the corresponding icon on the toolbar, or

- Double-click on the logical view
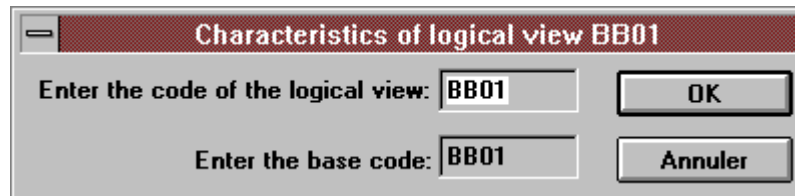
For more details about the two fields in this box, refer to the *Pacbench C/S Business Logic and TUI Clients* Manual, chapter "Call of Segments", for the Business Component and TUI Client, section SEGMENT CODE IN THE SCREEN.

The List of Unused Segments Dialog Box

This box is available by selecting **Unused Segments** in the **View** menu or by clicking the corresponding icon on the toolbar.

For more details on how to complete the various fields in this dialog box, refer to section "The Characteristics of the Segment Dialog Box", described above.

The Upload Errors Dialog Box

- This dialog box is displayed when errors occur during upload (**Upload** in the **Description** menu or **Exit** with confirmation of upload).
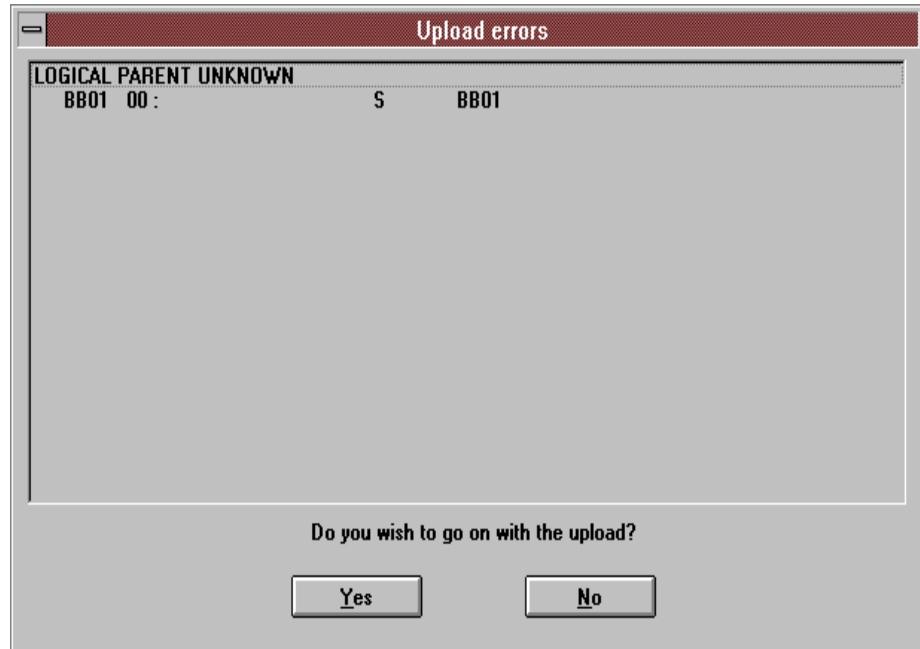
```
┌──────────────────────────────────────────────────────────┐
│ ─  │                      Upload errors                    │
├──────────────────────────────────────────────────────────┤
│ LOGICAL PARENT UNKNOWN                                     │
│    BB01  00 :                    S        BB01             │
│                                                            │
│                                                            │
│                                                            │
│                                                            │
│                                                            │
│                                                            │
│                                                            │
│                                                            │
│                Do you wish to go on with the upload?       │
│                                                            │
│           ┌──────────────┐      ┌──────────────┐          │
│           │     Yes      │      │      No      │          │
│           └──────────────┘      └──────────────┘          │
└──────────────────────────────────────────────────────────┘
```

This dialog box first displays the error message corresponding to the first error that occurred. If you continue to upload and a second error is detected, the dialog box opens up again displaying two messages, and so on, until the last error is detected. The dialog box then closes without the invalid elements being uploaded.

By clicking No, the modifications are not saved, i.e. no host update.

The **Print** button allows you to print the list.

- This dialog box opens up when you choose **Upload status** in the **View** menu or click the corresponding icon on the toolbar. It displays errors which occurred during the last upload.

Chapter 20   Call of Data Structures Window

Functionalities

The Call of Data Structures window enables you to insert and describe the internal and external resources of Programs.

The data displayed in this window is read by the host, processed locally by the WorkStation, and updated during save operations. Only the processing takes place locally. Like the Call of Segments (semi-local) and Local Specific Code descriptions, the Call of Data Structures description is not stored locally. However, in the event of an interruption during the process (such as a power failure), a recovery mechanism allows you to restore the description to its previous state.

The save can be performed during a work session or at the end of a session.

The functionalities of this window are the same as those of the character-mode P……CD screen.

The authorized values for its various areas are therefore described in the Batch Systems Development Manual, chapter "Programs", subchapter "Call of Data Structures (-CD)".

Getting to the Window

The Call of Data Structures window can be accessed via the Pacbench module with a host connection.

NOTE   You can open only one Call of Data Structures window at a time.

In the Program dialog box, enter an occurrence in the Occurrence Code field, and choose the Data Structure description in the Descriptions list.

For further details on the various ways to specify an occurrence code in the Entity dialog box or on descriptions, refer to chapter "Navigation in the WorkStation".

Presentation of the Window

The Call of Data Structures window contains three main areas:

- A vertical area on the left, containing the icons representing the various Data Structure types. To see those icons' labels, move to the right the vertical bar separating this area from the right-hand side area, using the mouse's left button.

- The main area is a view of all the resources used by the Program. There are two types of views:
  - the External View, which is a Program flow-chart showing the Program's external resources (indexed and sequential files, tables, databases…)
  - the Internal View, which lists all the internal resources of the Program (working areas, linkage areas, sort files).

- Tabs appear in the window's lower area when you double-click on a Data Structure in the view, or when you insert a new Data Structure in the view. These tabs vary according to the type of Data Structure.
  For further details on these tabs, refer to subchapter "Tabs".

External View

The External View provides management facilities for the following Data Structures:

- Sequential files
- Indexed files
- Databases
- Reports
- Tables
- Pactables
- Comments (See paragraph "Support of Data Structures in the WorkStation").

The External View contains four areas:

- The upper area shows the Data Structures used as input by the Program.
- The lower area shows the Data Structures produced as output by the Program.
- The left-hand side area shows the permanent Data Structures.
- The right-hand side area shows the temporary Data Structures.

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Insertion of Data Structures in the External View

You can insert Data Structures in authorized areas only, namely:

- Databases in the permanent or temporary input area

- Reports in the temporary output area

- Tables and Pactables in the temporary input area

- Comments in the temporary input and output areas

- Indexed and sequential files in any area.

To insert a Data Structure, just select a type of Data Structure in the vertical left area, drag it to the view using the mouse, and complete the Data Structure's description in the appropriate tabs.

Once inserted, a Data Structure cannot be moved to another area. If you want to move a Data Structure, delete it in the first area, then re-create it in the desired area.

Display of Data Structures in the External View

Three categories of information are displayed around the icon representing the Data Structure in the view:

- Two codes, located above the icon for an input Data Structure or below the icon for an output Data Structure:
  - code of the Data Structure in the Program, in bold characters,
  - code of the Data Structure in the Library, in italic characters.

- The Data Structure's external name, located below the icon for an input Data Structure or above the icon for an output Data Structure.

The arrow direction indicates the way in which the Data Structure is used. A bi-directional arrow indicates an input/output Data Structure.

The Program icon

The Program is represented by the central rectangle. Its exact representation depends on its internal resources:

Program with no sort, no working area, no linkage area

Program with at least one working area

Program with at least one linkage area

Program with at least one sort file

These representations can be further combined when the Program uses more than one type of internal resources.

Double-clicking on the Program's icon brings you to the Internal View.

Support of Data Structures in the WorkStation

The WorkStation's Call of Data Structures window supports the most common cases of uses of Data Structures. Non-typical cases of use are not recognized by the WorkStation and are therefore integrally managed by the host.

For example, when you download a Data Structure which already exists on the host, it may not be recognized in the Call of Data Structures window. This does not mean that your Data Structure's contents is incorrect, only that it is not supported by the WorkStation. In this case, the Data Structure is represented by the icon, and the Expert tab, reflecting the layout of the areas in the host screen (CH: P……CD), is displayed.

After an Upload or a Download, if the type of the Data Structure corresponds to a type defined in the WorkStation, the icon will be transformed and its place might move in the window.

It is not advised to use the Comments Data Structure – which is also described via the Expert tab – to create a Structure that the WorkStation does not recognize because no validation check is performed locally. So it is highly recommended to create this Structure type directly on the host.

Internal View

The Internal View provides functionalities for creating the following Data Structures:

- Sort files

- Working areas

- Linkage areas.
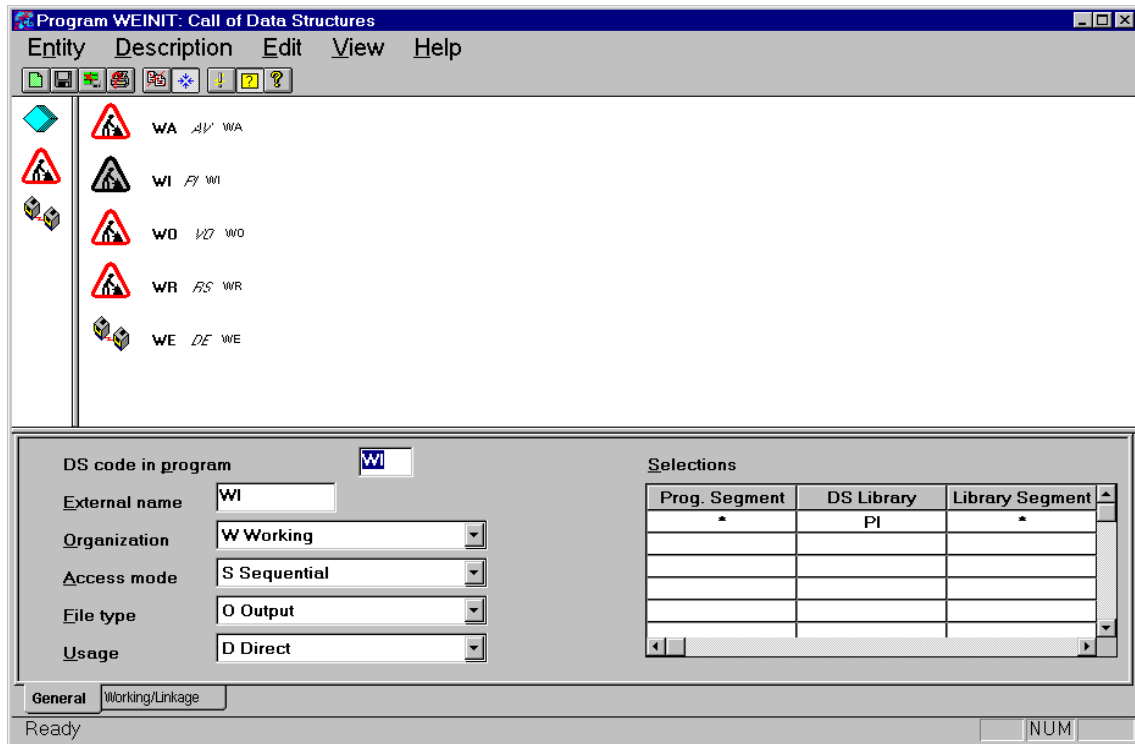
The list of Data Structures used by the Program displays

- the code of the Data Structure in the Program, in bold characters

- the code of the Data Structure in the Library, in italic characters

- the Data Structure's external name

next to each icon.

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Menu Bar of the Call of Data Structures Window

Entity   This Cascaded menu contains commands that enable you to access the definition, lists, descriptions, and cross-references of the current entity occurrence.

Description   This menu allows you to reset, upload, restore and quit the current description, as well as to configure the printer.

Edit   This menu allows you to delete a Data Structure in the view.

View   This menu allows you to display or hide the toolbar, the status bar, the ToolTips, or the errors that occurred during the last upload, and to toggle from the External View to the Internal View and vice-versa.

About…   This menu allows you to display information about the current window.

System Menu   In addition to the standard commands, this menu contains a command for displaying the window's context.

                      For information about window contexts, refer to chapter "WorkStation Connection", subchapter "Context".

The Entity Menu

Entity   **Definition**
                      Lists   ➜*Available Lists*
                      Descriptions   ➜*Available Descriptions*
                      X-references   ➜*Available X-references*
                      ————————————————
                      Other Occurrence...

                      For complete details about this menu, refer to chapter "Navigation in the WorkStation", subchapter "The Cascaded Entity Menu".

The Description Menu

Description   **Reset**
                         Upload
                         Restore

                         _____
                         Printer...
                         _____
                         Quit

Reset   Displays a window containing only the Program's icon. Calls already specified are deleted to enable you to rewrite the current description.

                         This command is represented by the ▢ icon in the toolbar.

Upload   Updates the current description on the host.

                         This command is represented by the 💾 icon in the toolbar.

Restore   Restores the description to its state at the time of the last upload, by canceling the latest changes.

                         This command is represented by the ▣ icon in the toolbar.

Printer...   Configures the printer for printing the upload errors.

                         This command is represented by the 🖨 icon in the toolbar.

Exit   Closes the window (application) and displays a message box prompting you to confirm that you wish to save your changes (i.e. perform a host update).

The Edit Menu

Edit   **Delete**

Delete   Deletes the selected Data Structure from the view.

