IBM

Tivoli

Front Line Customer Care Installation and Configuration Guide

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1   Database Installation

Note: These steps should be performed on the server where the Oracle 11g database is installed as the user oracle

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Deploy the Front Line Customer Care installation (FLCC) package (customer_care_x.x.zip) to a known location on the database server by executing the following commands:

```
$ cp customer_care_x.x.zip <target_directory>

$ unzip customer_care_x.x.zip

$ cd <target_directory>/install

$ chmod +x install_database.ksh
```

1.1 Create the database Instance

The database creation utilizes Oracle database templates. Bundled with the FLCC installation package is a sample template that can be used for small deployments.

If a specific database size is required for the deployment a template file should be created and placed in the directory below

```
<target_directory>/db/instance
```

The following tablespaces must be defined within the template file for FLCC to function correctly

```
REF_INDX

REFERENCE

SYSLOG_INDX

SYSLOG

TRANS_INDX

TRANSACTION
```

Execute the following steps to create the FLCC database

```
$ cd <target_directory>/install

$ ./install_database.ksh –create_database
```

During the installation procedure the user will be prompted for the following information:

```
Enter FLCC Home (/home/oracle/flcc):
```

Enter the installation directory for First Line Customer Care or accept the default.

```
Enter Oracle Home (/appl/oracle/product/11.2.0/db_1):
```

Enter the installation directory for Oracle or accept the default.

```
Enter Oracle SID (ccdb):
```

Enter the SID for the database to be created or accept the default

```
Enter Oracle password for user 'sys':
```

Enter the Oracle password for the sys user. Contact your Oracle administrator if this is not available.

```
Enter Oracle password for user 'system':
```

Enter the Oracle password for the system user. Contact your Oracle administrator if this is not available.

```
Enter Oracle password for user 'etlserver':
```

Enter a password for the Oracle etlserver user that is to be created. This user will be the primary user for both data loading and retrieval

```
Enter the database template name (flcc_small):
```

Enter the name of the Oracle template file (excluding the .dbt extension). Note this file must be present in the `<target_directory>/db/instance` folder.

The creation of the Oracle database may take some time depending on the size of the database defined.

The location of a log file will be indicated at the end of the installation procedure containing any errors which may have been encountered.

1.2 Create the database schema

Execute the following steps to create the FLCC schema

```
$ cd <target_directory>/install
```

```
$ ./install_database.ksh -install_schema
```

During the installation procedure the user will be prompted for the following information:

```
Enter FLCC Home (/export/home/flcc):
```

Enter the installation directory for First Line Customer Care or accept the default.

```
            Enter Oracle Home (/appl/oracle/product/11.2.0/db_1):
```

Enter the installation directory for Oracle or accept the default.

```
            Enter Oracle SID (ccdb):
```

Enter the SID for the database created previously

```
            Enter Oracle password for user 'sys':
```

Enter the Oracle password for the sys user. Contact your Oracle administrator if this is not available.

```
            Enter Oracle password for user 'system':
```

Enter the Oracle password for the system user. Contact your Oracle administrator if this is not available.

```
            Enter Oracle password for user 'etlserver':
```

Enter a password for the Oracle etlserver user that is to be created. This user will be the primary user for both data loading and retrieval

```
            Enter the database template name (flcc_small):
```

Enter the name of the Oracle template file (excluding the .dbt extension).

Note: this file must be present in the `<target_directory>/db/instance` folder.

2 Tivoli Common Reporting (TCR) Installation

Note: The steps outlined in the TCR installation procedure should be carried out on the server where the TCR platform is to be installed.

Details about how to install Cognos can be found in the documentation folder of the Tivoli Common Reporting Setup files. You will also find details about the hardware and software supported by TCR.

Pre-requisite #1: Install Oracle Client on the server before performing the TCR installation

Pre-requisite #2: Ensure that the following Oracle variables have been set up before performing the TCR installation:
- ORACLE_HOME
- LIBPATH

Pre-requisite #3: The only supported web browsers for accessing TCR are Microsoft Internet Explorer 7 and Mozilla Firefox 3.6

2.1 Deploying Dashboard and reports

Note: Unless otherwise specified, the procedures in this section must be performed on the designated reports server only.

