CA Clarity™ PPM

CA Clarity-Xcelsius Implementation Guide - On Premise

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ca technologies

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Contents

Chapter 1: Using Xcelsius to Display Real-time CA Clarity PPM Data

This section contains the following topics:

About CA Clarity PPM-Xcelsius Support

Xcelsius is a dashboard tool used to build visualizations that provide a visually rich and interactive approach to analyzing data. You can export a visualization to the Flash file format and create an interactive portlet in CA Clarity PPM. Xcelsius visualizations can display real-time CA Clarity PPM data outside of CA Clarity PPM, such as from a PowerPoint presentation, Word document, and more.

To get optimal performance from your Xcelsius visualizations, follow the guidelines in the BusinessObjects Xcelsius 2008 User Guide. For example, set up complex calculations in the database queries.

The CA Clarity PPM-Xcelsius integration supports the following:

- Real-time CA Clarity PPM data transfers using CA Clarity PPM Web Services or Business Objects Query as a Web Service as the connection method.

- Secured data transfers that authenticate CA Clarity PPM users through session IDs and that preserve CA Clarity PPM access rights. Users only see information they have rights to view.

- Context-aware Xcelsius visualizations automatically filter data based on where the interactive portlet is located in CA Clarity PPM. Some examples:

  – Overview page displays unfiltered data, such as all the projects

  – Project page displays filtered data, such as projects managed by a particular user.

- Color scheme consistency between the Xcelsius visualization and CA Clarity PPM.

- Multiple language support enables users to view information using their preferred language.

In addition to Xcelsius, the following are the primary components used to implement Xcelsius visualizations with real-time CA Clarity PPM data. See the following for details on each of the components:

- Interactive Portlets

- Connection Methods (see page 8)

- Global and Object Parameters (see page 18)

Connection Methods for Real-Time Data Exchanges

To enable real-time data exchanges between Xcelsius and CA Clarity PPM, set up the data connection using one of the following connection methods:

- CA Clarity PPM Web Service (see page 8). Use this connection method to get real-time CA Clarity PPM data through the CA Clarity PPM Web Service.

- Query as a Web Service (QaaWS) (see page 9). Use this connection method to get real-time CA Clarity PPM data through the Business Objects Query as a Web Service.

These connections include the data sources that establish real-time data exchanges with CA Clarity PPM. You set up and configure the data connections for your visualizations using the Xcelsius Data Manager. See the *BusinessObjects Xcelsius 2008 User Guide* for more information.

CA Clarity PPM Web Service

The CA Clarity PPM Web Service connection method enables a visualization to get real-time data.

The CA Clarity PPM Web Service connection method is a good choice when:

- Your CA Clarity PPM implementation is integrated with a solution other than Business Objects.

- You want to use CA Clarity PPM to establish the data source. Experience writing NSQL is required.

- You are unable to use the Query as a Web Service connection method.

Secured data transfers are established in the following ways:

- Authorization. A secured session for the logged in CA Clarity PPM user is enabled by creating a Flash variable, such as session_ID, in the Xcelsius visualization. A corresponding a session ID is defined in the *Clarity Session ID in SOAP Header* global parameter in the interactive portlet. The Flash Variable Name field of the global parameter must reference the exact Flash variable name in the Xcelsius visualization.

- Access control. User access rights are preserved by including an NSQL security clause to verify that users see only the data to which they have access.

Xcelsius visualization design files (.XLF) are available to get you started quickly using the CA Clarity PPM Web Service connection method.

To review these samples, download *Design Files for Stock Xcelsius Visualizations* from CA Clarity PPM on the software downloads page.

Query as a Web Service (QaaWS)

The Query as a Web Service (QaaWS) connection method enables the Xcelsius visualization. QaaWS provides real-time CA Clarity PPM data through the web services provided by Business Objects.

The Query as a Web Service connection method is a good choice when:

- You want to get the real-time CA Clarity PPM data through your Business Objects web services.

- You prefer to use CA Clarity PPM Business Object universes to establish the data source. Experience writing NSQL is not required.

Important! To use this connection method, you must have access to the Business Objects Query as a Web Service tool. If you are licensed to use CA Clarity PPM through a service provider, contact your service provider to discuss your connection method options.