                         This command is represented by the ▣ icon in the toolbar.

The View Menu

View   **Toolbar**
                         Status bar
                         ToolTips
                         ─────────────────
                         Upload status
                         Internal view

Toolbar   Displays or hides the toolbar.

                         The icons in the toolbar are documented as they are presented in this
                         subchapter.

Status bar   Displays or hides the status bar.

                         When this command is active, the status bar appears at the bottom of the
                         window.
                         The status bar describes the menu commands and indicates the operations to
                         be performed.

ToolTips   Shows or hides the ToolTips.

                         This command is represented by the [?] icon in the toolbar.

Upload status   Opens the Upload errors dialog box, which displays any errors that may have
                         occurred during the last upload. For further details about this dialog box, refer
                         to subchapter "The Auxiliary Dialog Box".
                         This command is represented by the [!] icon in the toolbar.

Internal view   Allows you to toggle from the Internal View to the External View and vice-versa.
                         When this command is selected, the Internal View is displayed. When it is
                         deselected, the External View is displayed.
                         This command is represented by the [*] icon in the toolbar.

The About... Menu

About...   Opens the About... dialog box, which shows information on the product's current
                         release.
                         This command is represented by the [?] icon in the toolbar.

Tabs

Tabs appear in the lower part of the window when you insert a new Data Structure in the view or when you double-click on a Data Structure existing in the view.

The number and contents of the tabs vary according to the type of Data Structure.

Authorized values for the various areas of a tab are described in the Batch Systems Development Manual, chapter "Programs", subchapter "Call of Data Structures (-CD)".

For each field in a tab (**bold characters**), the following paragraphs provide the titles of the corresponding field descriptions in the Batch Language Manual (small capitals).

General Tab

This is the only tab which is common to all types of Data Structures, except Commments and Other Structures.

- For the **DS Code in program** field, refer to the description of the DATA STRUCTURE CODE IN THE PROGRAM field. This code must be alphabetic and different from the source/target DS code in the program (in the « Cinematic » tab) except for a DS used as 'P'.

  A right click of the mouse on the field opens a popup menu which enables hypernavigation.

- For the **External name** field, refer to the description of the EXTERNAL NAME OF THE FILE field.

- For the **Organization** field, refer to the description of the ORGANIZATION field.

  To select a value, click the arrow to the right of the edit box, and choose a value in the scrolling list. Each value is followed by an explicit label.

- For the **Access mode** field, refer to the description of the ACCESS MODE field.

  To select a value, click the arrow to the right of the edit box, and choose a value in the scrolling list. Each value is followed by an explicit label.

- For the **File type** field, refer to the description of the FILE TYPE – INPUT / OUTPUT field.

  To select a value, click the arrow to the right of the edit box, and choose a value in the scrolling list. Each value is followed by an explicit label.

- For the **Usage** field, refer to the description of the USAGE OF DATA STRUCTURE field.

  To select a value, click the arrow to the right of the edit box, and choose a value in the scrolling list. Each value is followed by an explicit label.

- The **Selections** area is divided into several columns.

  - For the **DS Library** column, refer to the description of the DATA STRUCTURE CODE field.

    A right click of the mouse on the field opens a popup menu which enables hypernavigation.

- For the **Prog. Segment** and **Library Segment** columns:
  . To perform no selection, enter an asterisk in both columns (default value).
  . To select one Segment in a file, specify a unique, two-character code, in both columns.
  . To select a Report on a medium, specify a unique, one-character code in both columns.
  . To modify a Segment or Report code in the Program, specify the code modified in the Program in the **Prog. Segment** column, and the library use code in the **Library Segment** column.

Cinematic Tab

This tab is displayed for sequential and indexed files, and for sort files.

| Number of control breaks | 0 | Sort key (group of Data elements) | |
| File matching level Number | 0 | Source/target DS code in the program | |

General   **Cinematic**   Physical

Ready   NUM

- For the **Number of control breaks** field, refer to the description of the NUMBER OF CONTROL BREAKS field.

  (For an indexed file, this field is grayed out.)
  To select a value, click the arrows to the right of the edit box until you see the desired value.

- For the **File matching level Number** field, refer to the description of the FILE MATCHING LEVEL NUMBER field.

  (For an indexed file, this field is grayed out.)
  To select a value, click the arrows to the right of the edit box until you see the desired value.

- For the **Sort key (group of Data Elements)** field, refer to the description of the SORT KEY / SEG SELECT / REPORT CODES field, paragraph COMPOSITION OF THE SORT KEY.

- For the **DS code in the source/target program** field, refer to the descriptions of the RESULTING FILE DATA STRUCTURE CODE and SOURCE OR ERROR DATA STRUCTURE CODE fields.

Physical Tab

This tab is displayed for sequential and indexed files, for Reports, Tables and Pactables.

- For the **Mode** field, refer to the description of the RECORDING MODE field.

  To select a value, click the arrow to the right of the edit box, and choose a value in the scrolling list. Each value is followed by an explicit label.

- For the **File status** fields, refer to the description of the STATUS FIELD – FILE INDICATION field.

  (For a Report, these fields are grayed out.)
  You must specify the Data Structure – Segment code in the first field, and the Data Element code in the second field.

- For the **Unit type** field, refer to the description of the UNIT TYPE field.

  To select a value, click the arrow to the right of the edit box, and choose a value in the scrolling list. Each value is followed by an explicit label.

- For the **Block size** field, refer to the description of the BLOCK SIZE field.

- For the **Records – Characters** area, refer to the description of the BLOCK SIZE UNIT TYPE field.

  Click on either one of the radio buttons to activate the corresponding block size unit type.

- For the **Structure code** field, refer to the description of the CODE OF RECORD TYPE ELEMENT field.

  (This field is always grayed out for a Report. For other Data Structures, it is sometimes grayed out, depending on the recording modes and uses).

- For the **Key** field, refer to the description of the INDEXED DATA STRUCTURE ACCESS KEY field.

  A right click of the mouse on a Key Data Element input field displays a popup menu enabling hypernavigation.
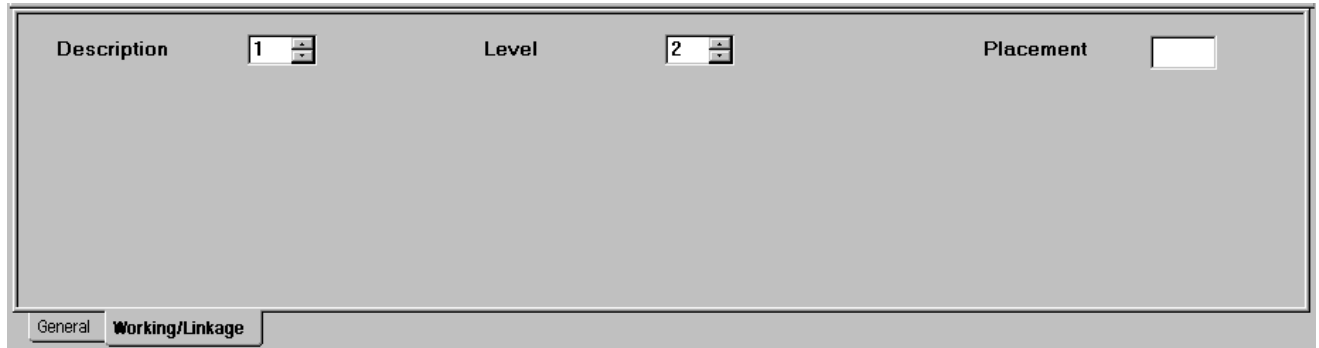
  (This field is always grayed out for a Report or a sequential file).

- For the **Physical unit type** field, refer to the description of the PHYSICAL UNIT TYPE and COMPLEMENTARY PHYSICAL UNIT TYPE fields.

- For the **Format** field, refer to the description of the NON-PRINTING DATA STRUCTURE FORMAT field.

  To select a value, click the arrow to the right of the edit box, and choose a value in the scrolling list. Each value is followed by an explicit label.

Working/Linkage Tab

This tab is displayed for working and linkage areas.

- For the **Description** field, refer to the description of the RECORD TYPE / USE WITHIN D.S. field.

    To select a value, click the arrows to the right of the edit box until you see the desired value.

- For the **Level** field, refer to the description of the LEVEL NUMBER (COBOL) OF THE RECORD field.

    To select a value, click the arrows to the right of the edit box until you see the desired value.

- For the **Placement** field, refer to the description of the CODE FOR COBOL PLACEMENT field.

Expert Tab

This tab is displayed for Other Data Structures and for Comments Data Structures.

DP	DL	EXTERN	OARFU	BLOCK	T	B	M	U	DS Library	Selection
RS	RV	DGVRRS	VSFID	0	R			M		

RE	SE	L	UNIT	C	SELECTION	F	E	R	L	PL
						I		1		

STAT.FLD [   ]   ACC. KEY [NOAVI]   RECTYPEL [   ]

Expert

This tab reflects the layout of the fields in the host screen (CH: P……CD).

When a Data Structure with a type 'Other' is saved, the server assigns default values to the Structure. A download of the Data Structure is then automatically performed, so the default values are retrieved.
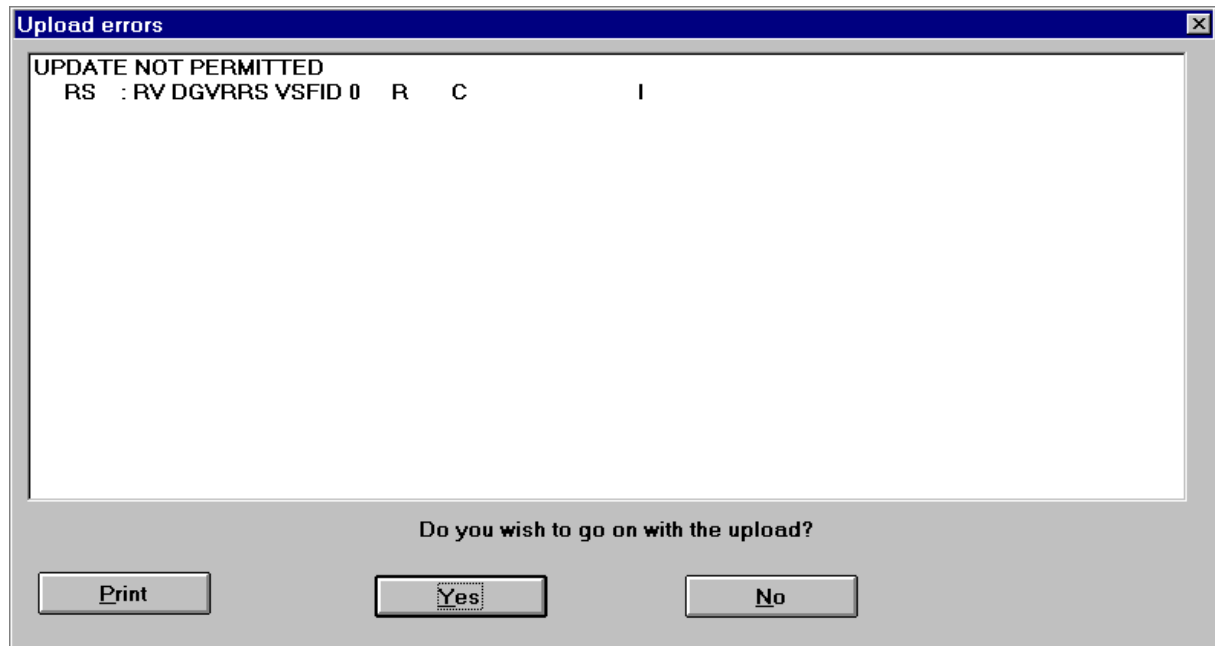
Authorized values for the various fields of this tab are detailed in the Batch Systems Development Manual, chapter "Programs", subchapter "Call of Data Structures (-CD)".

Auxiliary Dialog Box

The Upload Errors Dialog Box

- The following dialog box is displayed when at least one error occurred during an upload operation (**Upload** command in the Description menu, or **Exit** with confirmation of upload).

```
┌─────────────────────────────────────────────────────────────────────┐
│ Upload errors                                                      [×] │
├─────────────────────────────────────────────────────────────────────┤
│ ┌─────────────────────────────────────────────────────────────────┐ │
│ │ UPDATE NOT PERMITTED                                              │ │
│ │   RS   : RV DGVRRS VSFID 0    R    C                I            │ │
│ │                                                                   │ │
│ │                                                                   │ │
│ │                                                                   │ │
│ │                                                                   │ │
│ │                                                                   │ │
│ │                                                                   │ │
│ │                                                                   │ │
│ └─────────────────────────────────────────────────────────────────┘ │
│                    Do you wish to go on with the upload?              │
│  ┌──────────┐        ┌──────────┐          ┌──────────┐              │
│  │  Print   │        │   Yes    │          │    No    │              │
│  └──────────┘        └──────────┘          └──────────┘              │
└─────────────────────────────────────────────────────────────────────┘
```

This dialog box first displays the error message corresponding to the first error that occurred. If you continue to upload and a second error is detected, the dialog box opens up again displaying two messages, and so on, until the last error is detected. The dialog box then closes without the invalid elements being uploaded.

If you click No, the changes are not saved, i.e. there is no host update.

The **Print** button allows you to print the error list.

- The following dialog box opens up when you choose **Upload status** in the **View** menu or click the corresponding icon in the toolbar. It displays errors which occurred during the last upload.

