



IBM® Rational® DOORS

*Using Rational DOORS for ClearCase
Interface*

IBM.[®]

*IBM Rational DOORS for ClearCase
Interface*

*Using Rational DOORS for ClearCase
Interface*

Release 2.1.1

Before using this information, be sure to read the general information under the "Notices" chapter on page 27.

This edition applies to **IBM Rational DOORS for ClearCase Interface, VERSION 2.1.1**, and to all subsequent releases and modifications until otherwise indicated in new editions.

© Copyright IBM Corporation 1993, 2011

US Government Users Restricted Rights—Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Table of contents

Chapter 1: About this manual	1
Typographical conventions	1
Related documentation	1
Chapter 2: Concepts	5
About Rational DOORS for ClearCase Interface	5
About Rational DOORS for ClearCase Interface functions	5
Chapter 3: Importing from ClearCase	7
Importing from ClearCase into Rational DOORS.....	7
Importing structures for the first time.....	7
Re-importing structures	9
Imported attributes for structures	9
Viewing new information	10
Understanding imported information.....	11
Version structure.....	11
Graphics colors	11
ClearCase attributes.....	12
Labels.....	12
Merge links	12
Using Rational DOORS traceability.....	13
Managing links.....	13
Applications of imported structures.....	13
Import exceptions	14
Chapter 4: Labelling Rational DOORS baselines	15
Importing ClearCase labels into Rational DOORS	15
Importing labels for the first time	15
Re-importing labels.....	17
Imported attributes for labels	17

Table of contents

Creating Rational DOORS baselines	17
Understanding results	18
Graphics colors	18
Viewing new information	19
Using Rational DOORS traceability.	19
Managing links	19
Applications of imported labels.	20
Chapter 5: Troubleshooting	21
Poor performance when importing data to Rational DOORS.	21
Chapter 6: Contacting support	23
Contacting IBM Rational Software Support	23
Prerequisites	23
Submitting problems.	24
Other information.	26
Chapter 7: Notices	27
Trademarks	29

1

About this manual

Welcome to IBM® Rational® DOORS® for ClearCase Interface.

Rational DOORS for ClearCase Interface transfers data between Rational DOORS and ClearCase®. It lets you synchronize configuration management regimes and establish traceability between information managed in Rational DOORS and versions managed by ClearCase.

This manual describes how to use version 2.1.1 of Rational DOORS for ClearCase Interface. It assumes that you know how to use both Rational DOORS and ClearCase.

Typographical conventions

The following typographical conventions are used in this manual:

Typeface or Symbol	Meaning
Bold	Important items, and items that you can select, including buttons and menus. For example: Click Yes to continue.
<i>Italics</i>	Book titles
Courier	Commands, files, and directories; computer output. For example: Edit your .properties file.
>	A menu choice. For example: Select File > Open . This means select the File menu, then select the Open command from it.

Related documentation

The following table describes where to find information in the documentation set:

For information on	See
How to use Rational DOORS	The Rational DOORS Information Center
How to use ClearCase	The ClearCase documentation set

About this manual

For information on	See
How to install Rational DOORS for ClearCase Interface	The Rational DOORS Information Center

Related documentation

About this manual

2

Concepts

This chapter introduces Rational DOORS for ClearCase Interface and explains the concepts you need to understand before you use it:

- About Rational DOORS for ClearCase Interface
- About Rational DOORS for ClearCase Interface functions

About Rational DOORS for ClearCase Interface

Rational DOORS is the world's leading tool for creating, structuring, and managing complex sets of requirements, such as those for a typical software development project. ClearCase from Rational Software Corporation is a source code control and configuration management system.

Rational DOORS for ClearCase Interface is a bridge between these two products, enabling complete lifecycle traceability from requirements through to configuration management.

Rational DOORS for ClearCase Interface allows software project teams to:

- Establish traceability from Rational DOORS information to specific elements, branches or versions in ClearCase.
- Import release information from ClearCase to Rational DOORS.
- Import merge information from ClearCase to Rational DOORS.
- Import ClearCase attributes to Rational DOORS.
- Create Rational DOORS baselines to match ClearCase labels.
- Navigate through all ClearCase elements, versions and branches in one window.
- Generate complete reports on combined ClearCase and Rational DOORS configuration status.