Secured data transfers are established in the following ways:

- Authorization. A secured session is established for the logged in CA Clarity PPM user by making the Business Objects Session ID available to the Xcelsius visualization. To establish the session, a flash variable, *CELogonToken,* is created in the Xcelsius visualization and mapped to any cell in an Excel sheet. The interactive portlet uses the Business Objects Session ID global parameter.

- Access control. User access rights are preserved through Business Objects universes. The stock CA Clarity PPM Business Objects universes are configured so that users see data based on access rights.

Before You Get Started

Tools and Resources for an Xcelsius Implementation

The following tools and resources are available to take advantage of Xcelsius visualizations and setting them up for real-time CA Clarity PPM data transfers:

SAP BusinessObjects Xcelsius 2008

Used to download and install the Xcelsius locally on your computer. Use Xcelsius to create visualizations and to set up the data connections.

Note: For this download link to appear on the software downloads page, you must have download access rights to install Xcelsius. Your CA Clarity PPM administrator must perform the required setup step to copy the Xcelsius setup zip file to a CA Clarity PPM install folder.

Contact your CA Clarity PPM administrator if you are unable to download Xcelsius.

Required: Yes

Download from CA Clarity PPM software downloads page.

CA Clarity UI Themes as Xcelsius Color Schemes

Used to give your Xcelsius visualizations the same colors as your portlets and pages in CA Clarity PPM. The CA Clarity PPM UI themes are available to use in Xcelsius visualizations.

Follow the instructions on the software downloads page for information about making UI themes available as Xcelsius color schemes.

Required: No

Download from CA Clarity PPM software downloads page.

Design Files for Stock Xcelsius Visualizations

Used to help you get started with sample implementations. You can use the Xcelsius visualizations design files (.XLF) as is, or you can use them as a starting point to design your own Xcelsius visualizations.

Required: No

Download from CA Clarity PPM software downloads page.

Query as a Web Service tool

Required only if you are using the Query as a Web Service connection method. This tool is available only if you have Business Objects installed.

If you are licensed to use CA Clarity PPM through a service provider, contact your service provider to discuss whether this option is available to you.

Xcelsius Client Installation Checklist

Before you install Xcelsius Client:

- Verify that you have access rights to download Xcelsius Client.

  Xcelsius.zip file is available in the CA Clarity PPM downloads folder, Clarity <install>\webroot\downloads.

  Type: Global

- Verify that you have rights to install Xcelsius on your client computer.

Note: Contact your CA Clarity PPM administrator for access permissions and availability of the Xcelsius.zip file.

Install the Xcelsius Client

Install SAP BusinessObjects Xcelsius by downloading the .zip file from Software Downloads page. This installation includes setup.exe, user guides, tutorials, and more.

Follow these steps:

1. In CA Clarity PPM, open Home, and from Personal, click Account Settings.

2. On the personal information page, click Software Downloads.

3. Click the Download link next to SAP BusinessObjects Xcelsius and save the .zip file to a location on your computer.

4. On your computer, navigate to the .zip file and extract the contents.

5. Run setup.exe. For example, located in the folder path:

   `C:\downloads\Xcelsius-SPx\DATA_UNITS\Xcelsius\setup.exe`

6. Follow the instructions on the installation wizard to complete the installation.

   If you accept all the defaults, Xcelsius is installed in:

   `C:\Program Files\Business Objects\Xcelsius`

Enable Cross-domain CA Clarity PPM Data Transfers

If you plan to display Xcelsius visualizations in any of the following ways, set up these cross-domain data transfers:

- Dashboard outside CA Clarity PPM

- Dashboard inside CA Clarity PPM using data from the Business Objects universes

- Dashboard inside CA Clarity PPM when the application server name is different than the server hosting Web Services

If you are licensed to use CA Clarity PPM through a service provider, contact your service provider to discuss whether this option is available to you.

Follow these steps:

1. Create an XML file.

2. Copy the following lines to the file, and save as crossdomain.xml:

```
<?xml version="1.0"?>
<!DOCTYPE cross-domain-policy SYSTEM
"http://www.macromedia.com/xml/dtds/cross-domain-policy.dtd">
<cross-domain-policy>
    <allow-http-request-headers-from domain="*" headers="*"
secure="false" />
    <allow-access-from domain="*" secure="false" />
</cross-domain-policy>
```

    You can use the * (asterisk) character as a wildcard. domain=* allows access from any domain. The domain access can be restricted and this limits the access for outside domains. For example, *.acme.com, www.acme.com.