Upload errors

UPDATE NOT PERMITTED
  RS   : RV DGVRRS VSFID 0   R   C   I

Print   Close
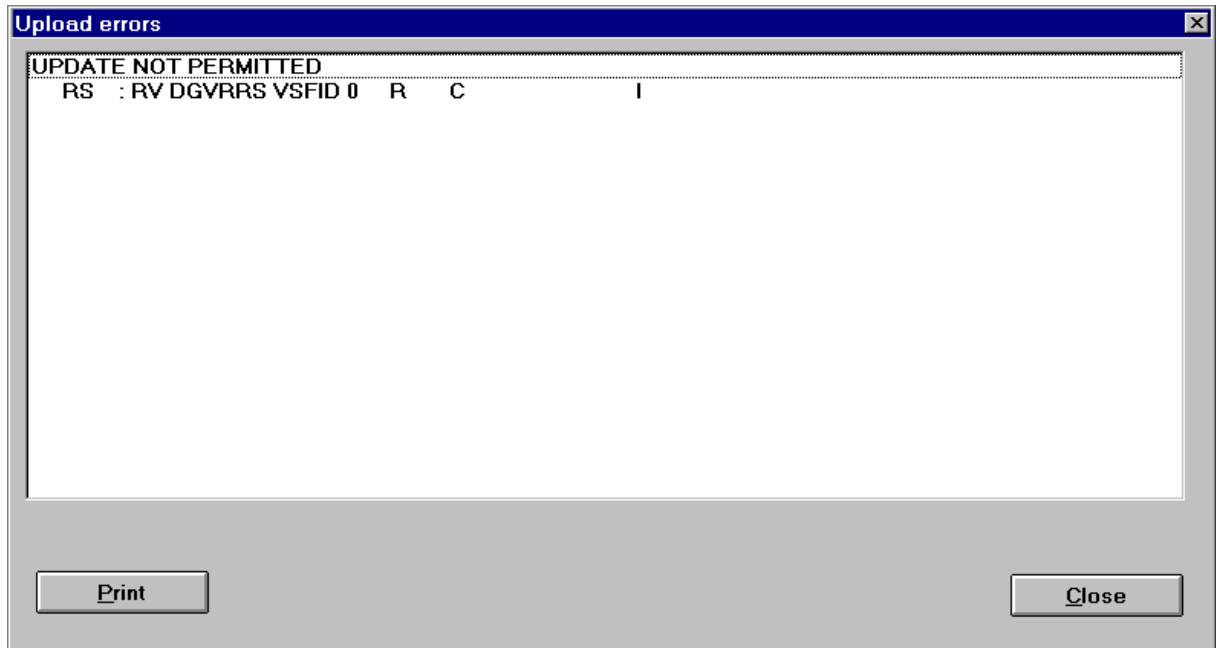
chapter 21   The Library/Session Window

Functionalities

The Library/Session window allows you to change Libraries, Sessions, DSMS Product code and DSMS Change number during the same work session.

NOTE   The context of your current connection may be different from the context of other windows which are already open. See chapter "WorkStation Connection", subchapter "Context".

Getting to the Window

You can access the Library/Session window either with a local or a host connection.

Access this window from the WorkStation Manager window, via **Library-Session** in the **Host-Access** menu or by clicking on the corresponding icon in the toolbar.

Library/Session Window Menu Bar

When the window opens, it displays the library list as registered locally during the first connection to the current database. See chapter "WorkStation Connection", subchapter "Library and Session List Loading". This list is displayed as a library tree containing buttons. You can switch the display to the locally registered sessions list.

CURRENT CONTEXT

When the window opens, it displays your current connection context below the menu bar: the Library, the Session, the DSMS Product Code and the DSMS Change Number.

TO CHANGE THE CONTEXT

The current context can be modified in one of two ways:

1. Directly enter the desired values into the input fields.

   For the Library field do not enter blanks, asterisks or periods.

   The Inter-Library mode (***), used to visualize the entire library network, cannot be used in the WorkStation. To use this mode, use the Emulator. Before exiting the Emulator, it is necessary to change the context to an existing library.

   The session numbers must be numeric. Enter "9999" to return to the current session.

   The DSMS information is optional, but the DSMS Change number must be numeric.

2. Click a button on the List of Libraries tree or on the List of Sessions tree.

NOTE   The actual change of context occurs when you select **Update** in the menu bar, press ENTER, or double-click the button corresponding to the desired context.

Update!   Modifies the context of your connection to the WorkStation.

List   This menu allows you to display the other list (List of Libraries or List of Sessions, depending on which list you are using), and to refresh the lists of libraries and/or sessions.

System Menu   This menu contains, in addition to its standard commands, a command allowing you to consult the window context.

          For more information about the context, refer to chapter "WorkStation Connection", subchapter "Context".

The Update! Command

Update!   Performs the requested change in the WorkStation Manager window context. (This can also be done by pressing ENTER or double-clicking the button which corresponds to the desired context.)

The List Menu

List   **Libraries**
                         Sessions
                         _____
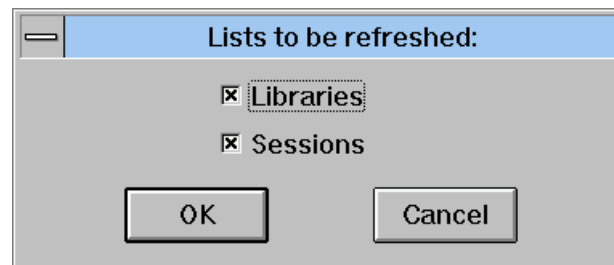
                         Refresh...

A check mark appears next to the list displayed.

Libraries   Displays the locally registered library list of the database to which you are connected.

Sessions   Displays the locally registered list of frozen sessions of the database to which you are connected.

Refresh...   Active only with host connection. Opens the following dialog box in which you indicate whether you want to refresh the local (Library and/or Session) lists with lists from the host:

Chapter 22   The List of Journalized Transactions Window

Functionalities

All updates entered in the Specifications Database (except Generation-Print requests) are recorded in the Journal File.

The List of Journalized Transactions window allows you to consult the contents of the Journal. The transactions are listed in descending chronological order.

Transactions displayed in this window include all users and all Libraries in the current Database. It is possible to select what you consult by entering criteria on the first line of the Journal window. For example, input a user code and press ENTER. The window will display all Journalized Transactions for the specified user.

Getting to the Window

Since the List of Journalized Transactions window interrogates the Specifications Database directly, it can only be accessed if you are connected to the host. A host connection is required.

This dialog box is displayed when you choose **List of Journalized Transactions** in the **Search** menu in the WorkStation Manager window or click the corresponding button on the toolbar.

The Menu Bar in the List of Journalized Transactions Window

Search   This menu contains commands which allow you to indicate search criteria, continue your search or reinitialize your search criteria.

Screen   This menu allows you to copy and print the current window.

System Menu   In addition to standard commands, the system menu allows you to consult the context of the current window.

Function Keys and Mouse Control

For the use of function keys and mouse in this screen, see the Appendix at the end of this manual.

The Search Menu

Search   **Guided Search...**
                      Continue Search
                      ────────────────
                      Reinitialize

Guided Search...   Opens up the Selection dialog box. For complete details, refer to subchapter "Auxiliary Dialog Boxes".

Continue Search   Performs the selection requested in the Selection dialog box or displays the next page if no other selection is specified.

Reinitialize   Clears the Selection dialog box and redisplays the first page of the Journal.

The Screen Menu

Screen Menu   **Copy Host Screen**
                      Print Host Screen...

Copy Host Screen

                      Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...

                      Prints the current Host Screen.

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

                      For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

Auxiliary Dialog Box

The Selection Dialog Box

The Selection dialog box can be accessed via **Guided search...** in the Search menu. It prompts you to enter search criteria.

NOTE   If search criteria have already been entered in the Journal window, they are automatically displayed here. They can be modified.

In this dialog box you can enter the following criteria:

From Transaction Number

This is the order number of the transaction from which the list is to begin. Only numeric input is permitted. Displayed transactions, if any, will be less than or equal to this number.

Context

User
To select transactions entered by a particular user, enter the user code here.

Library
To select transactions in a particular library, enter the library code here.

Session
To select transactions during a specific session (numeric field), enter the session here.

Frozen or Current/test
The label "frozen" is displayed when the check box is not selected and the label "Current/test" is displayed when the check box is selected.

Change Number
To select transactions by the DSMS Product code in the first field (3 characters) and the DSMS Change number in the second field (numeric).

Time

To select transactions entered Before (<) or After (>) a given time, enter the time in the hhmmss format ('160000' for 4:00 pm).

Transaction

Type
To select a specific type of transaction, indicate the batch access code of the transaction line in the edit box to the left, or click in the edit box to the right, and select the desired type.

Creation/Modification/Deletion
To select transactions by their action code, select the action code with one of these three buttons. To select all types of transactions (default option), select the All (+) radio button.

Key

Part 1 to Part 4
Selection key with 4 parts: the first field is the occurrence code, the other fields vary according to the entity and the type of line (definition, description, etc.).

Examples:

§ for a Program occurrence procedural code

Part 1	Part 2	Part 3	Part 4
PGM001	**30**	**BB**	**123**
occurrence code	function code	sub-function code	line number

§ for a Text occurrence description

Part 1	Part 2	Part 3
TEXT01	**PP**	**321**
occurrence code	paragraph code	line number

Send

Once all relevant criteria have been entered, click on the Send button to transmit the request.

Cancel

The Cancel button closes the dialog box without saving the modified values.

Chapter 23   The Keyword Search Window

Functionalities

The Keyword Search window allows you to search for occurrences by using keywords as search criteria. These keywords can be implicit (part of the occurrence name), explicit or synonyms. Keywords can be combined with the logical operators AND and OR.

The Keyword Search is open to all entities (depending on the methodology) available with the selected module, or may be limited to a given entity.

For a complete description, see the *Character Mode User Interface Guide*, Chapter "Search for Instances", Subchapter "Searching by Keywords".

Getting to the Window

Since the Keyword Search window interrogates the Specifications Database directly, it can only be accessed with a host connection.

This window is accessed via **Keyword Search** in the **Search** menu or by the corresponding icon on the toolbar in the WorkStation Manager window.

The Menu Bar of the Keyword Search Window

The Keyword Search window is empty when opened. Specify the keyword(s) in the field where the cursor is located.

Several keywords may be used in a search since they can be combined with the logical operators AND and OR.

- AND is represented by a blank space.

  EXAMPLE: Entering BRANCH AREA will list all occurrences containing both keywords BRANCH and AREA.

- OR is represented by an = sign.

  EXAMPLE: Entering BRANCH=AREA=SUBSIDIARYwill list all occurrences containing at least one of these three keywords.

- AND and OR are represented by a blank space and an = sign.

  EXAMPLE: Entering BRANCH AREA=SUBSIDIARY will list all occurrences containing the keywords BRANCH and AREA **and** all occurrences containing the keywords BRANCH and SUBSIDIARY.

- If the character string used as the search argument ends with an asterisk (*), the search function looks for keywords **beginning** with that character string.

  EXAMPLE: Entering PURCHAS* will list all occurrences whose keyword(s) begin with this character string, e.g. purchasing, purchase, purchased, etc.

Entity... Enables you to access the Entity dialog box for the selected occurrence. If all entities are to be scanned (no individual entity chosen), this command is grayed.

Search Allows you to formulate a Keyword Search and request its execution.

View... Allows you to select the Library sub-network and screen presentation.

Screen This menu allows you to copy and print the current window.

System Menu In addition to standard commands, the system menu allows you to consult the context of the current window.

Function Keys and Mouse Control

For the use of function keys and mouse in this screen, see the Appendix at the end of this manual.

The Entity... command

This command is available when an entity has been selected via **Guided Search...** in the **Search** menu and an occurrence is selected in the Search output list. This command opens the Entity dialog box of the selected occurrence which allows you to access windows related to this occurrence.

For a complete description of the Entity dialog box, refer to chapter "Navigation in the WorkStation".

The Search Menu

Search   **Guided Search...**
                      Continue Search

Guided Search...   Opens the Guided Search dialog box in which you indicate search criteria. For a complete description of this dialog box, refer to subchapter "Auxiliary Dialog Boxes".

Continue Search   Performs the search requested via the **Guided Search...** command and displays the results.

The results are displayed as follows:

- If the search is **not** restricted to one entity, the type (ITEM, STRUCT, SEGMT, PROG, etc.) is displayed, followed by the occurrence code, occurrence name and explicit keywords

- If the search is restricted to one entity, the type is displayed, followed by the occurrence code, the occurrence name and the explicit keywords

The View... Command

View...   This menu opens the View dialog box. For a complete description of the View dialog box, refer to chapter "The Host Occurrence List Window", subchapter "Auxiliary Dialog Boxes".

The Screen Menu

Screen Menu   **Copy Host Screen**
                         Print Host Screen...

Copy Host Screen

Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...

Prints the current Host Screen.

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

Auxiliary Dialog Box

Guided Search Dialog Box

Copy VisualAge Pacbase Screen
Copies the current host screen into the file SPAC\BASE\SPAC.PRT. When you
select this command, a message will ask you if you want to reinitialize the file
before copying the screen.

Accessible entities

> This is a list of available entities (local codes & names). Select an entity to
> limit the keyword search to the selected entity. If no line is selected, the
> search is performed on all entities.

Search

Implicit or Explicit Keywords only
> Select **Implicit Keywords only**, **Explicit Keywords only** or **Both**
> (default option) to limit the keyword search to one of these two types of
> keywords or both.

Keywords (79 char. max.)

> This input area displays the keyword(s) entered in the Keyword Search
> window. Keyword changes or new keywords entered here will appear in the
> Keyword Search window. At least one keyword must be entered.

The Send button accepts the selections indicated and performs the requested
search. The Cancel button ignores them.

Chapter 24   The Generation-Print Window

Functionalities

The Generation-Print window allows you to consult and update Generation-Print commands as well as the JCL lines used by the Generation-Print (GPRT) procedure. This window includes a Command Input Guide Facility.