Copying Content into the Tivoli Common Reporting Server

1. Copy the *flcc_dashboard.zip* file from the reports folder of the Front Line Customer Care installation package into the Cognos "*deployment*" folder:

   $TIVOLI_COMMON_REPORTING_PATH/tipv2Components/TCRComponent/cognos/deployment

Creating Database Connection

1. Open a browser windows and launch Tivoli Integrated Portal by default:

   `https://server:16311/ibm/console/logon.jsp`

2. Login in into the system with an user with administration privileges

3. Open the *"Reporting>Common Reporting"* tab

4. Expand the menu *"Launch"* and choose *"Administration"*

5. Select the *"Configuration"* tab

6. Create a new *"Data Source Connection"* pointing to the Front Line Customer Care Database.

   a. Details about how to create and configure a new Data Source Connection can be found in the *IBM Cognos Business Intelligence Administration and Security Guide 8.4.1*

   http://publib.boulder.ibm.com/infocenter/c8bi/v8r4m0/index.jsp?topic=/com.ibm.swg.im.cognos.ug_cra.8.4.1.doc/ug_cra.html

   Chapter: *Data Management*

   Section: *Data Sources and Connections > Create a Data Source*

       i. Data Source Connection name: **FLCC_DB**

       ii. Data Source Connection type: **Oracle**

       iii. SQL*Net Connect String: **tnsname** of the Oracle database

       iv. User ID and password: **user schema** for the Oracle database

Deploying Content

1. Open a browser windows and launch Tivoli Integrated Portal by default:

   https://server:16311/ibm/console/logon.jsp

2. Login in into the system with an user with administration privileges

3. Open the *"Reporting>Common Reporting"* tab

4. Expand the menu *"Launch"* and choose *"Administration"*

5. Select the *"Configuration"* tab

6. Go to Content Administration and import the content of the *flcc_dashboard.zip* using the *"New Import Wizard"*.

   a. Details about how to import and deploy IBM Cognos 8 content can be found in the *IBM Cognos Business Intelligence Administration and Security Guide 8.4.1*

Chapter: *Content Administration in IBM Cognos Connection*

Section: *Deployment>Deploying IBM Cognos 8 Entries>Import to a Target Environment*

    b. Select the following entries available in the package:

        i. First Line Customer Care

        ii. Second Line Customer Care

2.2 Web Application Installation

Note: Execute the following steps as the same user used to install TCR

The following pre-requisites must be followed prior to installing the Customer Care application

- Tivoli Common Reporting (TCR) v2.1 must have been installed on the target AIX server.
- The installer must know the name of the Tivoli Integrated Portal (TIP) profile being used <TIP_Profile>
- The installer must know the name of the TIP administrator user <TIP_User>
- The installer must know the password for the TIP administrator user <TIP_Passwd>
- The environment variable TIP_HOME must be set to the root of the Tivoli Integrated Portal

e.g.

```
$ export TIP_HOME=/opt/IBM/tivoli/tip
```

2.2.1 Installation Steps

Note: The following steps must be performed on the server where TCR 2.1 is installed. The operating system user used must be that which was used during the install of TCR 2.1

Place the Customer Care 1.1 installation package (customer_care_SQM1.4.X.X) in the *<target directory>*. Once completed, execute the following commands

```
$ cd <target directory>/install
$ chmod +x install_dashboard.ksh
```

```
$ ./install_dashboard.ksh -profile <TIP_Profile> -user <TIP_User> -passwd
<TIP_Passwd> -mode install
```

You will be prompted to enter role names for the first line, second line and VIP user profiles. Enter three user defined names.

Note: that these names will later be configured within the Tivoli Integrated Portal user management.

Errors encountered during the installation can be seen in the log files located at the following directory:

```
$TIP_HOME/logs/customer_care
```

2.2.2   Post-Install Steps

Note: The following steps must be performed on the server where TCR 2.1 is installed. The operating system user used must be that which was used during the install of TCR 2.1

Edit the file $TIP_HOME/bin/startflcc.sh and replace all occurrences of $TIP_HOME with the fully qualified path.