About Rational DOORS for ClearCase Interface functions

Rational DOORS for ClearCase Interface provides two functions that are fundamental to integrating configuration management with lifecycle traceability, as follows:

- The ability to represent the configuration item structure stored in ClearCase as a Rational DOORS module.

Each element, branch and version in a Versioned Object Base (VOB) is represented by a Rational DOORS object in a hierarchy that represents the complete version tree for the VOB. Merge hyperlinks are stored as Rational DOORS links.

Once you have represented the ClearCase configuration item structure in a Rational DOORS module, you can use regular Rational DOORS link functions to establish traceability from project information stored in Rational DOORS to the configuration items. For example, a ClearCase version object that implements a specific requirement can be directly linked to the corresponding Rational DOORS requirement object. This allows you to demonstrate conformance to requirements at source-code level.

- The ability to baseline Rational DOORS modules using the same labels and comments as the ClearCase data.

This operation uses another Rational DOORS module to store a list of labels that exist in each VOB, and to create baselines automatically for groups of modules. Each baseline is recorded in the Rational DOORS module, providing a configuration-management record of which Rational DOORS baselines relate to which ClearCase labels. This function also provides the important ability to create baselines for many Rational DOORS modules simultaneously.

These two functions create a unified approach to both traceability and information release control, resulting in full lifecycle traceability and rigorous configuration management.

3

Importing from ClearCase

This chapter describes:

- Importing from ClearCase into Rational DOORS
- Viewing new information
- Understanding imported information
- Using Rational DOORS traceability
- Import exceptions

Importing from ClearCase into Rational DOORS

This operation reads the complete structure of a VOB into a Rational DOORS module, creating a Rational DOORS object for each element, version and branch. Properties, attributes and labels are also imported.

Access to ClearCase elements is controlled by views that determine which elements, branches and versions are visible. ClearCase provides dynamic and snapshot views, depending on whether you want the views to be updated automatically or manually. Views also control access to derived objects and view-private files.

For these reasons it is vital that you choose the correct view for your import operation. Although Rational DOORS for ClearCase Interface imports all versions and branches, it cannot import view-private files from all views, so you must decide which view to use if you want these to be imported.

Rational DOORS for ClearCase Interface uses Windows® drive letters to select views. You can either choose to use the **Dynamic-views drive**, normally **M:**, or a view representing a specific dynamic or snapshot view. The dynamic views drive allows you to select any view of any VOB without needing to choose a drive letter, simplifying the import operation.

Importing structures for the first time

You can choose to import into an empty module or into a module that already contains objects. Each VOB is always imported under its own top-level object.

Normally, you want to maintain your configuration item structure in a special module. However, you might want to store information for several VOBs in the same module. If you choose to do this, the new VOB is imported under a new top-level object at the end of the module.

To import from ClearCase:

1. Open the target Rational DOORS module.
2. From the **DOORSConnect** menu, select **ClearCase > Synchronize/import**.

Note A command prompt window (DOS box) is displayed briefly before the **Import Structure** window displays. This happens when Rational DOORS for ClearCase Interface is communicating with ClearCase, and occurs several times during the import process. Each time, the command prompt window disappears automatically when the process is complete.
3. If you want to import from a dynamic view, make sure that the **Drive** field contains the correct drive. **M:** is the ClearCase default.
4. Select the view in the **View** field.
5. Select the VOB in the **VOB** field. The **Path** field shows the composite path that you have created.

Only mounted VOBs and views are shown. If you do not see the VOB or view you want to import, click **Close** to quit Rational DOORS for ClearCase Interface, then use ClearCase to mount the required VOB and view.
6. If you want to import from a snapshot view or a dynamic view mounted on a specific drive, select **Specific view drive** from the **Type** drop-down list.
7. Select the correct drive and VOB. The **Path** field shows the composite path that you have created.