When JCL lines and GPRT command(s) are validated, you can submit the corresponding job from this window.

For complete information on the Generation-Print Procedure, refer to the Character Mode *User Interface Guide*, chapter "Generation and/or Printing".

Getting to the Window

Since Generation-Print commands update (or interrogate) the Specifications Database directly, the window can only be accessed if you are connected to the host.

This window is accessed via **Generation-Print** in the **Host-Access** menu in the WorkStation Manager window.

Note on Color Setting

Set the colors of this window via **Logical screens...** in the **Preferences** menu in the WorkStation Manager window. For complete details, see chapter "The WorkStation Manager Window".

Update mode:
   The color of non-validated lines is the color defined for "Updatable fields".

Consultation/Validation mode:
   The color of non-validated lines is the color defined for "Protected fields".

All modes:
   The color of validated lines is the color defined for "Error".

The Menu Bar of the Generation-Print Window

Update+Display

Updates and displays the requested page.

View

Selects the Screen Display Option.

Host-Access

Submits job built by the validated lines or copies JCL lines to another user.

Options

Selects the window usage mode: update or validate.

Screen

This menu allows you to copy and print the current window.

?...=F1

Command Input Guide Facility.

System Menu

In addition to standard commands, the system menu allows you to consult the context of the current window.

Function Keys and Mouse Control

See the Appendix at the end of this manual.

The Update+Display Menu

If you have not modified the contents of the window, the menu is as follows:

Update+Display
> **Next page**
> **Top**
> **From...**

Next page   Displays the next page. If there is no next page, the same page is redisplayed. (Equivalent host choice: CH: JF)

Top   Displays the first page.

From...   Opens a From dialog box in which you indicate the page to be displayed.

                         For more information concerning the From dialog box, refer to chapter "Navigation in the WorkStation", subchapter "Auxiliary Dialog Boxes".

If you have modified the contents of the window, the menu is as follows:

Update+Display
> **Same page**
> **Next page**
> **Top**
> **From...**

Same page   Updates and redisplays the current page.

Next page   Updates the current page and displays the next page. If there is no next page, the same page is redisplayed. (Equivalent host choice: CH: JF)

Top   Updates the current page and displays the first page.

From...   Updates the current page and opens a From dialog box in which you indicate the page to display.

                         For more information concerning the From... dialog box, refer to chapter "Navigation in the WorkStation", subchapter "Auxiliary Dialog Boxes".

The View Menu

View   **Generation-Print Requests (U1)**
                         Generation-Print Requests (C1)
                         Job to Submit (C2)
                         JCL (C4)

This menu lists all display options available with this window. These commands correspond to the values (U1, C1, C2, and C4) of the Operation Code field in the standard Generation-Print (CH: GP) screen. The initial screen display is in display option U1.

Generation-Print Requests (U1)
                         Allows you to consult and update (Update mode) all Generation-Print requests, or to select requests to be submitted (Validation mode) in your working library only.

Generation-Print Requests (C1)
                         Allows you to consult and update (Update mode) all Generation-Print requests, by user and Library, or to select requests to be submitted (Validation mode).

Job to Submit   Allows you to consult all validated lines (requests and JCL), for a given user and for all Libraries. This is the image of the job to be submitted.

JCL   Allows you to consult and update (Update mode) JCL lines, by user and for all Libraries, or to select lines to be submitted (Validation mode).

Submit Job

                         Allows you to submit the job that is composed of all validated lines. A dialog box opens requesting confirmation or cancellation of the submission.

                         NOTE   It is not mandatory to input the password in the message box.

The Options Menu

Options   **Update mode**
                             Validation mode

This menu is active with the C1 and C4 display options only.

The mode in use is displayed in the window title bar. The initial mode is "update".

When you leave the Generation-Print window, the current mode is saved. When the Generation-Print window is next opened, the window automatically opens in this mode.

Update mode   Initial mode. This mode allows you to directly update Generation-Print commands (U1 or C1 option) and JCL lines (C4 option). See ?...=F1 for Command Input Guide Facility.

Validation mode   Once updating is complete, select this command to validate the Generation-Print requests (U1 or C1 screen) and JCL lines (C4 screen) to be submitted.

                          When this mode is active, lines cannot be updated. However, they can be deleted by entering 'D' in the Action Code field (labeled A).

                          Validation is performed by a simple click on the desired line or by positioning the cursor on the appropriate line and pressing the F2 key. A validated line changes color and the letter "V" is placed to the left of the line. (See "Note on Color Setting" at the end of the chapter.)

     NOTE   Requests (U1 or C1)
                          Once the Job is submitted, the validated Generation-Print requests (U1 or C1 screen) automatically lose their validated status.

                          JCL (C4)
                          On the JCL updating (C4) screen, the lines remain validated until you expressly change their status.

The Screen Menu

Screen Menu   **Copy Host Screen**
                    Print Host Screen...

Copy Host Screen

Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.
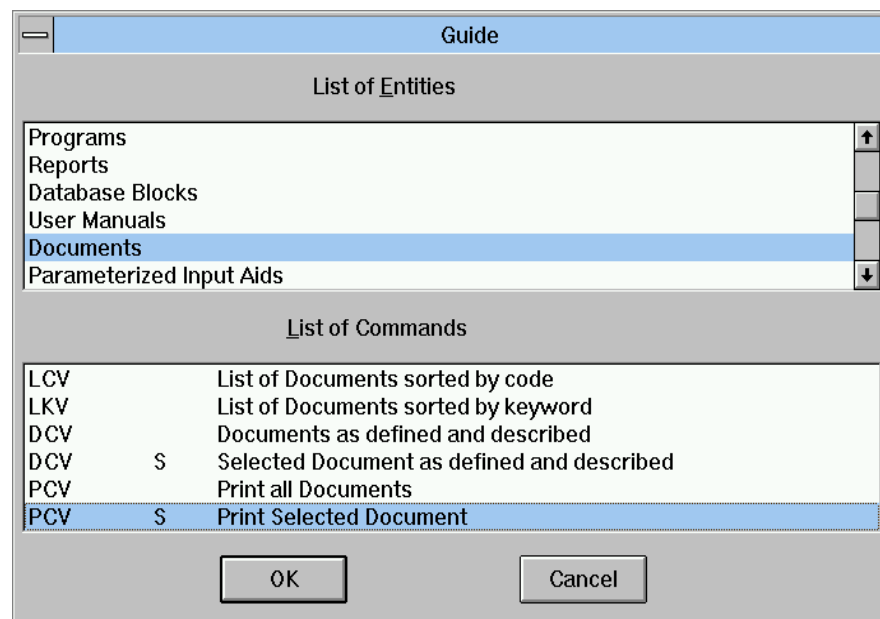
Print Host Screen...

Prints the current Host Screen.

The Help Command

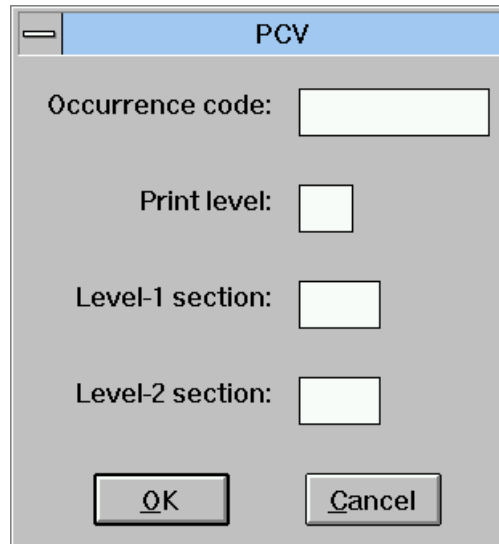**?...=F1**   Command Input Guide Facility. Available when you are in Input mode.

C1 option screen

Dialog boxes open to help with your Generation-Print requests:

Select an entity and a Generation-Print command for the selected entity.

If the selected Generation-Print command requires additional input, another dialog box opens up to help you.

```
 ┌─────────────────────────────────────┐
 │ ▭         PCV                         │
 ├─────────────────────────────────────┤
 │  Occurrence code:  [              ]   │
 │                                       │
 │      Print level:  [  ]               │
 │                                       │
 │   Level-1 section: [    ]             │
 │                                       │
 │   Level-2 section: [    ]             │
 │                                       │
 │      [  OK  ]      [ Cancel ]         │
 └─────────────────────────────────────┘
```

Caution: this dialog box displays the contents of the command being pointed by the cursor. Be careful where you position your cursor.

NOTE   To edit VisualAge Pacbase reports in RTF format (via a word processor), refer to chapter "The WorkStation Manager Window", Host Access menu, Local Volume Printout choice.

Once all parameters have been entered, the line where the cursor is located is updated and you will see the modified C1 option screen. Press **ENTER** or select **Same Page** in the **Update+Display** menu in order to perform the actual updating. Commands are re-sequenced in alphabetical order.

C4 option screen

The F1 key on the JCL Updating option causes the word "JCL" to be entered in the Command field on the line where the cursor is located.

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".

Chapter 25   The Generation-Print Monitor

Functionalities

IMPORTANT	**The Generation-Print Monitor is available only for LAN plateforms (VisualAge Pacbase under UNIX and Windows).**

The Generation-Print Monitor allows you to consult, print and delete job output (produced by procedure GPRT).

A maximum of four files may be displayed as job output by the Generation-Print Monitor: Execution Report, Results, Volume and User Manual.

Getting to the Windows

The Generation-Print Monitor can only be accessed if you are connected to the host.

The Job List window is accessed via **Generation-Print Monitor** in the **Host-Access** menu in the WorkStation Manager window.

To display a file generated by a specific job, select the job and the file in the Job List window and select **Display file** in the **Display** menu in the Job List window. This opens the Job File window.

IMPORTANT   To enable the Generation-Print Monitor command to be active, you must define an access path to the Databases in use in the GPMON.PRM file. For more information, consult the "*Installation Guide (Unix or Windows Server) and Client Components*", Chapter "*VisualAge Pacbase WorkStation*".

To be able to view the names of directories in a proper format, the *BVP_GPMON* parameter must be set to YES in the generation script. For more details, consult the following manual: '*Developer's Procedures, UNIX or WINDOWS Server"*.

The Menu Bar of the Job List Window

The Job List window displays the list of executed jobs (and the files generated for each job) submitted by the connected user:
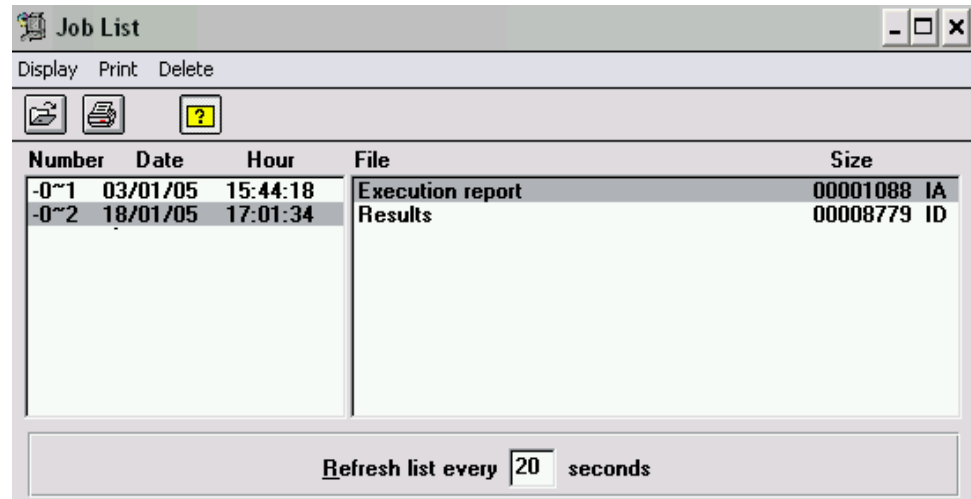
A special feature of this window is that you can specify how often the list of executed jobs is refreshed. Check the refresh check box and specify the number of seconds desired between each refresh, then exit the input field for this period to be accepted.

To be able to view, in this list, specific labels of files in output of a personalized GPRT procedure, the codes and labels of such files must be entered in a *GPMON.LBL* file that is to be created in the directory *BASE*. For more details, refer to the '*Installation Guide (Unix or Windows Server) and Client Components"*, Chapter "*VisualAge Pacbase WorkStation*".

Display   This menu contains a command that displays the file selected in the Job List window.

Print   Prints the file selected in the Job List window. You can also set options and printers. If the first command in this menu is not available, your WorkStation is not connected to a printer.

Delete   Deletes the files selected in the Job List window.

NOTE   Click the [?] icon to display tooltips.

The Display Menu

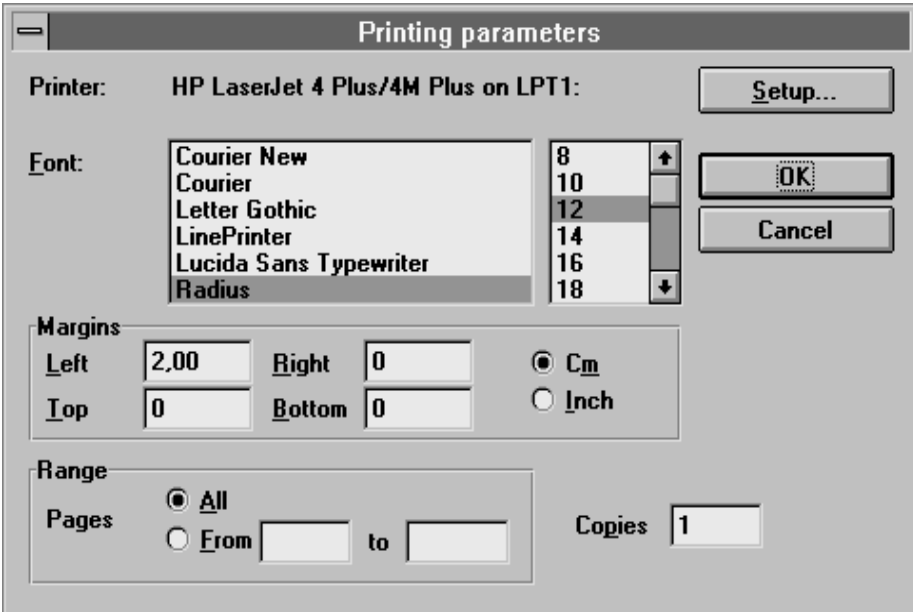**Display**   **File**

File   Opens the Job File window displaying the selected file.