Also replace the default value for the security.log.dir property with a path to a directory where the security audit logs are to be kept.

Restart the Tivoli Integrated Portal with the following commands:

```
$ cd $TIP_HOME/bin
```

```
$ ./stopServer.sh server1
```

```
$ ./startflcc.sh server1
```

Create the three user roles defined earlier in the installation. Log into the Tivoli Integrated Portal with the user name and password used when invoking the install_dashboard.ksh script.

Select "Users and Group" "Role Management" as shown below
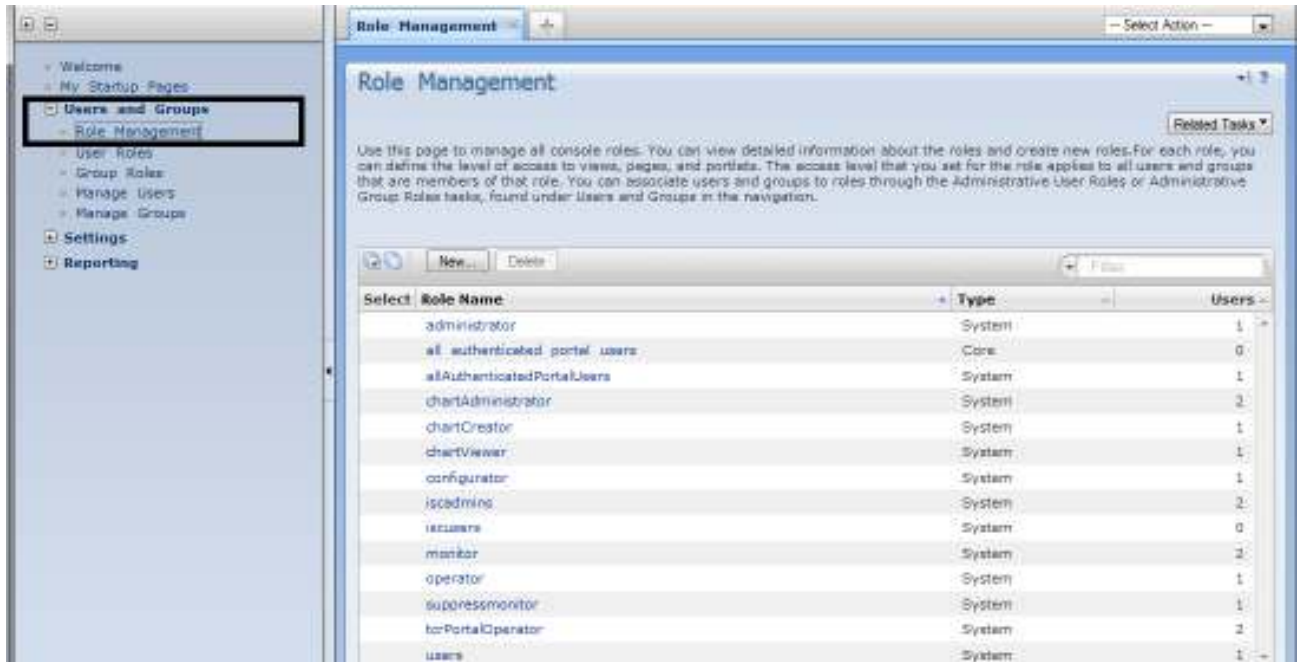
Select "New" and you will be prompted to enter a role name. Enter the role name for the First Line users as defined earlier. Select "Save"
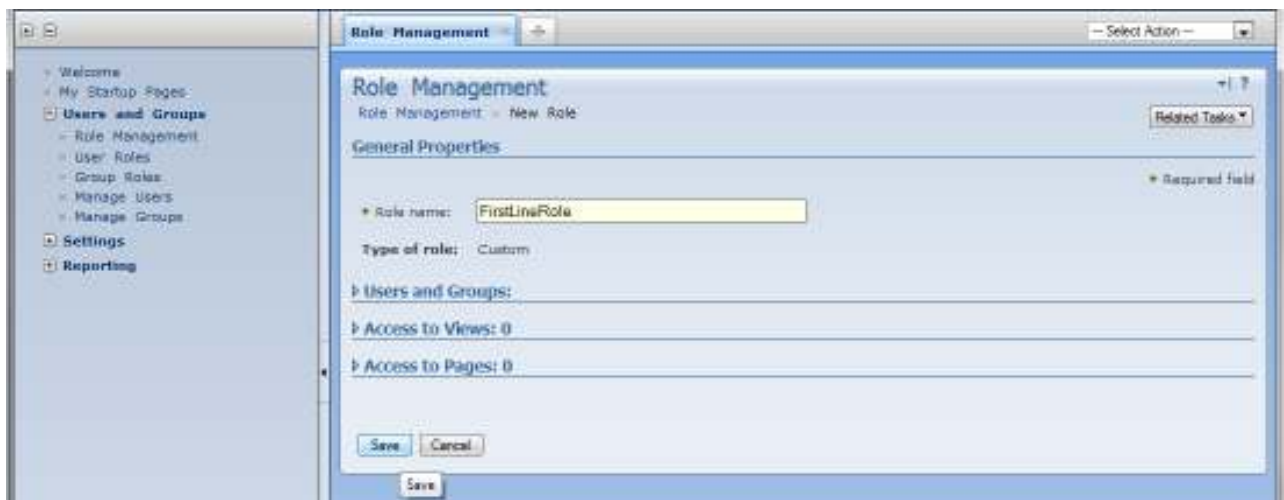
Repeat the steps above to create the Second Line and VIP User Roles. When complete all roles should be visible within Role Management