3. Add the crossdomain.xml file to the following paths for each connection method:

   - CA Clarity PPM Web Service:
     `<Clarity_home>\tomcat-app-deploy\ROOT`

   - Query as a Web Service:
     `/<BO_INSTALL_DIR>/bobje/Tomcat7/webapps/ROOT`

Install CA Clarity PPM Color Schemes in Xcelsius

You can install *CA Clarity UI Themes as Xcelsius Color Schemes* on Xcelsius. Apply CA Clarity PPM color to visualizations and give them the same appearance as a CA Clarity PPM page.

Follow these steps:

1. In CA Clarity PPM, open Home, and from Personal, click Account Settings.

2. On the personal information page, click Software Downloads.

3. Click the Download link next to *CA Clarity UI Themes as Xcelsius Color Schemes.*

4. Click the Clarity_Color_Schemes_for_XC.zip link and extract the contents to the following location.

    ```
    <Xcelsius Install Folder>\assets\themes\built-in
    ```

    CA Clarity PPM color schemes are available in Xcelsius and can be applied to Xcelsius visualizations.

Install Sample Xcelsius Dashboards

Optionally, install the *Design Files for Stock Xcelsius Visualizations* on your computer to view sample Xcelsius visualizations. The visualizations are prepopulated with CA Clarity PPM data and Web Service Connection settings.

You must have the following access right to download these sample files:

Software Download - Xcelsius

Required to download Xcelsius.

Type: Global

Follow these steps:

1. In CA Clarity PPM, open Home, and from Personal, click Account Settings.

2. Click Software Downloads.

3. Click the Download link next to *Design Files for Stock Xcelsius Visualizations* and save the .zip file to a location on your computer.

4. Navigate to the DesignFiles_for_StockXcelsiusDashboards.zip file and extract the contents to a designated folder. For example:

    ```
    c:\Xcelsius\ClaritySamples
    ```

    The .zip archive contains:

    ■   Portfolio Dashboard.xlf.

        Corresponds to the Portfolio stock interactive portlet.

    ■   Resource Dashboard.xlf.

        Corresponds to the Resource stock interactive portlet.

5. Open these files in Xcelsius to review setup procedures and to test web service connections.

Chapter 2: Setting up Interactive Portlets

Interactive portlets display visually rich CA Clarity PPM information in real time. Users can personalize object pages or add interactive portlets anywhere in CA Clarity PPM, such as their overview page.

Use interactive portlets to:

■ Perform what-if analyses

■ Set up alerts

■ Drill down to go to more detailed information

■ Mouseover areas to view more information

This section contains the following topics:

How to Set up an Interactive Portlet for Real-time Data

These instructions assume that you have installed the required tools for an Xcelsius implementation and have the appropriate access rights.

Follow these steps:

1. In Xcelsius, create the visualization.

   Best Practice: Create a mock-up of the visualization and create a static visualization in Xcelsius when you first build an interactive portlet.

   To get optimal performance from your Xcelsius visualizations, follow the guidelines in the *BusinessObjects Xcelsius 2008 User Guide.* For example, set up complex calculations in the database queries.

2. Set up the web services to be used to transfer data between CA Clarity PPM and Xcelsius. Choose one of these methods:

   ■ Set up a CA Clarity PPM Web Service connection (see page 16).

   ■ Set up a Query as a Web Service connection (see page 21).

3. In Xcelsius, export the visualization as Flash using the .swf suffix, saving the file to your local drive.

4. In CA Clarity PPM, create the interactive portlet.

5. Create global and object parameters.

   These interactive portlet parameters define the CA Clarity PPM information that appears in the Xcelsius visualization. These parameters correspond to the Flash variables created in Xcelsius to establish the real-time data connection between CA Clarity PPM and Xcelsius.

Set up the CA Clarity PPM Web Service Connection to Xcelsius Visualizations

Use these steps to do the following:

- Set up CA Clarity PPM Web Service as the data source
- Establish real-time data transfers between CA Clarity PPM and the Xcelsius visualization

Follow these steps:

1. In CA Clarity PPM, create a query.

   - Write a SELECT statement to transfer CA Clarity PPM data to Xcelsius.

   - Add the SECURITY in the WHERE clause. You can include access rights information in NSQL statement to add advanced security to interactive portlets.