To display the Job File window, you can also click the 🗁 icon.

The Print Menu

Print   **Print file...**
                    Printer...

Print file...   Displays the Printing parameters dialog box. You can also display this dialog
                    box via the 🖨 icon. It contains the name and port of the current printer, and in
                    which you can select the font and its size and specify the margins size and the
                    printing length. The **Setup...** button allows you to display the printer's setup
                    dialog box described below.

Printer...   Opens the Available Printers dialog box in which you specify the printer to be
                    used and define the printing orientation and the paper size.

The Delete Menu

Delete   **Delete file**
                           Delete job

Delete file

Deletes the selected files.

If you select several output files, the **Display** and **Print** menus are disabled.

NOTE   You cannot delete the execution report file from this menu. To do so, you must request job deletion.

Delete job

Deletes the selected job(s).

If you select several jobs, the File field of the Job List Window cannot display an output file. You cannot therefore delete the output files. In addition, the **Display** and **Print** menus are disabled.

The Menu Bar of the Job File Window

The Preferences Menu

Preferences...   Opens the Preferences dialog box in which you change the display font and
scroll keys:
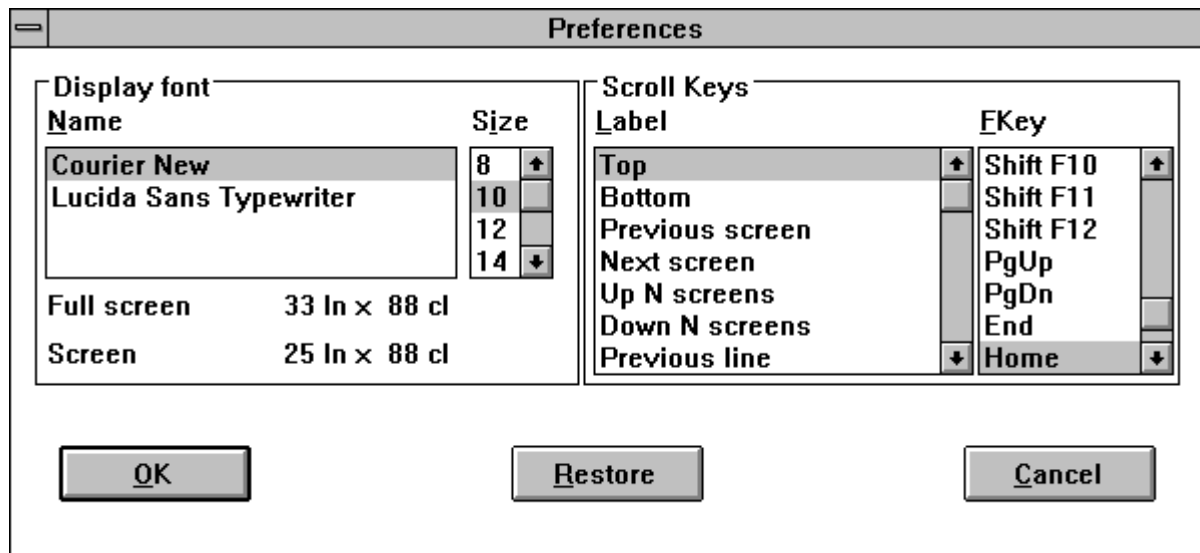
When you select a font name, the size assigned to it is highlighted. To change
the font size, select the font name and select a non-highlighted size.

When you select a scroll key label, its function key assigned to it is highlighted.
To change the function key of a scroll key, select the scroll key label and select
a non-highlighted function key. (If the function key is already assigned to a scroll
key, you will hear a "beep". To make this function key available, assign its scroll
key to another function key.)

Click **OK** to save changes and to close the dialog box. Click **Restore** to cancel
changes and to leave the dialog box open. Click **Cancel** to cancel changes and
close the dialog box.

The Scroll Menu

Scroll

Top
Bottom
━━━━━━━━━━━━━━━━━━━━━━━━━━━━
Next screen
Previous screen
Down N screens...
Up N screens...
━━━━━━━━━━━━━━━━━━━━━━━━━━━━
Next line
Previous line
Down N lines...
Up N lines...
━━━━━━━━━━━━━━━━━━━━━━━━━━━━
Memorize screen...
Recall screen...

Top	Displays the beginning of the job output file.
Bottom	Displays the end of the job output file.
Next screen	Displays the screen after the current screen.
Previous screen	Displays the screen before the current screen.
Down N screens...	Displays a dialog box which requests the number of screens (N) and then displays the screen N screens below the current screen.
Up N screens...	Displays a dialog box which requests the number of screens (N) and then displays the screen N screens above the current screen.
Next line	Displays the current screen shifted down one line.
Previous line	Displays the current screen shifted up one line.
Down N lines...	Displays a dialog box which requests a Number of Lines (N) then displays the current screen shifted down N lines.
Up N lines...	Displays a dialog box which requests a Number of Lines (N) then displays the current screen shifted up N lines.
Memorize screen...	Displays a dialog box which requests a screen number (1,2,3) under which the current screen will be memorized.

Recall screen...   Displays a dialog box which requests the memorized screen number (1,2,3) to
                            be displayed.

NOTE   All commands in the Scroll menu may be assigned a function key via the
                            Preferences dialog box opened via **Preferences...** in the Job File window. Once
                            a function key has been assigned it is displayed in the Scroll menu. Since the
                            Memorize Screen and **Recall Screen** commands can be assigned several
                            function keys specific to each output file, these function keys do not appear in
                            the   menu.

Chapter 26   The Emulator Window

Functionalities

The Emulator window allows you to consult and update host screens. Some host screens can be accessed through the Emulator window only (i.e. Libraries, Parameterized Input Aids (P.I.A.), Keywords, and User Entities with their occurrences and User Entity Relationships).

You should therefore use the Emulator mainly to access these screens. You can access all the other screens through dedicated WorkStation windows.

Emulator window colors can be customized via **Colors** in the System menu.

You may use Emulator windows exactly like host screens and choose to use the Input Guide facilities for the Choice and Operation Code fields. In so doing, you will not have to explicitly enter values in these fields because the Emulator does it for you.

When the Emulator window opens, it displays the List of Libraries (selected Library and those above).

IMPORTANT NOTE   The Emulator does NOT allow you to display a non-system screen (any screen which is not a VisualAge Pacbase host screen). Do NOT try to use it for any other purpose than accessing host screens.

Getting to the Window

The Emulator window allows you to update or interrogate the Specifications Database. A host connection is required.

To access the Emulator window select the **Emulator** command in the **Host-Access** menu of the WorkStation Manager window.

The Menu Bar of the Emulator Window

Update+Display

This menu contains commands that allow you to update and memorize screens, navigate between screens (previous, same, next), consult the Journal and access the Generation-Print window.

Special choices This menu contains commands that allow you to consult the differences between sessions, search and replace character strings and renumber lines.

View... This command activates the field Input Guide Facility for the Operation Code field.

Options This menu contains commands that allow you to select the update mode: implicit or explicit.

Screen This menu allows you to copy and print the current window.

?=F1 This command activates the field Input Guide Facility for the Choice field.

System Menu In addition to standard commands, the system menu allows you to consult the context of the current window.

It also allows you to customize the colors of the window.

For more information about the context, refer to chapter "WorkStation Connection", subchapter "Context".

NOTE On the Screen Simulation screen (Equivalent host choice: CH: o ......sim), this Menu Bar is not displayed. To exit this screen, press the PF key used to call the Simulation again or the F2 key (clear screen).

Function Keys and Mouse Control

For the use of function keys and mouse in this screen, see the Appendix at the end of this manual.

The Update+Display Menu

Update+Display

Update + Memorize Screen
Update
────────────

Previous Screen
Same Screen
Next Screen
────────────

List of Journalized Transactions
Generation-Print

Update + Memorize Screen

This command updates the screen, if necessary, and calls another screen if it is specified in the Choice field. If no update has been entered and if the Choice field is left blank, this command calls the next screen. For the logical sequence of screens, see the *Data Dictionary* Manual.

Memorize

This command updates the screen, if necessary, and calls another screen if it is specified in the Choice field. It is the screen that is called in the choice field or the next logical screen which is memorized and displayed in another Emulator window.

HELPFUL HINT

If you wish the currently displayed screen to be memorized, enter JI in the Choice field prior to selecting **Memorize**.

This Screen Memorization/Recall facility benefits from the multi-windowing capabilities. However, attention should be paid to the fact that if you update a screen that has been previously memorized, and if you then open the icon of this memorized screen, an obsolete image of this screen will be displayed. To refresh it, enter JI in the choice field and press ENTER.

NOTE

The Screen Memorization/Recall facility as implemented in the host system (Mn/Rn in the Operation Code field) cannot be used in Emulator screens.

Previous Screen   Jumps to the previous screen (Equivalent host choice: CH: JP).

Same Screen   Jumps "in place" to the same screen (Equivalent host choice CH: JI).

Next Screen   Jumps forward to the next screen (Equivalent host choice CH: JF). For the logical sequence of screens, see the *Data Dictionary* Manual.

List of Journalized Transactions   Allows you to consult the List of Journalized Transactions (i.e. the transactions entered in the Database to which you are connected).

NOTE

For complete information, refer to the *User Interface Guide*, Chapter "Online Access Language", Subchapter "Journal Consultation". You may also refer to chapter "The List of Journalized Transactions Window" in this manual.

Generation-Print   Allows you to consult and update Generation-Print commands as well as the JCL lines used by the GPRT procedure. When JCL lines and GPRT command(s) are validated, the corresponding job can be submitted from this window.

NOTE   For complete information, refer to the *User Interface Guide*, Chapter "Generation and/or Printing". You may also refer to chapter "Generation-Print" in this manual.

The Special Choices Menu

Special choices **Differences between sessions...**
—————————

Search string...
Replace string...
Renumber...

For a complete description of this menu, refer to chapter "The Formatted Description Window", subchapters "The Special Choices Menu" and "Auxiliary Dialog Boxes".

The View... Command

View...   This command opens the View dialog box which allows you to use the field Input Choice Facility for the Operation Code field. The selections that you make in this dialog box are automatically copied into the Operation Code field.

For a complete description of the View dialog box, refer to chapter "The Host Occurrence List Window", subchapter "Auxiliary Dialog Boxes".

The Options Menu

Options   **Implicit Updates**
                       Explicit Updates

Implicit Updates   Automatically creates or modifies the screen after you press ENTER or select **Update** in the **Update+Display** menu.

This option remains valid while you are connected to the Emulator.

NOTE   Deletions are necessarily explicit.

Equivalent host choice: CH: .U (default option).

Explicit Updates   Updates the screen when the relevant action codes are entered.

This option remains valid as long as you are connected to the Emulator.

Equivalent host choice: CH: .NU

When you click on either of these commands, the screen Choice field displays the new value.

Press the ENTER key or select **Update** in the **Update+Display** menu: the corresponding update mode is activated.

NOTE   For complete information, refer to the *User Interface Guide*, Chapter "Online Access Language", Subchapter "Online Updating".

The Screen Menu

Screen Menu   **Copy Host Screen**
                       Print Host Screen...

Copy Host Screen

Copies the current Host Screen in the SPAC\BASE\SPAC.PRT. When you select this command, a dialog box offers you either to reinitialize the file, or to add the screen at the end of the existing file.

Print Host Screen...

Prints the current Host Screen.

The Help Command

- ?=F1   Calls the Choice field Input Guide Facility which opens the Help on Choice dialog box. This dialog box displays the list of entities available on the host, depending on which functions are installed at the site. This list allows you to select the type of entity you wish to work on. The selections you make in this dialog box are automatically translated in the Choice field.

  For details concerning the Help on Choice dialog box, see subchapter "Auxiliary Dialog Boxes".

The System Menu

System Menu   **Context...**

Context...   Displays the current context.