Front Line Customer Care application users can now be added to the appropriate role.

Note: that users added to the "First Line" role will not have access to location information within the dashboard view. "Second Line" users will have full access to the dashboard view. Note that VIP users (those assigned to the VIP user role) must also be assigned to either a First Line or Second Line user role.

To assign users select "Users and Groups" "User Roles" from within the Tivoli Integrated Portal.

Enter the search criteria for the user you wish to assign to a role and select "Search"

Select the user from the list returned and a list of roles will be returned

Select the appropriate role for this user (either first line or second line role). Note that selecting both roles will result in full dashboard access for the user. Select "Save". Note that all FLCC application users must also have the 'tcrPortalOperator' and 'users' roles assigned.
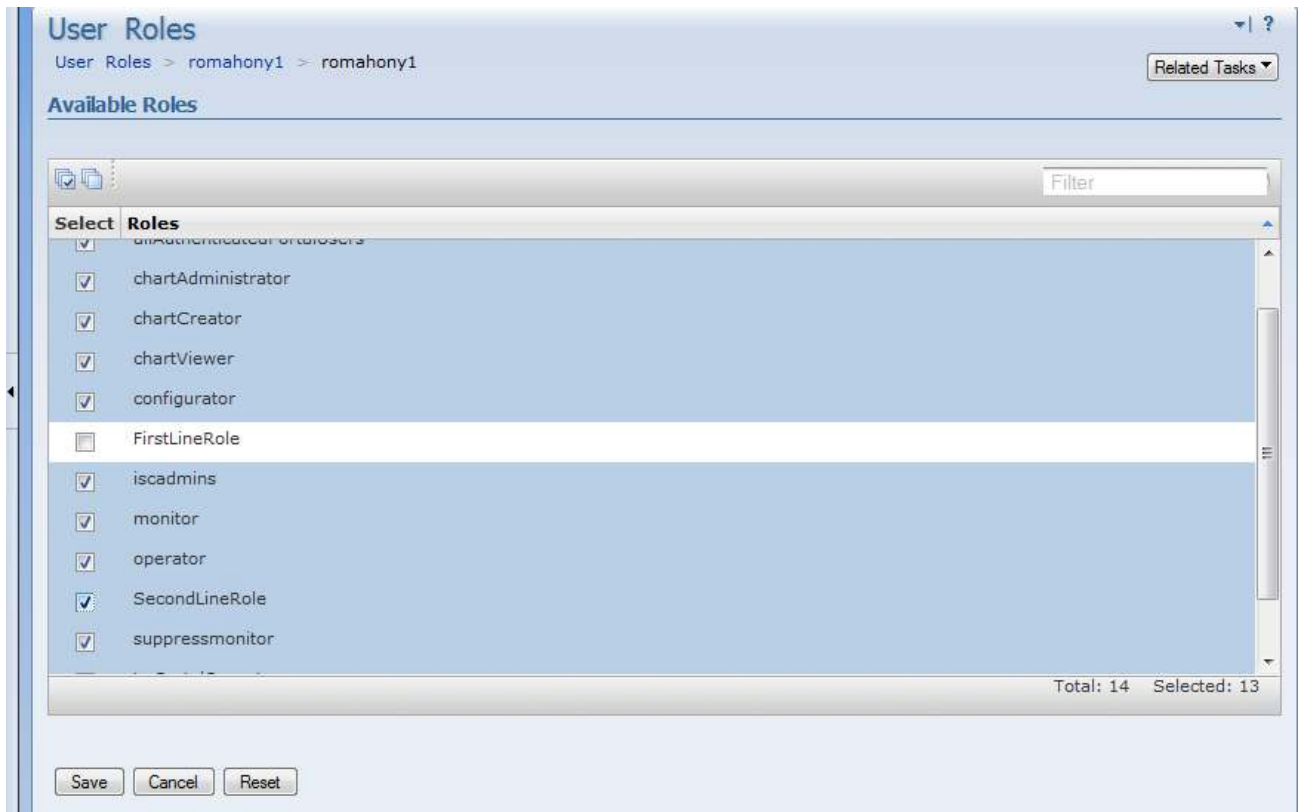
Repeat these steps for each of the application users.