2. Complete the following steps:

   a. Navigate to CA Clarity PPM Web Services using the following URL.

      ```
      http://<servername:port>/niku/wsdl/
      ```

   b. View the web query WDSL associated with the query you created for your interactive portlet.

   c. Make note of the URL of the query.

3. In Xcelsius, open the Data Manager and set up the web service to establish the connection with CA Clarity PPM.

   a. Complete the following fields:

      WSDL URL

      Defines the URL of the web service to import the URL.

Method

Defines the Web service connection.

Value: Query

Web Service URL

Defines the mapping for an output value of the Web service to a cell in the embedded spreadsheet.

Query Code

Defines the mapping for an output value of the Web service to a cell in the embedded spreadsheet.

Records

Defines the mapping for an output value of the Web service to a cell in the embedded spreadsheet.

b. Click the Usage tab and select Options to refresh the connection.

c. Click the Advanced tab and define the mapping for SOAP header to a cell in the embedded spreadsheet.

d. Create the following Flash variables. The names used to define these Flash variables are mapped to the interactive portlet as global and object parameters:

Session ID

Receives the Session ID of the CA Clarity PPM user.

Mapped to: the interactive portlet as the Clarity Session ID in SOAP Header global parameter.

(Optional) Web Service URL

Optional. Define if you want to use the same Xcelsius visualization as is on multiple CA Clarity PPM servers.

Mapped to: the interactive portlet as the Clarity Web Service URL global parameter.

Other CA Clarity PPM information

Optional. This can be information such as user name, user internal ID, or language.

Mapped to: the interactive portlet as the Clarity User Name, Clarity User Internal ID, or Language global parameters, respectively.

(Optional) CA Clarity PPM object-related information

Optional.

Mapped to: the interactive portlet as the object parameters that you create.

Interactive Portlet Parameters

Interactive portlets use global and object parameters with Flash variables, which allow the visualization to accept secure data from CA Clarity PPM.

Global Parameters

Global parameters represent information that is available at the global level in CA Clarity PPM. By including an interactive portlet, you make the data part of any CA Clarity PPM page, including an object page, such as the Project object.

You create global parameters from the interactive portlet in CA Clarity PPM using Studio. The data for the global parameter is made available to the Xcelsius visualization as a Flash variable. You define the mapping between the Flash variable in Xcelsius and the global parameter in the Global Parameter field. This data is available regardless of where the interactive portlet appears on CA Clarity PPM pages.

Example

Suppose you create the *Language* global parameter in your interactive portlet, assigning to the Flash variable the name "Lang". The language preference of the logged-in CA Clarity PPM user is available to the Xcelsius visualization in this Flash variable "Lang". As a global parameter, this parameter applies regardless of which CA Clarity PPM page includes the interactive portlet.

When configuring either of the web service connection methods in the Xcelsius Data Manager, specify the URL where the web service is hosted. You can explicitly specify the server where your web services are hosted. Alternatively, you can use the same Xcelsius visualization as-is on multiple CA Clarity PPM servers. Create either the Clarity Web Service URL global parameter or the Business Objects Web Service URL global parameter. Then enter the web service URL corresponding to the CA Clarity PPM server on which you view the Xcelsius visualization.

Download the *Design Files for Stock Xcelsius Visualizations* from the software downloads page. From this download, review the stock Xcelsius visualizations and better understand how these parameters are used.

Parameters

The following global parameters are available:

Business Objects Session ID

Authenticates the user.

Connection Method: Query as a Web Service

Required: When using the Query as a Web Service connection method.

Flash Variable Name: Must match the CELogonToken Flash variable name defined in Xcelsius.

Business Objects Web Service URL

Maps to the Web Service URL for the CA Clarity PPM server from which the Xcelsius visualization is viewed.

Connection Method: Query as a Web Service

Required: When using the same Xcelsius visualization as-is on multiple CA Clarity PPM servers. Provide either the Web Service URL or the name of the server which hosts your web services.

Flash Variable Name: Must match the Flash variable name defined in Xcelsius.

Example:
`http://<BO_servername>/dswsbobje/qaawsservices/`

Clarity Session ID in SOAP Header

Authenticates users.

The SessionID is used to authenticate with the web service.