                       For more information about the context, refer to the subchapter "Context", chapter "WorkStation Connection".
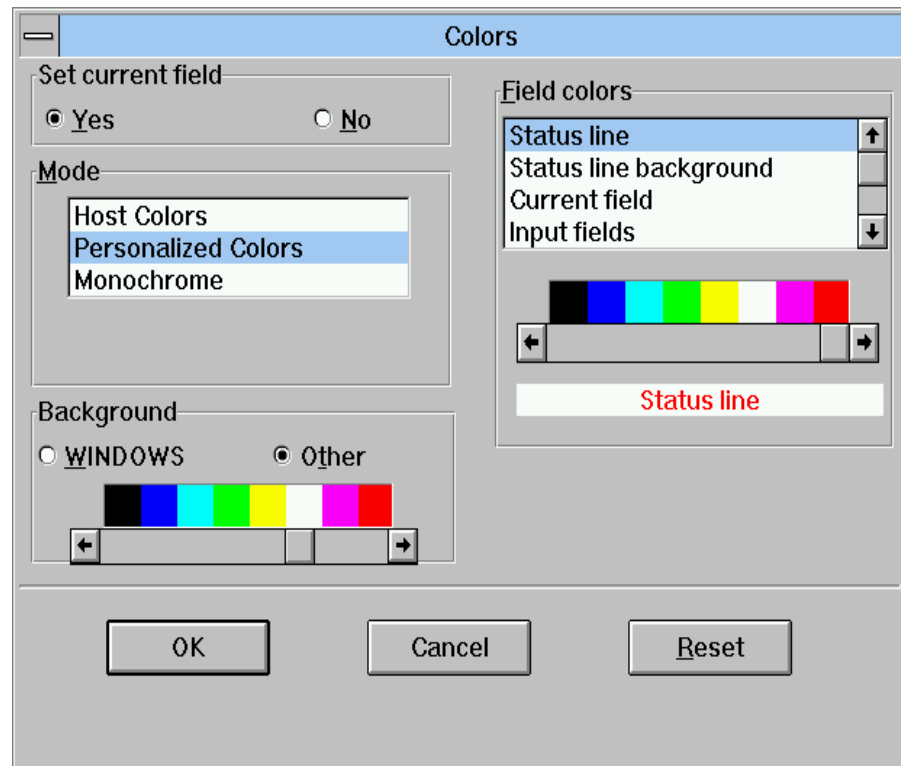
Colors...   Displays the Colors dialog box. For complete details, refer to subchapter "Auxiliary Dialog Boxes".

Auxiliary Dialog Boxes

The Colors Dialog Box

This dialog box allows you to change the colors of the Emulator window:

Set current field

Yes
The color of the characters in the current field (the field in which the cursor is located) can be specified in the Field Colors list box.

No
The color of the characters in the current field will have no specific color.

Mode

Host Colors
The colors of the characters will be those of the host. You can also select specific colors for the items in the Field Colors list box.

Customized Colors
You can select the colors for all items in the Field Colors list box.

Monochrome
The colors of the characters will be the color selected on the scroll bar. You can also select specific colors for items in the Field Colors list box.

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Background

WINDOWS
The background color will be the background color defined in WINDOWS.

Other
The background color will be the color selected on the scroll bar.

Field colors
The color of the following fields (characters and backgrounds) can be set by selecting the desired field in the list box and selecting the color on the scroll bar.

(Available for Host Colors mode)
Status line
Status line background
Current field
This command is available if you request current field settings.

(Available for Customized Colors mode)
Status Line
Status line background
Current field
This command is available if you request current field settings.
Input fields
Protected fields
Highlighted input fields
Highlighted protected fields
Invisible fields
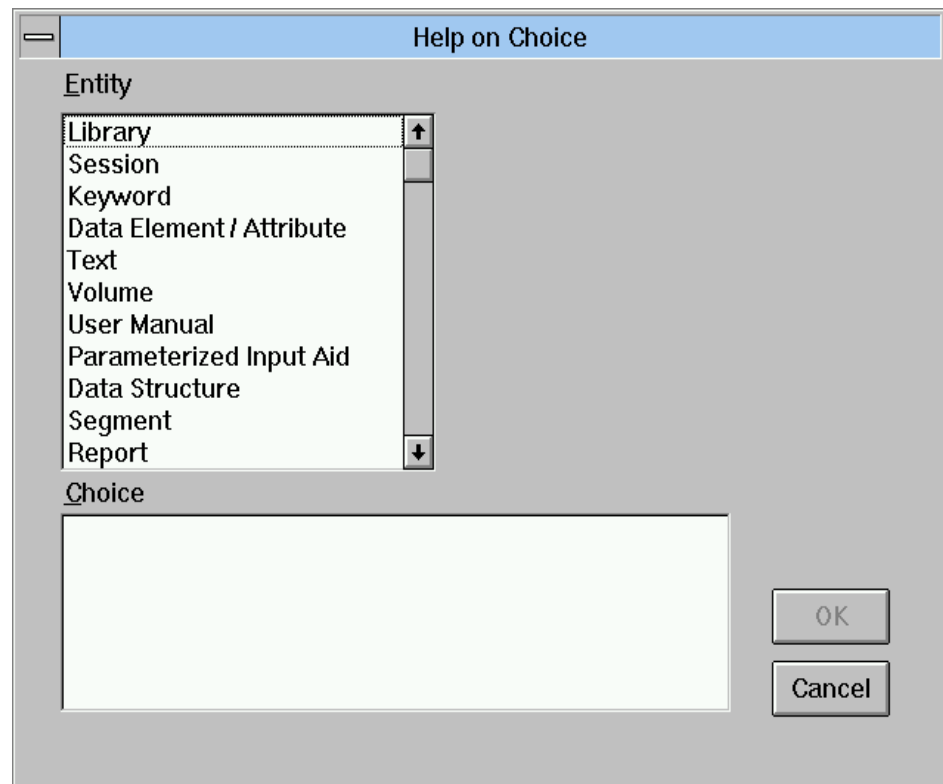**Attribute characters**

(Available for Monochrome mode)
Status Line
Status line background
Current field
This command is available if you request current field settings.

The Help on Choice Dialog Box

This dialog box opens when you select **?=F1** in the Emulator window.

The **?=F1** command opens the Help on Choice dialog box which displays the list of entities available on the host, depending on which functions are installed at the site.

- Select the entity in the list of entities

- Specify the type of description you want to access

- Enter the occurrence code (except for lists)

- Enter the Display Key (optional)

The Choice field value is therefore built progressively.

- You may choose to **Cancel** the operation

- If you click the **OK** button, the dialog box closes and the screen Choice field displays the new value

Press the **ENTER** key or select **Update** in the **Update+Display** menu: the corresponding screen is displayed.

When you next open the Help on Choice dialog box, it displays the last selections entered before it was closed: Entity, Choice, and primary and secondary occurrence codes.

MEMORIZATION OF OCCURRENCE CODES

This dialog box also offers an occurrence code memorization function. This function is described in detail on the following pages:

PRINCIPLE:

2*n occurrence codes can be memorized, n being the number of entities managed through the Emulator.

Memorizations are kept until you close the Emulator window.

EXAMPLE:

In the Entity list box, select Program. In the Choice list box, select Definition. Enter an occurrence code in the Program field: PROG1.

   At this point the primary Program occurrence code is PROG1:
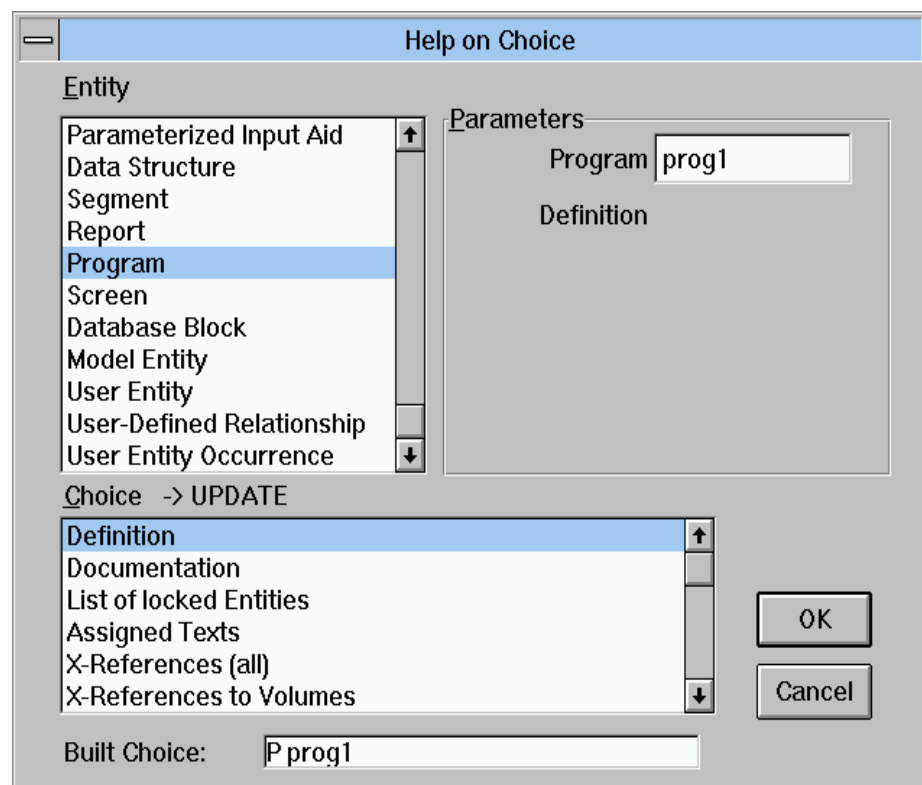
Select another item in the Choice list box: Procedural Code. PROG1 is re-displayed in the Program field. Replace this code by PROG2: it is memorized in place of PROG1.

At this point the primary Program occurrence code is PROG2:

```
┌─────────────────────────────────────────────────────────────┐
│ ▄                    Help on Choice                          │
├─────────────────────────────────────────────────────────────┤
│  Entity                                                      │
│  ┌────────────────────────────────┐  ┌─Parameters─────────┐ │
│  │ Parameterized Input Aid      ▲ │    Program │prog2     │ │
│  │ Data Structure                 │                         │ │
│  │ Segment                        │    Procedural Code      │ │
│  │ Report                         │                         │ │
│  │ Program                        │    starting with :      │ │
│  │ Screen                         │                         │ │
│  │ Database Block                 │    Function │        │  │ │
│  │ Model Entity                   │                         │ │
│  │ User Entity                    │  Sub-Function │      │  │ │
│  │ User-Defined Relationship      │                         │ │
│  │ User Entity Occurrence       ▼ │  Line number │       │  │ │
│  └────────────────────────────────┘  └─────────────────────┘ │
│  Choice   -> UPDATE                                          │
│  ┌────────────────────────────────┐                         │
│  │ Call of Data Structures (Zoom) ▲│                        │
│  │ Call of Parameterized Macro-Structures │                 │
│  │ Beginning Insertions Modifications │                     │
│  │ Work Areas                     │     ┌──────────┐        │
│  │ Procedural Code                │     │    OK    │        │
│  │ Reverse Procedural Code      ▼ │     └──────────┘        │
│  └────────────────────────────────┘     ┌──────────┐        │
│                                          │  Cancel  │        │
│  Built Choice:     │P prog2  P        │  └──────────┘        │
└─────────────────────────────────────────────────────────────┘
```

Select another item in the Choice list box: Call of Parameterized Macro-Structures. PROG2 is re-displayed in the Program field and in the Starting With field . In this last field, replace PROG2 by PROG3.

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At this point the primary Program occurrence code is PROG2 and the secondary occurrence code is PROG3:
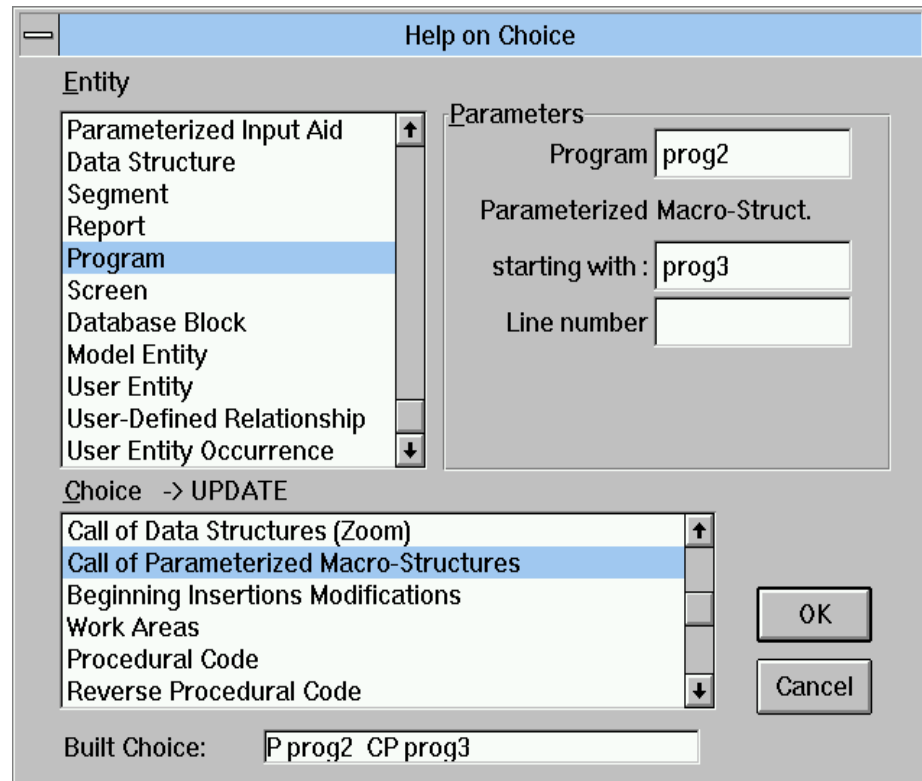
Now, in the Entity list box, select Data Element/Attribute. In the Choice list box, select X-References to Programs. Your primary selection is now Data Element/Attribute and your secondary selection is X-References to Programs (the displayed secondary occurrence code is PROG3). There is now no occurrence code in the Data Element/Attrib. field.

Enter DATEL1 in the Data Element/Attrib. field.

At this point the primary selection is DATEL1 and the secondary selection is PROG3:

For each entity, two occurrence codes can be memorized: in the previous exercise, PROG2 and PROG3 for the Program entity. These codes are displayed, if they exist, in the corresponding fields.

SECTION 4   APPENDIX

Chapter 27   Appendix

Correspondence between WorkStation and Host commands

Standard Entities

The table below lists the standard entities which can be accessed from the Workstation or the Host. The first column shows the entity name, the second shows the description label in the WorkStation, the third shows the module via which the description is accessed, the fourth shows the corresponding Host command and the fifth shows the manual(s) documenting the entity.