Note: Changes to user roles will not take affect until a user re-opens the web browser.

FLCC users operating in an Internet Explorer environment should disable browser caching with the following browser update:

Select Tools/Internet, click the general tab.

Under the Browsing history section select Settings ensure that the option "Every time I visit a webpage" is selected as shown below.
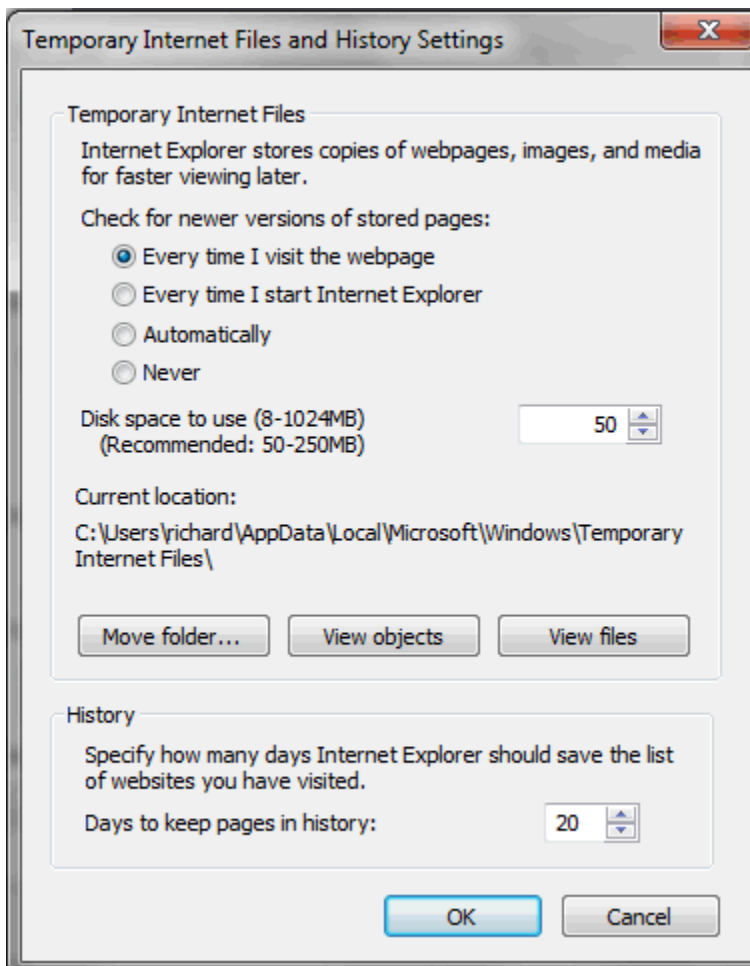
3 Setting up Cognos report services for report parallel execution