Connection Method: CA Clarity PPM Web Service

Required: When using the CA Clarity PPM Web Service connection method.

Flash Variable Name: Must match the Flash variable name defined in Xcelsius.

Example:

```
<n0:Auth><n0:SessionID><CLARITY_SESSION_ID>
</n0:SessionID></n0:Auth>
```

Clarity User Internal ID

Identifies the Internal ID associated with the logged in CA Clarity PPM user.

You can use this global parameter to filter data by the internal ID to allow users to view global, user-specific information from the Xcelsius visualization.

Connection Method: CA Clarity PPM Web Service and Query as a Web Service (QaaWS)

Required: No

Flash Variable Name: Must match the Flash variable name defined in Xcelsius.

Clarity User Name

Identifies the user name of the logged in CA Clarity PPM user.

You can use this parameter to filter data by the user name to allow users to view global, user-specific information from the Xcelsius visualization.

Connection Method: Web Service Connection and QaaWS

Required: No

Flash Variable Name: Must match the Flash Variable name defined in Xcelsius.

Clarity Web Service URL

Maps the Web Service URL when you use the CA Clarity PPM Web Service connection method to access CA Clarity PPM web services.

Connection Method: CA Clarity PPM Web Service Connection

Required: When using the same Xcelsius visualization as-is on multiple CA Clarity PPM servers. Provide either the Web Service URL or the name of the server which hosts your web services.

Flash Variable Name: Must match the Flash variable name defined in Xcelsius.

Example:
```
http://<servername>/niku/xog
```

Language

Identifies the language preference of the logged in CA Clarity PPM user. The user can determine the language associated with the Xcelsius visualizations using the account settings page.

Connection Method: CA Clarity PPM Web Service Connection and Query as a Web Service

Required: No

Flash Variable Name: Must match the Flash variable name defined in Xcelsius.

Object Parameters

Object parameters allow CA Clarity PPM object-related information to pass to the Xcelsius visualization.

For example, consider passing information about a project manager to the Xcelsius visualization. To do that, create an object parameter in the interactive portlet that selects the Project object and Manager field.

Instance types

When you create the interactive portlet, you specify an Instance Type. The following Instance Type options are available:

General

> Allows the interactive portlet to embed on any CA Clarity PPM page where a portlet is included.

> For example, select General as the Instance Type from the interactive portlet page. Then select any object from the Object drop-down list.

Object

> Restricts the interactive portlet to the selected object.

Example

To use the Object instance type to restrict the portlet to a particular object:

1. Select an object, such as Resource or Project.

   For example, select Project from the Object drop down and Manager from the Field drop down.

2. Enter Proj_Mgr in the Flash Variable Name field.

   The project manager name is passed through the Proj_Mgr Flash variable to the visualization.

   If the same interactive portlet is added to the overview page, the Proj_Mgr Flash variable has an empty value. The Xcelsius visualization displays all project information regardless of the project manager.

   Object parameters support stock objects and custom objects.

Set up the QaaWS Connection to Xcelsius Visualizations

Use these steps if you are using the Query as a Web Service (QaaWS) method to establish real-time data transfers between CA Clarity PPM and the Xcelsius visualization.

Users who view Xcelsius visualizations using this method must be members of the following Business Objects security groups:

■ QaaWS Group Designer

■ CA-PPM-Reporting-Designer-User

Follow these steps:

1. In the Query as a Web Service tool, create the Query:

    a. Enter a description for the Web Service.

    b. Select a Universe.

    c. Drag and drop Universe objects and classes to create the Query.

    d. View the web query WSDL URL associated with the query you created for the interactive portlet. Make note of the URL of the query.

2. In Xcelsius, open the Data Manager and set up the web service to establish the connection with to CA Clarity PPM.

    a. Complete the WSDL URL field to specify the web service URL.

    b. Map Output Values of the Web service to the appropriate cells in the spreadsheet.

    c. Create the following Flash variables. The names used to define these Flash variables are mapped to the interactive portlet as global and object parameters.

    Session ID

    Receives the Session ID of the CA Clarity PPM user.

    Mapped to: the interactive port as the Business Objects Session ID global parameter.

    Required Name: CELogonToken

    Web Service URL

    Optional. Define if you want to use the same Xcelsius visualization as is on multiple CA Clarity PPM servers.

    Mapped to: the interactive portlet as the Business Objects Web Service URL global parameter.