STANDARD ENTITY	WORKSTATION COMMAND	MODULE	HOST COMMAND	ASSOCIATED MANUAL(S)
DATA ELEMENT	Host description	Pacdesign / bench	E......	Data Dictionary
	General Documentation	Pacdesign / bench	E......GC	
	Description (Values...)	Pacdesign / bench	E......D	
	Error messages	Pacdesign / bench	E……GE	
	Called entities	Pacdesign / bench	E……CR	
DATA STRUCTURE	Host description	Pacdesign / bench	D..	Data Dictionary
	General Documentation	Pacdesign / bench	D..GC	
	Error messages	Pacdesign / bench	D……GE	
	Called entities	Pacdesign / bench	D……CR	
DATABASE BLOCKS	Host description	Pacdesign / bench	B......	Data Dictionary + Specif. Database Description.
	General Documentation	Pacdesign / bench	B......GC	
	Called entities	Pacdesign / bench	B……CR	
	Generation lines	Pacdesign / bench	B……GG	
	Generation parameters	Pacdesign / bench	B……GO	
HIERARCHICAL DB BLOCKS	Hierarchical Block Descript.	Pacbench	B......DH	Repository + DL1, SDD
	Hierarchical Block Docum.	Pacbench	B......DH...GC	
CODASYL - DB2 DB BLOCKS	Codasyl-DB2 Block Descript.	Pacbench	B......DC	Data Dictionary + Codasyl and DB2, SDD
	Codasyl-DB2 Block Docum.	Pacbench	B......DC...GC	
	Activity on a set (Codasyl)	Pacbench	C......ACT	
RELATIONAL - SQL DB BLOCKS - SQL	Relational-SQL Block Descript.	Pacbench	B......DR	Data Dictionary + SQL, SDD
	Relational-SQL Block Docum.	Pacbench	B......DR...GC	
	Generation of SQL commands	Pacbench	B......GN	
	Building of Relational/SQL key	Pacbench	B......DR...K	

TURBOIMAGE DB BLOCKS	Turboimage Block Descript.	Pacbench	B......DT	Data Dictionary + Turboimage, SDD
	Turboimage Block Docum.	Pacbench	B......DT...GC	
SCREEN DIALOG C/S SCREEN BUSINESS COMPONENT FOLDER	Host description	Pacdesign / bench	O......	On-Line Syst. Dev + Pacbench C/S – Business Logics – TUI Client + Developer's Documentation, eBusiness Applications: Business Logics
	General Documentation	Pacdesign / bench	O......GC	
	Calls of Elements*	Pacdesign / bench	O......CE	
	Host Mapping*	Pacdesign / bench	O......M	
	Host Simulation*	Pacdesign / bench	O......SIM	
	Called entities	Pacdesign / bench	O......CR	
	Generation parameters	Pacdesign / bench	O......GO	
	Generation lines	Pacdesign / bench	O......GG	
	Error messages	Pacdesign / bench	O......GE	
	Addressees of Elements*	Pacbench	O......ADR	
	Calls of Segments	Pacbench	O......CS	
	Calls of P.M.S.	Pacbench	O......CP	
	Beginning Insertions	Pacbench	O......B	
	Work Areas	Pacbench	O......W	
	Local Specific Codes	Pacbench	O......P	
	Procedure Titles**	Pacbench	O......TO	
	Proced. Titles and Conditions**	Pacbench	O......TC	
	Dialog Complement	Pacbench	O......O	

---

* These commands do not concern the Business Component entity nor the Folder.
** These commands concern the Screen and the Dialog only.

STANDARD ENTITY	WORKSTATION COMMAND	MODULE	HOST COMMAND	ASSOCIATED MANUAL(S)
PROGRAM	Host description	Pacdesign / bench	P......	Structured Code + Batch Applications
	General Documentation	Pacdesign / bench	P......GC	
	Called entities	Pacdesign / bench	P.....CR	
	Calls of Data Structures	Pacbench	P......CD	
	Calls of P.M.S	Pacbench	P......CP	
	Beginning Insertions	Pacbench	P.....B	
	Work Areas	Pacbench	P.....W	
	Procedural Code (P)	Pacbench	P.....P	
	Procedural Code (-8)	Pacbench	P.....8	
	Reverse Prog Source Code	Pacbench	P......SC	
	Procedure Titles	Pacbench	P......TO	
	Proced. Titles and Conditions	Pacbench	P......TC	
	Reverse Program Structure	Pacbench	P......STR	
	Procedures generated	Pacbench	P......PG	
	Generation parameters	Pacbench	P......GO	
REPORT	Host description	Pacdesign / bench	R...	Batch Applications
	General Documentation	Pacdesign / bench	R...GC	
	Layout	Pacdesign / bench	R...L	
	Call of Elements	Pacdesign / bench	R...CE	
	Called entities	Pacdesign / bench	R…CR	
	Description	Pacbench	R...D	
SEGMENT LOGICAL VIEW	Host description	Pacdesign / bench	S....	Data Dictionary + Batch Applications + On-line Systems + Pacbench C/S – Business Logics + Developer's Documentation, eBusiness Applications: Business Logics
	General Documentation	Pacdesign / bench	S....GC	
	Called entities	Pacdesign / bench	S....CR	
	Call of Elements	Pacdesign / bench	S....CE	
	General Documentation on El.	Pacdesign / bench	S....DED	
	Generation parameters	Pacbench	S….GO	
	Generation lines	Pacbench	S….GG	
	Error messages	Pacbench	S….GE	
	Data Element Details	Pacbench	S....CE...GC	
	Level-Address-Length	Pacbench	S....LAL	
	Statistics	Pacbench	S....STA	
	SQL View Description	Pacbench	S....DBE	
	Distributed Activities	Pacbench	S....ACT	
TEXT	Host description	Pacdesign / bench	T......	Data Dictionary
	Contents	Pacdesign / bench	T......D	
	General Documentation	Pacdesign / bench	T......GC	
	Called entities	Pacdesign / bench	T……CR	
DOCUMENT/VOLUME	Host description	Pacdesign / bench	V......	Personalized Documentation Manager (PDM)
	General Documentation	Pacdesign / bench	V......GC	
	Plan and Call of Contents	Pacdesign / bench	V......D	

Host Specific Entities

The table below lists the entities which can be accessed only from the Emulator window. The first column indicates the entity name with the entity code on the host in brackets: the second column specifies the manual detailing the entity.

HOST ENTITY (Host code))	ASSOCIATED MANUAL
KEYWORD (K)	Data Dictionary
LIBRARY (B)	Character Mode User Interface Guide
PARAMETERIZED INPUT AID (I)	Data Dictionary
USER ENTITY ($--) "—" corresponds to the meta-entity type	Dictionary Extensibility

Special Uses of Keyboard and Mouse in Logical Screens

The keyboard and mouse special uses apply to all logical screens (Windows: List of Host Occurrences, Definition, Formatted Description, Host Mapping, Generation-Print, Emulator, List of Journalized Transactions and Keyword Search).

KEYBOARD

Esc
Restores the initial content of the field and repositions the cursor on the first character.

Shift+Esc
Fills in the rest of the field with a dotted line. To exit this mode, press Enter.

Ctrl+Home
Places the cursor on the first character in the field. To quit this mode, press Enter.

Ctrl+Home
Positions the cursor on the first character in the field.

Shift+Home
Selects from the beginning of the field to the character to the left of the cursor.

End
Positions the cursor to the right of the last character in the field or on the last character if the field is full. The dotted line (Shift+Esc) is ignored.

Shift+End
Selects from the position of the cursor to the end of the field.

Ins
Switches from Typeover to Insert mode and vice-versa and modifies the shape of the cursor.

Shift+Del
Deletes the selected field in the screen and transfers it to the clipboard.

Ctrl+Ins
Copies the selected field in the screen and transfers it to the clipboard.

Shift+Ins
Inserts the content of the clipboard in the field at the cursor position.

Backspace
Deletes the character to the left of the cursor and moves the contents of the field and the cursor one character to the left.

Alt+Backspace
Cancels the last edit action.

Del
Deletes the character to the right of the cursor and moves the contents of the field one character to the left of the cursor without changing the cursor position.

Left arrow
Moves the cursor one character to the left.

Right arrow
Moves the cursor one character to the right.

Up arrow
   Moves the cursor one line up.

Down arrow
   Moves the cursor one line down.

Shift+Left arrow
   Selects the character to the left to the cursor.

Shift+Right arrow
   Selects the character to the right to the cursor.

Ctrl+Alt+Space bar
   Selects the character string on which the cursor is positioned.

Ctrl+Space bar
   Selects the entered field and the input field.

Ctrl+Shift+Space bar
   Selects the entire input field.

MOUSE

Mouse buttons: cursor positioning

- **Left button**: positions the cursor where you click.

- **Right button**: opens the **Related Entity** dialog box, if the field in which the cursor is placed can accept an occurrence code. This action is similar to activating **Related Entity** in the **Entity** menu.

Mouse buttons: selection

- **Left button**: selects the contents of the field over which you slide the mouse pointer.

- **Ctrl+Left button**: selects the entered field of the input field.

- **Ctrl+Shift+Left Button**: selects the entire input field.

- **Double-click with Left button**: selects the character string on which the cursor is positioned.

Error Messages

There are approximately 3,000 error messages which may appear during operations with the VisualAge Pacbase WorkStation. It is thus difficult to list them all here, especially as these messages are frequently modified. It is therefore worthwhile explaining the standards adopted for writing these messages, which are generally explicit, with a few exceptions, created for security reasons, which do not appear during normal use of the VisualAge Pacbase WorkStation.

Structure of Error Message Boxes

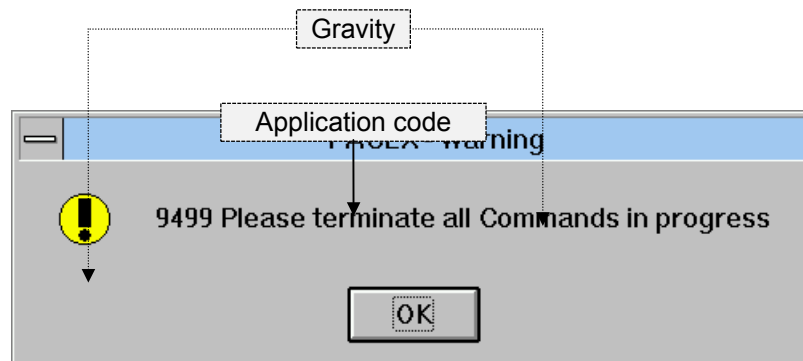The error messages are displayed in message boxes. There are two categories of error messages.

Error Messages from the Host

Some messages come directly from the host and appear in a message box such as the one below:

Error Messages from the WorkStation

The structure of most message boxes is standardized.

The part corresponding to the title of the message box contains:

- The emitting application code. For an exhaustive list of these application codes, refer to the next section.

- The error gravity to the right of the application code. Five gravity levels are used.

  ◆ **System error**:
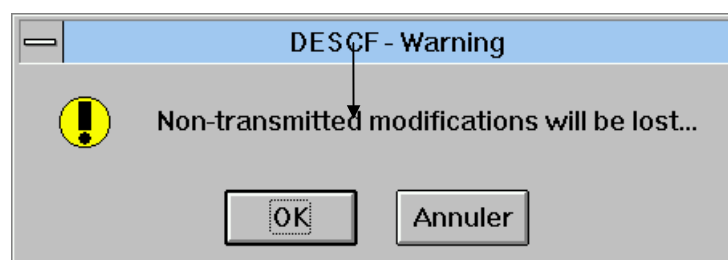   Serious error preventing the WorkStation from operating normally.
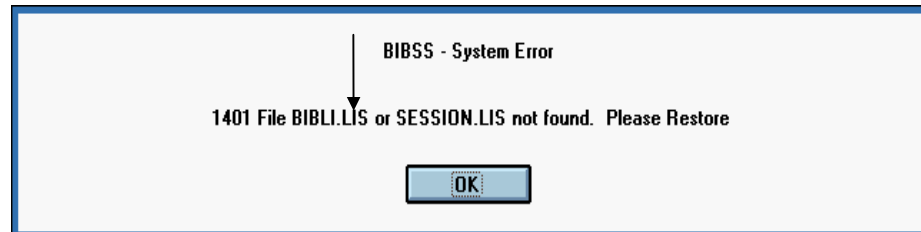
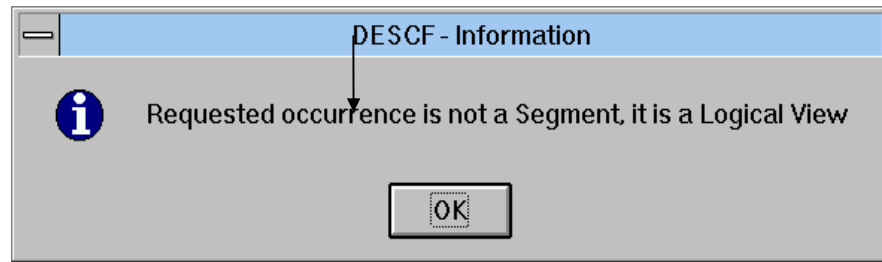 ◆ **Error**:
    You must react according to the message.
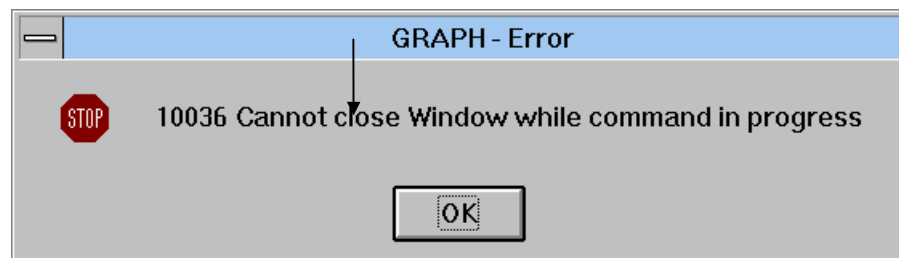
  ◆ **Question**:
    You must answer the question.
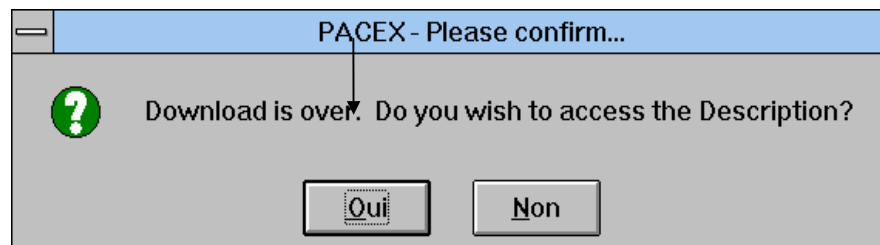
  ◆ **Warning** (or **Note**):
    Minor error.