Only mounted VOBs are shown. If you do not see the VOB you want to import, click **Close** to quit Rational DOORS for ClearCase Interface and use ClearCase to mount the required VOB.
8. Clear the **Create merge links in** box if you do not want to create Rational DOORS links representing ClearCase merge hyperlinks.
9. If you want to create links in the default link module, ClearCase Merges, and it does not exist, it is created automatically the first time you perform an import. In this case, go to step 11.
10. If you want to create links, but not in the default link module, click **Select** to display the **Select Link Module** window.
11. Select the link module you want to use, and click **Select**.
12. Click **Import** to start the import operation.

Several command prompt windows appear briefly as the operation progresses.

When the import is complete, an import report is displayed.

The import report shows how many new items were created during the import, how many items were updated, how many were deleted and how many merge links were created.

For information on how to use the report window functions, see “Viewing new information,” on page 10.

Re-importing structures

It is likely that your ClearCase data will continue to evolve after you have imported it into Rational DOORS. Rational DOORS for ClearCase Interface can synchronize imported data with the state of the ClearCase VOB, adding new elements, versions and links and updating attributes and labels as required.

To synchronize your imported data, select the Rational DOORS object representing the VOB to be re-imported and repeat the procedure in “Importing structures for the first time,” on page 7. This object appears at the top of the structure, usually the first object in the module. An import report is displayed, showing the number of items that have been created or updated.

If an item is deleted from the VOB, the equivalent object in the Rational DOORS surrogate module is flagged with the attribute **CC Deleted** set to **True**.

Items that are moved within the VOB, for example a source file moved from one directory to another are moved within the Rational DOORS surrogate module. This allows traceability to be maintained.

Imported attributes for structures

ClearCase data is stored in Rational DOORS attributes when it is imported. Attributes that store ClearCase data start with **CC**.

ClearCase properties are stored in the following attributes:

Attribute	Contains
Object Heading	The name of the ClearCase element. For a version this contains just the tail of the version name. For example, if the extended name of a version is: sysdef.c@@\main\windows\5 the Object Heading attribute contains 5 .

Attribute	Contains
Object Text	The ClearCase comment for the element, branch or version. This typically contains the comment from a source file check-in.
CC Kind	The type of the object. Possible values are VOB, Directory, File, Version, Branch, Derived Object, or Private File.
CC Full Name	The full version name of an item. In the example above this attribute would contain sysdef.c@@\main\windows\5.
CC User	The name of the person who created the element, version or branch.
CC Date	The date on which the element, version or branch was created.
CC Merges	The full name of a version to which this version has been merged.
CC DBID	The ClearCase database identifier for the item.

Rational DOORS for ClearCase Interface also imports ClearCase labels and attributes. These are stored as Rational DOORS attributes and the values are kept with each Rational DOORS object.

If you have a ClearCase label **Release_1**, a Rational DOORS Boolean attribute called **CC Label Release_1** is created. All versions that are marked with that label have the Rational DOORS attribute set to True. A simple Rational DOORS filter immediately shows which items belong to each release.

If you have a ClearCase attribute **QA_Status**, a Rational DOORS string attribute called **CC Attr QA_Status** is created. When an element, branch or version has a value for this attribute it is copied into the Rational DOORS attribute.

Rational DOORS for ClearCase Interface also creates three attributes to store import metadata: **CC Deleted**, **CC New**, and **CC Updated**. These are set each time you import or synchronize, and are the basis for the import report filters. You can create your own filters and views based on these attributes.

Viewing new information

Rational DOORS provides many useful ways of viewing imported ClearCase information. It has the advantage of being able to put all the relevant information into a single screen.

Any updated information is clearly shown using the standard Rational DOORS change bars. After an import, new or updated items have their change bars set to red, but the rest of the objects remain unmodified.

In the case of a re-import, you can use the **New items**, **Updated items** and **Deleted items** buttons in the **Import Report** window to show only the items that were new, updated or deleted.