    Other CA Clarity PPM information

    Optional. This can be information such as user name, user internal ID, or language.

    Mapped to: the interactive portlet as the Clarity User Name, Clarity User Internal ID, or Language global parameters, respectively.

    CA Clarity PPM object-related information

    Optional.

    Mapped to: the interactive portlet as the object parameters that you create.

    d. Link components to the embedded spreadsheet.

Add a Web Connection Definition

For either the Web Services Connection method or the Query as a Web Service connection method, create a connection definition in Xcelsius using the Data Manager. The external data connection, either the Web Service connection or Query as a Web Service, must be configured to insert data into the embedded spreadsheet. Components that use the data from the external source are then bound to the cells updated by the external connection.

The approach to connecting real-time data from CA Clarity PPM to an Xcelsius visualization can depend on the following:

- Your degree of experience with Xcelsius and Microsoft Excel spreadsheets

- Connection choices you make, such as dynamically connecting to multiple Web Service URLs, or displaying a visualization in another language

- The complexity of the visualization you design in Xcelsius

This illustration shows the Data Manager with a basic external data connection setup:
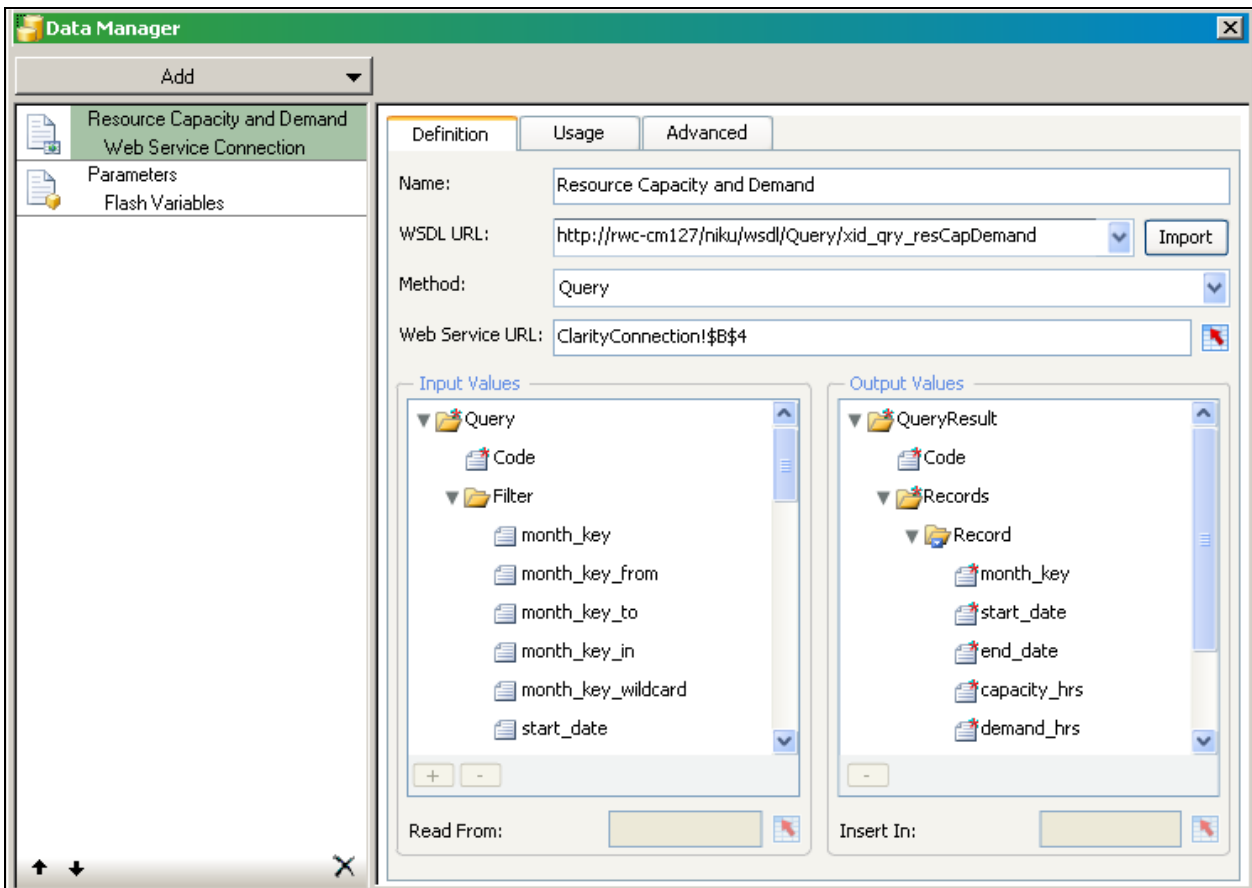
This illustration shows the corresponding, embedded spreadsheet for the web service connection:
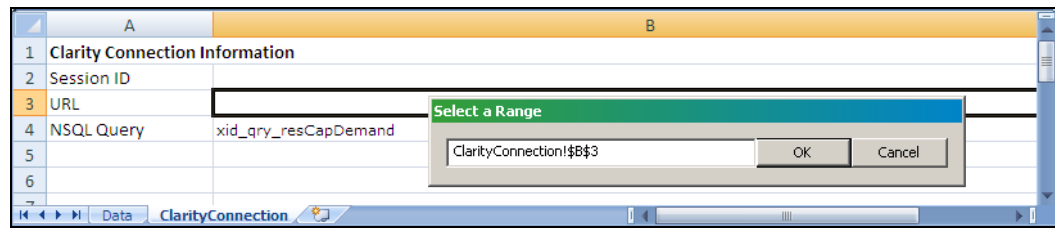
Create an external data connection for each query associated with the visualization. In addition, create one for the Flash variables that map to the global and object parameters.