⬥ **Information**

The other part of the message box normally contains, in addition to the message itself, an error number, button(s) and an icon which varies according to the gravity level.

It is important to communicate the "Application code + Error number" combination to your HelpDesk when requesting an explanation of a given message. These two elements are used to determine the usual circumstances causing the error and for troubleshooting.

NOTE   Question and Information categories do not contain error numbers.

List of Application Codes

The VisualAge Pacbase WorkStation consists in applications (executable programs) which may emit error messages. This alphabetical list allows you to identify the application emitting the message from the application code generally contained in the message box. If necessary, this 5-character code and the error number should be communicated to your HelpDesk.

APPLICATION CODE	FUNCTION or CORRESPONDING WINDOW
BIBSS	Library/Session.
BOUCH	Lock transfer (started up from the Local List).
CHAIN	Backup of X-references between a graph and its content. Sub-application of GRAPH.
HELP	Online Help
CONNX	Connection and Disconnection.
DEFIN	Definition Screens.
DESCF	Formatted Descriptions.
DESCL	Non-Formatted Descriptions.
DSTXT	Chart Facility.
DVACS	Call of segments (semi-local) (for Folder and Folder View entities)
ECRCS	Call of Segments (semi-local) (for Screen, C/S Screen and Business Components entities).
EDGEN	Generation-Print.
EMPAC	Emulator.
EXTMQ	Data Extraction.
GPMON	Generation-Print monitoring (available if the VisualAge Pacbase host is UNIX or WINDOWS NT type).
GRAPH	Processing of graphs.
ILRTF	Local Printing of Volumes to the RTF format. See chapter "The WorkStation Manager Window", Host-Access menu, Local Volume Printouts choice.
JOURN	Consultation of the Journal.
LIENS	Update link/X-refs. in a graph. Sub-application of GRAPH.
LISTE	Host Occurrence Lists and Cross-references.
MAQCE	Host Mapping of Screens.

APPLICATION CODE	FUNCTION or CORRESPONDING WINDOW
MAQLO	Local Mapping of Screens.
NAMES	Update of icon names or links in a graph. Sub-application of GRAPH.
PACEX	WorkStation Manager.
PEXEC	Start-up application of the WorkStation
PGMCD	Call of Data Structures
SIMCE	Host Simulation of Screens.
SIMLO	Local Simulation of Screens.
STRUC	Local Specific Code (Program, Screen, Client / Server Components and Dialog).
TEXT	Text Processing.
UP_DW	Upload and Download of an occurrence description.
VALID	Validation of a graphic description by checking the consistency of the links between the occurrences represented in the graph. Sub-application of GRAPH.
WSRCH	Keyword Search.
WSTIM	Application allowing to activate the WorkStation applications from an exterior tool as project management applications.

Location of Local Data Files

It may be useful to know the location of your local data files. In case of problems, the VA Pac support may ask you to send them your files for analysis.

When using the WorkStation, the part of the tree located under the \SPAC\BASE directory is automatically complemented with the databases, sessions and libraries accessed by the user.
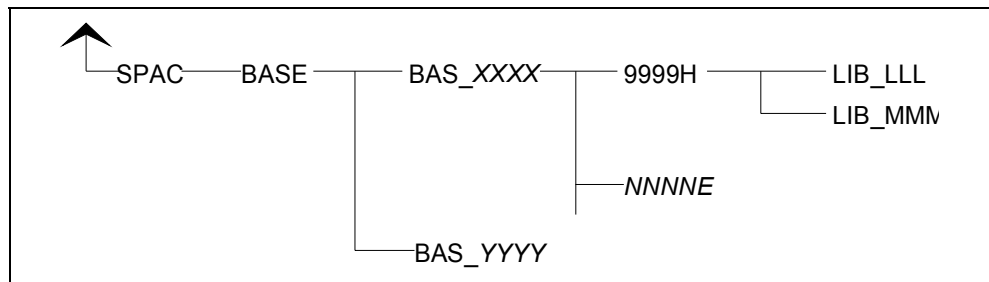
The user network, using the \SPAC\BASE directory as a root, develops in the following way:

• For each new Database onto which the user connects, a subdirectory is created under \SPAC\BASE, called BAS_*XXXX*, where *XXXX* is the code of the connection Database. For example, if the user accesses the Database D280, a subdirectory BAS_D280 is automatically created if it does not already exist.

• When a user connects to a Database, he or she chooses to connect to a session and to a library.

  ▪ Session chosen:

    If connecting to the current session, a subdirectory 9999H is added under BAS_*XXXX*.

    If connecting to a frozen session, a subdirectory *NNNNE* is added under BAS_*XXXX*.
    NNNN takes the number of the frozen session;
    E takes the value H or T (frozen type).

  ▪ Library chosen: For a given session and for each library to the user accesses, a subdirectory LIB_*LLL* is created (where *LLL* is the accessed library code). This subdirectory is placed under the 9999H or *NNNNE* directory corresponding to the connection session.   The LIB_*LLL* directories contain all descriptions of occurrences that have been downloaded from the server for local consultation or modification, as well as all drafts created under the WorkStation:
    – An *EEEDz*.LST file by local entity description type, containing the list of occurrences present on the PC in this directory. *EEE* is the local entity code and *Dz* is the local description type code (example: TXTD1.LST, where TXT is the local entity code of the Text entity, and D1 is the local code for the description type "text contents" of this entity). It is this file which allows the updating of the local lists proposed by the WorkStation.
    – A *OOOOOODz*.EEE file by for each downloaded entity occurrence. This file contains the *Dz*-type description of the *OOOOOO* occurrence of entity *EEE* (example: PTMA00D1.TXT contains the local D1-type description of the PTMA00 occurrence of the Text entity, whose local code is TXT).

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Function keys

For each VisualAge Pacbase Database installed on a MVS, a Windows or an UNIX server that you want to access from the WorkStation, if function keys are not assigned or if they are assigned non-standard values, then you must either:

• Define the function keys according to the standard options,

or

• At least assign the PF7 key to inhibit implicit update.

For each Database, function keys are defined via the REST procedure. For complete information concerning this procedure, please refer to the *Operations Manual* (Vol. II - *Batch Procedures:* Administrator's Guide) specific to your platform.

Parameterization of Keys Equivalent to PF11 and PF12

In some cases, listed in the tables below, you must modify some lines of EMPAC.PRO file in order to activate the keys which have the same function as PF11 and PF12.

This file, automatically created at the Emulator start-up in the \SPAC\BASE directory, contains the parameterization of function keys in columns 9, 10 and 11.

You must modify the three figures of columns 9, 10 and 11 according to the configuration type of your keyboard:

- If you work on a French WorkStation and if your keyboard is not configured in the French way;

- If you work on an English WorkStation earlier than the 1.2 V00 release and if your keyboard is not configured in the French way.

NOTE   "----" means that you have nothing to change.

Line number	Default value	U.S.A G.B. Canada	Germany Switzerl.	Spain Italy Portugal	Norway Sweden Finland Denmark	Netherl.	Belgium
24	219	189	----	----	187	----	----
25	187	----	221	221	219	191	189
36	219	189	----	----	187	----	----
37	187	----	221	221	219	191	189

For the English WorkStations from the 1.2 V00 release on, with a keyboard whose configuration is not English or American, you must modify the columns 9, 10 and 11 as follows, according to the configuration type of your keyboard:

Line number	Default value	France	Germany Switzerl.	Spain Italy Portugal	Norway Sweden Finland Denmark	Netherl.	Belgium
24	189	219	219	219	187	219	219
25	187	----	221	221	219	191	189
36	189	219	219	219	187	219	219
37	187	----	221	221	219	191	189

WARNING   The first or the first two lines of EMPAC.PRO file are different from the other lines and are optional. One or the other or both can be absent. In such a case, take away one or two from the line numbers mentioned in the two tables above.

The Clean-Up Utility

A utility enables you to close all applications that could remain open after a sudden interruption of the WorkStation. When using a PC, external problems may always cause an interruption.

In this case, use the KILLP.EXE utility located in the \SPAC*NNNL*\UTIL directory.

Starting Up the WorkStation

The PACBASE.DAT File

The PACBASE.DAT file contains all of the parameters which are necessary for the WorkStation start-up. This file is automatically created during the installation in the \SPAC*NNNL* directory (where *NNN* is the release number and *L* the language code of the installed release).

Each of the lines that make up this file has the following structure:

- An identifying number composed of three characters, on position 1 to 3.

- the label, whose position is free.

- the parameter value, between square brackets ([and]), whose position is also free.

Here is an example of the PACBASE.DAT file:

```
001 WorkStation Release               [250A]
002 Host                              [PACBASE]
003 Communication board               [GSEXTW]
004 Communication parameters          [GSEXTW]
005 Operating System                  [DOS]
006 Methodology                       [MER]
007 Load-module disk drive            [C]
008 Default load-module disk drive    [C]
009 System data disk drive            [C]
010 User data disk drive             [C]
011 Connection execution mode         [E]
```

The PACBASE.DAT file is created with the parameters entered during the first installation of the *NNNL* release. If the same release is re-installed without preliminary deletion, the contents of this file is not updated. The user must modify it manually (if necessary).

The type of host is coded as follows:

Mainframe   [PACBASE]
Unix   [PACBASE/X]
Windows NT   [PACBASE/WNT]

NOTE: If you are connected via Top Secret, you must add a 012 line in the PACBASE.DAT file that indicates the access path to the local file containing these user codes, so that the WorkStation can find them.

Optional parameterization files

You can define optional parameterization files to adapt and choose the configurations of your site.

The name of these files is free but must respect the DOS file standard coding. It is advised to give them a .DAT extension.

These files must follow the pattern of the PACBASE.DAT file and be placed in the same directory as the PACBASE.DAT file.

In case of a WorkStation re-installation, the *.DAT files that have been created and the files between brackets contained in the BASE.LST file will be saved before the previous WorkStation replacement and placed back in their original directory at the end of the reinstallation.

Start-Up Procedure

You can start up the WorkStation directly from the operating system or from the Graphical User Interface (GUI) installed on the PC.

The start-up manipulations vary depending on the operation environment of the WorkStation. These differences exist only because of the differences of the operating environments. For example, to change the directory:

- under DOS you must use the CD command (Change Directory) with the directory name (ex.: CD \SPAC\NNNL).

- under Windows, it is the File Manager which allows you to change directory, by selecting the desired directory in the directory tree displayed in a window.

In this chapter, we indicate, in general terms and regardless of the WorkStation operation environments, what needs to be done on the start-up directory and program. For the details concerning the manipulations related to your environment, please refer to the user documentation for your operating system and GUI.

Start-up directory: \SPAC\NNNL

Before starting-up the WorkStation, you must be positioned on the \SPAC\NNNL directory of disk X: on which the WorkStation has been installed. The WorkStation initialization programs must access particular files (for example, PACBASE.DAT) which are located in this directory.

The content of this directory is detailed in Subchapter *WorkStation Directory Structure: Initial state and evolution* of Chapter *WorkStation Installation*.

Start-up: PEXEC.EXE

To start up the WorkStation, execute the PEXEC.EXE program. This program must be run under the GUI corresponding to your installed WorkStation release: Windows, Presentation Manager.

By default, the PEXEC.EXE program takes the PACBASE.DAT parameter file into account.

However, you can specify an optional parameterization file (that must be defined):

- Give the name of this file as a parameter in the PEXEC.EXE program, in the command line:

    EXAMPLE: C:\SPAC\250A\PEXEC.EXE\PACBASE.BIS.

    The parameters of the PACBASE.DAT file then are not taken into account.

- Or, more specifically, associate the name of this file to a database in BASE.LST file. You must put the name of the file into brackets (ex: V280 Validation Database [PACBASE.TER]). This name will appear in the database list, next to the database label. These new parameters will overwrite the file parameters (PACBASE.DAT or PACBASE.BIS) which were used to start the WorkStation.

NOTE: The optional parameterization files (here, PACBASE.BIS or PACBASE.TER) must exist in the same directory as PACBASE.DAT. They must be constituted like the PACBASE.DAT (with different values in the parameters). The name of these files is free. PACBASE.DAT must not be deleted.

The Clean-Up Utility

A utility enables you to close all applications that could remain open after a sudden interruption of the WorkStation. When using a PC, external problems may always cause an interruption.

In this case, use the KILLP.EXE utility located in the \SPAC*NNNL*\UTIL directory.