ClearCase information can also be shown in graphics mode, where colors are used to distinguish the different kinds of object. Merge links are clearly shown if you click **View**, then **Show**, then **Graphics Links**. This option is automatically switched on by the **Graphics** button in the ClearCase **Import Report** window.

Understanding imported information

This section explains how to interpret the information and how to get the best from it.

Version structure

ClearCase version structures are represented as version hierarchies, written using an extended filename syntax, such as the following name:

`lookup.c@@main\PERFORMANCE\5`

This means that this is the fifth version of the file `lookup.c` in the `PERFORMANCE` branch. In ClearCase this structure can be seen graphically element by element when using the Version Tree utility.

Rational DOORS stores this information as a hierarchy of objects containing the names of the elements, branches and versions as headings, with check-in comments as the text.

The Rational DOORS graphics mode has the advantage over the ClearCase Version Tree because it can show many version trees at once.

Graphics colors

When each item is imported it is assigned a color for use in graphics mode. This helps provide instant visual recognition of the structure of your data.

The color allocations are as follows:

Kind	Color
VOB	Red
Directory	Green

Kind	Color
File	Blue
Version	Light blue
Branch	Yellow
Derived Object	Pink
Private File	Orange

ClearCase attributes

All user-defined ClearCase attributes are imported into Rational DOORS as string attributes with the same name, prefixed with **CC Attr**. For example, the ClearCase attribute **Test_Status** is called **CC Attr Test_Status** in Rational DOORS.

Attribute values are imported for all ClearCase elements, versions and branches. If the values of attributes are subsequently changed in ClearCase, the values in Rational DOORS are updated the next time the file is imported.

Labels

ClearCase labels are typically used to mark which files were included in a particular release. Labels have names, such as **Patch_1.1**. The import process creates a Boolean label for each imported label, prefixing the label name with **CC Label**. For this example, the Boolean label would be **CC Label Patch_1.1**.

Each version that is labeled with a given name, has the Rational DOORS attribute set to True. This can be used in filters, and gives instant indications of what versions were used in a given release.

Merge links

ClearCase uses hyperlinks to indicate where files have been merged. These can be imported into Rational DOORS as regular Rational DOORS links. This import process is optional, and can be turned off using the **Create merge links** check box.

Links are created from the version to the one it is merged with, typically from a branch to the main stream. This is equivalent to the direction of the ClearCase hyperlinks.

The best way of viewing merge links is to turn on the display of graphics links by clicking **View**, then **Show**, then **Graphics Links**. Alternatively, all the normal Rational DOORS link viewing and analysis mechanisms are available.

Using Rational DOORS traceability

Once imported into Rational DOORS, the ClearCase structure can be treated as normal in Rational DOORS. This means that the ClearCase structure can be included in your traceability schema. A typical application of this is to link source code modules to requirements in order to check which requirements have been met. This is only one case where traceability could be useful, as outlined below.

Managing links

You can use any of the standard methods for creating links between ClearCase configuration items and other Rational DOORS information:

- Drag and drop
- **Link > Create links**
- Link module matrix

In each case you must take into account the correct direction for links to allow impact and traceability analyses to be performed as required. These analyses can be performed using the standard tools:

- Pop-up menus
- **Analysis > Impact** or **Analysis > Trace**
- Layout DXL
- **Analysis > Wizard**

The **Analysis Wizard** is particularly good for creating customized traceability reports. With this, you could create a report that shows the relationship between change requests and code check-ins, showing complete version names in the context of the change requests.

Links can be deleted using any of the standard techniques.

Applications of imported structures

Rational DOORS can be used to store any kind of structured information, so it is likely that you already have information that can be usefully linked to the configuration items. In addition to the classic application of requirements traceability, you can also build links from change requests, bug reports, design information, test plans and project plans to ClearCase versions.

Once in place, you can demonstrate that specific changes have been implemented, or create reports that justify all checked in changes.

Another application is the creation of complete product manifests. Using the Rational DOORS export functions, you can create documents in Word, HTML or any other supported format, that lists the document version included in a shipment.