Login into the TIP UI as a user with administration privileges

1. Open the "Reporting/Common Reporting" tab

2. Expand the menu "Launch" and choose "Administration"

3. Details about how to setup IBM Cognos 8 services for parallel execution can be found in the *IBM Cognos Business Intelligence Administration and Security Guide 8.4.1*

   > *http://publib.boulder.ibm.com/infocenter/c8bi/v8r4m0/index.jsp?topic=/com.ibm.swg.im.cognos.ug_cra.8.4.1.doc/ug_cra.html*

   > Chapter: *System Administration*

   > Section: *Server Administration>>Set Parameters for Concurrent Query Execution*

Note: Parameter selection will vary depending on the Tivoli Common Reporting server specifications

APPENDIX A: Accessing Dashboard and Reports Manually

1. Open a browser windows and launch Tivoli Integrated Portal by default:

   https://server:16311/ibm/console/logon.jsp

2. Login in into the system with an user with administration privileges

3. Open the *"Reporting>Common Reporting>Public Folders"* tab

4. Open the *"First Line Customer Care"* package

5. Select any of the following files and fill the prompts:

   a. *CEM Dashboard - Cause and Actions*

      i. *Prompts: Service and Reason*

   b. *CEM Dashboard – Data*

      i. *Prompts: IMSI and Time Range*

   c. *CEM Dashboard – Voice*

      i. *Prompts: IMSI and Time Range*

APPENDIX B: Updating dashboard with customer logos

The following steps outline the procedure to alter the default logos on the FLCC dashboard:

1. Copy the new logo into the following folders

   a. *$TIVOLI_COMMON_REPORTING_PATH/tipv2/profiles/TIPProfile/installedA pps/TIPCell/IBM Cognos 8.ear/p2pd.war/tivoli/tcr_common/images*

   b. *$TIVOLI_COMMON_REPORTING_PATH/tipv2Components/TCRComponent/cognos/ webcontent/tivoli/tcr_common/images*

2. Edit and Update all the dashboard logos changing the path (all dashboard files for all services must be updated)

   a. From: *../tivoli/tcr_common/images/tivoli.gif*

   b. To: *../tivoli/tcr_common/images/new_logo.ext*

APPENDIX C: Updating dashboard granularity

The following steps detail the changes needed in the FLCC dashboard when the granularity of the underlying datasources are changed:

1. The dashboard END TIME column is defined as 15 minutes later than the transaction DATETIME recorder in the database.

2. If the granularity of the sources changes to lower values (5minutes, 1 minute…) then the TCR First Line Customer Care model has to be updated accordingly as follows:

    a. Launch IBM Cognos 8 Framework Manager

    b. Open "First Line Customer Care v1.x" Metadata Model

    c. Update the following objects:

        i. FLCC Model > VOICE > Transactions > ENDTIME

            1. The default value is adding 15 minutes (DATETIME +1/96)

            2. Example for 5 minutes (DATETIME +1/288)

            3. Example for 1 minutes (DATETIME +1/1440)

        ii. FLCC Model > SMS > Transactions > ENDTIME

            1. The default value is adding 15 minutes (DATETIME +1/96)

            2. Example for 5 minutes (DATETIME +1/288)

            3. Example for 1 minutes (DATETIME +1/1440)

        iii. FLCC Model > MMS > Transactions > ENDTIME

            1. The default value is adding 15 minutes (DATETIME +1/96)

            2. Example for 5 minutes (DATETIME +1/288)

            3. Example for 1 minutes (DATETIME +1/1440)

        iv. FLCC Model > DATA > Transactions > ENDTIME

            1. The default value is adding 15 minutes (DATETIME +1/96)

            2. Example for 5 minutes (DATETIME +1/288)

            3. Example for 1 minutes (DATETIME +1/1440)

    d. Save the model

    e. Publish the First Line Customer Care Package

APPENDIX D: Applying Access Control to users

TIP User Group and Roles

1. Open a browser windows and launch Tivoli Integrated Portal by default:

   https://server:16311/ibm/console/logon.jsp

2. Login in into the system with an user with administration privileges

3. Create two different TIP user groups. As an example consider the following names

   a. First Line Group (users that belong to this group will have to be added to this group afterwards)

   b. Second Line Group (users that belong to this group will have to be added to this group afterwards)