Import exceptions

The Rational DOORS for ClearCase Interface import process is designed to import the information that you need most in your Rational DOORS-based lifecycle traceability scheme. To this end there are some items that are not imported. Two items that are deliberately not imported are listed below.

- Any version that is checked out is not imported until it is checked in. Any item that would be selected only with a **\CHECKEDOUT** configuration specification rule is specifically ignored. If a checked in item has been merged with an item that is still checked out the **CC Merges** attribute contains the reference; for example **\main\CHECKEDOUT**. However, no Rational DOORS link is created until the merge target is checked in.
- Versions of directory elements are not imported. Rational DOORS for ClearCase Interface only imports from the directories that are selected by the configuration specification of the view from which you import.

Private files and derived objects from multiple views can be imported by repeating the import process from those different views. If there are several elements of the same name, Rational DOORS for ClearCase Interface has no way of distinguishing them; it then considers each private one an update of an earlier import.

4

Labelling Rational DOORS baselines

This chapter describes:

- Importing ClearCase labels into Rational DOORS
- Creating Rational DOORS baselines
- Understanding results
- Using Rational DOORS traceability

Importing ClearCase labels into Rational DOORS

ClearCase labels are typically used to mark which files were included in a particular release. Labels have names, such as **Release_3**, which can be attached to versions of ClearCase elements. Labels can be attached to any version, and do not restrain in any way the numbering system.

Rational DOORS baselines create frozen versions of modules that are similar to checked-in versions of files: they can be referenced, but not changed. Baselines are numbered progressively using major and minor versions, plus a textual suffix.

ClearCase labels are ideal for use as Rational DOORS baseline suffixes, where they can be used for the same purpose as in ClearCase. This is the main function of the Rational DOORS for ClearCase Interface baseline labelling function.

Baseline labelling is a two-step process: importing labels and creating baselines. The import process sets up a structure where a record of each created baseline is kept. This section describes the import step while the section “Creating Rational DOORS baselines,” on page 17 describes baseline creation.

Even though labels are directly related to a VOB, access to ClearCase is still controlled by views. For these reasons you must choose a view for your import operation.

Importing labels for the first time

You can choose to import into an empty module or into a module that already contains objects. The set of labels from each VOB is always imported under its own top-level object.

Normally, you would maintain your label and baseline structure in a special module, though you might choose to store label information for several VOBs in the same module. If you choose to do this, the new VOB will be imported under a new level one object at the end of the module.

It is advisable not to store label and baseline information in the same module as the imported ClearCase configuration structure.

To import labels from ClearCase:

1. Log in to Rational DOORS as the Administrator.
2. Open your target Rational DOORS module.
3. Select **DOORSConnect > ClearCase > Label baselines**.

A command prompt window (DOS box) is displayed briefly before the **Import ClearCase Labels** window is displayed. This occurs when Rational DOORS for ClearCase Interface is communicating with ClearCase.

If you want to import from a dynamic-view make sure that the **Drive** field contains the correct drive. M: is the ClearCase default.

4. Select the view in the **View** field.
5. Select the VOB in the **VOB** field. The **Path** field shows the composite path that you have created.

Note Only mounted VOBs and views are shown. If you do not see the VOB or view you want to import, click **Close** to quit Rational DOORS for ClearCase Interface, then use ClearCase to mount the required VOB and view.

6. If you want to import from a snapshot view or a dynamic view mounted on a specific drive, select **Specific view drive** from the **Type** drop-down list.
7. Select the correct drive and VOB. The **Path** field shows the composite path that you have created.

Note Only mounted VOBs are shown. If you do not see the VOB you want to import, click **Close** to quit Rational DOORS for ClearCase Interface, then use ClearCase to mount the required VOB.

8. Click **Import** to start the import operation.
A command prompt window appears briefly.
9. When the import is complete, the Rational DOORS module is updated and the **Apply Label to Modules** window is displayed. For further information, see “Creating Rational DOORS baselines,” on page 17.

Re-importing labels

It is likely that after you have completed this baseline labelling operation you will create more ClearCase labels. For this reason, Rational DOORS for ClearCase Interface can synchronize existing imported labels with the state of the ClearCase VOB, adding new labels as required.

To do this, select the VOB object at the top of the label and baseline structure, then repeat the procedure in “Importing labels for the first time,” on page 15.

Imported attributes for labels

ClearCase data is stored in Rational DOORS attributes when it is imported. Attributes that store ClearCase data start with **CC**.

ClearCase properties are stored in the following attributes:

Attribute	Meaning
Object Heading	The name of the ClearCase label.
Object Text	The ClearCase comment for the label, specified when the label was created.
CC Kind	The object type. Possible values are VOB, Label and Baseline.
CC User	The name of the person who created the label.
CC Date	The date on which the label was created.

Creating Rational DOORS baselines

The second step of the import process is the creation of Rational DOORS baselines using an imported ClearCase label.

You create baselines using the **ClearCase Apply Label to Modules** dialog box.

To create labeled baselines:

1. Ensure all necessary Rational DOORS modules are closed and not in use by others.
2. Select the required label from the list in **ClearCase labels**.
3. Select the required module from the list in **Rational DOORS modules**. You can select any number of modules in this list. Use **Select all** and **Clear all** to simplify the selection process if you have a lot of modules.

4. Select the type of baseline required: **Suffix only**, **Minor** or **Major** version.
5. Select whether you want to include a suffix by clicking **Use suffix**. The default suffix is the selected ClearCase label. You can modify it before use if required.
6. Modify the label comment, if necessary. It is used as annotation for the baseline.
7. Click **Baseline**. You are asked to confirm the operation twice. To create the baseline, Rational DOORS needs to open all the selected modules in exclusive edit mode. This means you must make sure that no one else has any of the modules open in either exclusive or shareable edit modes.

Once a baseline has been created, it cannot be destroyed or recreated, so you must be absolutely certain that a group baselining operation is correct before proceeding.

Baselines are created for each of the specified modules, and the label module is updated to contain a baseline-creation object for each module.

The attribute **CC Baseline** is created and filled with the baseline name for each baseline creation object.

When the baseline creation is complete, a **Baseline Labelling Report** dialog box is displayed, showing how many labels and baselines were created.

For further information on how to use the **Baseline Labelling Report** window functions, see “Understanding results,” on page 18.

Understanding results

All the normal Rational DOORS viewing mechanisms can be used on the label and baseline structure. The information can be displayed in either document or graphics mode. Each object type has been allocated a color to aid visual identification.

Graphics colors

When each item is imported it is assigned a color for use in graphics mode. This helps provide instant visual recognition of the structure of your data.

The color allocations are as follows:

Kind	Color
VOB	Red

Kind	Color
Label	Green
Baseline	Blue
Derived Object	Pink
Private File	Orange

Viewing new information

If you re-import labels or create new labels in the same module, you can use the **Apply filter** button on the **Baseline Labelling Report** dialog box so that only the new items are displayed.

Using Rational DOORS traceability

By storing information on labels and baselines in a Rational DOORS module, they can be included in your traceability schema. In this way you can link details of released information directly to project plans and other applications, as outlined below.

Managing links

You can use any of the following standard methods for creating links between label and baseline objects and other Rational DOORS information:

- Drag and drop
- **Link > Create links**
- Link module matrix

In each case you must take into account the correct direction for links to allow impact and traceability analyses to be performed as required. These analyses can be performed using the following standard tools:

- Pop-up menus
- **Analysis > Impact** or **Analysis > Trace**
- Layout DXL
- **Analysis > Wizard**

The last item, the analysis wizard, is particularly good for creating customized traceability reports. With this, you could create a report that shows the relationship between code check-ins and module baselines, showing complete

version names, baseline specifications, and dates in the context of planning information.

Links can be deleted by using any of the standard techniques.

Applications of imported labels

Rational DOORS can be used to store any kind of structured information, so it is highly likely that in your data you already have information that can be linked to baseline records. You might use it to associate particular module baselines with deliveries made to customers with specific requirements.