4. The following TIP roles will have to be assigned to both groups above

   a. users

   b. tcrPortalOperator

TCR Cognos Access Control

Details about how to administer IBM Cognos 8 security can be found in the *IBM Cognos 8 Administration and Security Guide 8.4.1*

http://publib.boulder.ibm.com/infocenter/c8bi/v8r4m0/index.jsp?topic=/com.ibm.swg.im.cognos.ug_cra.8.4.1.doc/ug_cra.html

Chapter: *Security Administration*

1. Open a browser windows and launch Tivoli Integrated Portal by default:

   https://server:16311/ibm/console/logon.jsp

2. Login in into the system with an user with administration privileges

3. Open the *"Reporting>Common Reporting"* tab

4. Expand the menu *"Launch"* and choose *"Administration"*

5. Select the *"Security"* tab

a. Remove the group "Everyone" as a member of the following role:

      i. System Administrators

6. Expand the menu *"Launch"* and choose *"Connection"*

7. Edit the properties of the "First Line Customer Care" package:

    a. Override the parent group privileges

    b. Grant the following privileges to the "First Line Group" user Group created earlier:

      i. Read

      ii. Execute

    c. Deny all the privileges to the "Second Line Group" user Group created earlier:

8. Edit the properties of the "Second Line Customer Care" package:

    a. Override the parent group privileges

    b. Grant the following privileges to the "Second Line Group" user Group created earlier:

      i. Read

      ii. Execute

    c. Deny all the privileges to the "First Line Group" user Group created earlier.

How to disable editing capabilities to First Line and Second Line Users

Details about how to administer IBM Cognos 8 security can be found in the *IBM Cognos 8 Administration and Security Guide 8.4.1*

http://publib.boulder.ibm.com/infocenter/c8bi/v8r4m0/index.jsp?topic=/com.ibm.swg.im.cognos.ug_cra.8.4.1.doc/ug_cra.html

Chapter: *Security Administration*

1. Open a browser windows and launch Tivoli Integrated Portal by default:

https://server:16311/ibm/console/logon.jsp

2. Login in into the system with an user with administration privileges

3. Open the *"Reporting>Common Reporting"* tab

4. Expand the menu *"Launch"* and choose *"Administration"*

5. Select the *"Security"* tab

    a. Remove the group "Everyone" as a member of the following roles:

        i. Authors

        ii. Express Authors

        iii. Directory Administrators

        iv. Report Administrators

APPENDIX E: Uninstall Steps

To uninstall the Front Line Customer Care Web Application execute the following steps as the user used to install TCR

```
$ cd <target_directory>/install
```

Where target <target_directory> is the location to which the Front Line Customer Care installation package was extracted to

```
$ ./install_dashboard.ksh –profile <TIP_Profile> -user <TIP_User> -passwd
<TIP_Passwd> -mode remove
```

To uninstall the Front Line Customer Care database instance execute the following steps as the user oracle

```
$ export ORACLE_SID=ccdb
```

Substitute the appropriate database name for **ccdb**:

```
$ sqlplus /nolog
```

Enter the password for the sys user when prompted:

```
SQL> connect / as sysdba

SQL> shutdown immediate;

SQL> exit
```

Remove the database:

```
        $ORACLE_HOME/bin/dbca -silent -deleteDatabase -sourceDB ccdb -
sysDBAUserName sys -sysDBAPassword <sys DBA user password>
```

Substitute the appropriate database name for **ccdb**:

To remove the FLCC dashboard reports log into the TIP UI as a user with administration privileges. Navigate through "Reporting/Common Reporting". Select the "First Line Customer Care" and "Second Line Customer Care" reports and click on delete.

The firstline, secondline and VIP user roles can be deleted by navigating to "Users and Group/Role Management", selecting the groups to delete and clicking the delete button

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