Another application is to create complete product manifests. Using the Rational DOORS export functions, you can create documents in Word, HTML or any other supported format, that lists the document version included in a shipment.

5

Troubleshooting

- Poor performance when importing data to Rational DOORS

Poor performance when importing data to Rational DOORS

When importing data from ClearCase into Rational DOORS, the operation may take a long time and may appear to hang.

To resolve this problem, do the following before importing:

1. Open up Windows Task Manager.
2. Go to the **Processes** tab.
3. Right-click on the **DOORS.exe** process and for the **Set priority** menu option, click **low**.
4. Try the operation in the integration again.
5. Once the import operation has finished, set the priority of the process back to **normal**.

Troubleshooting

6

Contacting support

This chapter contains the following topics:

- Contacting IBM Rational Software Support
- Prerequisites
- Submitting problems
- Other information

Contacting IBM Rational Software Support

If the self-help resources have not provided a resolution to your problem, you can contact IBM Rational Software Support for assistance in resolving product issues.

Note If you are a heritage Telelogic customer, you can go to <http://support.telelogic.com/toolbar> and download the IBM Rational Telelogic Software Support browser toolbar. This toolbar helps simplify the transition to the IBM Rational Telelogic product online resources. Also, a single reference site for all IBM Rational Telelogic support resources is located at <http://www.ibm.com/software/rational/support/telelogic/>

Prerequisites

To submit your problem to IBM Rational Software Support, you must have an active Passport Advantage® software maintenance agreement. Passport Advantage is the IBM comprehensive software licensing and software maintenance (product upgrades and technical support) offering. You can enroll online in Passport Advantage from <http://www.ibm.com/software/lotus/passportadvantage/howtoenroll.html>.

- To learn more about Passport Advantage, visit the Passport Advantage FAQs at http://www.ibm.com/software/lotus/passportadvantage/brochures_faqs_quickguides.html.
- For further assistance, contact your IBM representative.

To submit your problem online (from the IBM website to IBM Rational Software Support, you must additionally:

- Be a registered user on the IBM Rational Software Support website. For details about registering, go to <http://www-01.ibm.com/software/support/>.
- Be listed as an authorized caller in the service request tool.

Submitting problems

To submit your problem to IBM Rational Software Support:

1. Determine the business impact of your problem. When you report a problem to IBM, you are asked to supply a severity level. Therefore, you need to understand and assess the business impact of the problem that you are reporting.

Use the following table to determine the severity level.

Severity	Description
1	The problem has a <i>critical</i> business impact: You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution.
2	This problem has a <i>significant</i> business impact: The program is usable, but it is severely limited.
3	The problem has <i>some</i> business impact: The program is usable, but less significant features (not critical to operations) are unavailable.
4	The problem has <i>minimal</i> business impact: The problem causes little impact on operations or a reasonable circumvention to the problem was implemented.

2. Describe your problem and gather background information. When describing a problem to IBM, be as specific as possible. Include all relevant background information so that IBM Rational Software Support specialists can help you solve the problem efficiently. To save time, know the answers to these questions:

- What software versions were you running when the problem occurred? To determine the exact product name and version, use the option applicable to you:

- Start the IBM Installation Manager and click **File > View Installed Packages**. Expand a package group and select a package to see the package name and version number.
 - Start your product, and click **Help > About** to see the offering name and version number.
 - What is your operating system and version number (including any service packs or patches)?
 - Do you have logs, traces, and messages that are related to the problem symptoms?
 - Can you recreate the problem? If so, what steps do you perform to recreate the problem?
 - Did you make any changes to the system? For example, did you make changes to the hardware, operating system, networking software, or other system components?
 - Are you currently using a workaround for the problem? If so, be prepared to describe the workaround when you report the problem.
3. Submit your problem to IBM Rational Software Support. You can submit your problem to IBM Rational Software Support in the following ways:
- **Online:** Go to the IBM Rational Software Support website at <https://www.ibm.com/software/rational/support/> and in the Rational support task navigator, click **Open Service Request**. Select the electronic problem reporting tool, and open a Problem Management Record (PMR), describing the problem accurately in your own words.
For more information about opening a service request, go to <http://www.ibm.com/software/support/help.html>.
You can also open an online service request using the IBM Support Assistant. For more information, go to <http://www-01.ibm.com/software/support/isa/faq.html>.
 - **By phone:** For the phone number to call in your country or region, go to the IBM directory of worldwide contacts at <http://www.ibm.com/planetwide/> and click the name of your country or geographic region.
 - **Through your IBM Representative:** If you cannot access IBM Rational Software Support online or by phone, contact your IBM Representative. If necessary, your IBM Representative can open a service request for you. You can find complete contact information for each country at <http://www.ibm.com/planetwide/>.

If the problem you submit is for a software defect or for missing or inaccurate documentation, IBM Rational Software Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. Whenever possible, IBM Rational Software Support provides a workaround that you can implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM Rational Software Support website daily, so that other users who experience the same problem can benefit from the same resolution.

Other information

For Rational software product news, events, and other information, visit the IBM Rational Software website on <http://www.ibm.com/software/rational/>.

7

Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send written license inquiries to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send written inquiries to:

Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan, Ltd.
19-21, Nihonbashi-Hakozakicho, Chuo-ku
Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:
INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND,

EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO,
THE IMPLIED WARRANTIES OF NON-INFRINGEMENT,
MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
Some states do not allow disclaimer of express or implied warranties in certain
transactions. Therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors.
Changes are periodically made to the information herein; these changes will be
incorporated in new editions of the publication. IBM may make improvements
and/or changes in the product(s) and/or the program(s) described in this
publication at any time without notice.

Any references in this information to non-IBM websites are provided for
convenience only and do not in any manner serve as an endorsement of those
websites. The materials at those websites are not part of the materials for this
IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you supply in any way it
believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the
purpose of enabling: (i) the exchange of information between independently
created programs and other programs (including this one) and (ii) the mutual use
of the information which has been exchanged, should contact:

Intellectual Property Dept. for Rational Software
IBM Corporation
5 Technology Park Drive
Westford, MA 01886
U.S.A.

Such information may be available, subject to appropriate terms and conditions,
including in some cases, payment of a fee.

The licensed program described in this document and all licensed material
available for it are provided by IBM under terms of the IBM Customer
Agreement, IBM International Program License Agreement or any equivalent
agreement between us.

Any performance data contained herein was determined in a controlled
environment. Therefore, the results obtained in other operating environments
may vary significantly. Some measurements may have been made on
development-level systems and there is no guarantee that these measurements
will be the same on generally available systems. Furthermore, some
measurements may have been estimated through extrapolation. Actual results

may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Additional legal notices are described in the `legal_information.html` file that is included in your software installation.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at www.ibm.com/legal/copytrade.html.

Windows is a trademark of Microsoft Corporation in the United States, other countries, or both.

Other company, product or service names may be trademarks or service marks of others.

Index

A

attributes

- imported elements 12
- imported labels 17
- imported structures 9

B

baselines

- about displaying 18
- creating 17
- graphics mode 11.18

E

exceptions 14

G

graphics mode 11.18

I

IBM Customer Support 23

import exceptions 14

imported information

- about labels 12
 - attributes 12
 - color allocation 11.18
 - displaying 10
 - filtering 19
 - understanding 11
- version structures 11
- imported labels
- about 12
 - about importing 15
 - attributes 17
 - importing for the first time 15
 - updating 17

imported structures

- attributes 9
- importing for the first time 7
- updating 9

importing

- about importing labels 15
- about importing structures 7
- attributes for imported labels 17
- attributes for imported structures 9
- displaying imported information 10
- importing labels for the first time 15
- importing structures for the first time 7
- updating labels 17
- updating structures 9

L

links 12, 13, 19

M

merge links 12

R

Rational DOORS for ClearCase Interface

functions 5

introduction 5

T

traceability 13.19

V

Versioned Object Bases (VOBs) 6