Query external data connection

Enables you to link data connection and query elements to cells in the embedded spreadsheet.

Flash Variable external data connection

Enables you to create named Flash variables used in global and object parameters of an interactive portlet, such as the required global parameter, session ID.

For complete information about how to set up a data connection definition, read the *SAP BusinessObjects Xcelsius 2008 User Guide.*

The sample file *Resource Dashboard.xlf* is provided as part of the Design Files for Xcelsius Visualizations download available from CA Clarity PPM. You can open the file in Xcelsius to view the Data Manager and the embedded Excel spreadsheet.

Test the Data Connection at Design-time

After you set up the run-time connection, test the data connection from Xcelsius. Do the test before you export the Xcelsius visualization to a SWF file.

Important! Cross-domain must be enabled if you are logged in to CA Clarity PPM through a different URL than your Web Services URL.

Follow these steps:

1. Log in to CA Clarity PPM, and click About.

2. In the User information section, make note of your current session ID.

3. In Xcelsius, do the following:

   a. Create a row in the embedded spreadsheet and complete the following actions:

      ■ In cell a, add a label, such as Design-time Session ID.

■ In cell b, enter the following:

`<n0:Auth><n0:SessionID>0000000__-0z11111:22y222222x2:-3a3b3`
`333333333333</n0:SessionID></n0:Auth>`

where *0000000__-0z11111:22y222222x2:-3a3b3333333333333* is your
current session ID

Note: If you close your CA Clarity PPM session, update this cell with your
latest session ID.

b. Create a second new row in the embedded spreadsheet and complete the
following actions:

■ In cell a, add a label, such as Design-time URL.

■ In cell b, enter the web service URL.

4. In Xcelsius, save the visualization and preview it to test the connection.

If the connection is successful, you are ready to export to a .SWF file.

If the connection is not successful, recheck your data connection settings.

Add Flash Variable Definitions

Define Flash variables in Xcelsius.

For each Flash variable, create a corresponding global or object parameter for the
interactive portlet in CA Clarity PPM. At runtime, the Web Service URL passes a value
from CA Clarity PPM using the parameter to the Flash variable. The Flash variable saves
the value to a linked (bound) cell in the embedded spreadsheet. Components in the
visualization are also bound to spreadsheet cells, and the visualization data is generated
from the embedded spreadsheet.

Create the Interactive Portlet

Use the following procedure to create an interactive portlet and import the Xcelsius
visualization.

This procedure assumes you have created an Xcelsius visualization and exported it to
the Flash (.SWF) format.

Follow these steps:

1. In CA Clarity PPM, open Administration, and from Studio, click Portlets.

2. Click New Portlet and select Interactive Portlet.

3. Complete the requested information. The following fields require explanation:

    Portlet ID

    Defines a unique alphanumeric identifier for the portlet.

    Category

    Specifies the general area on which the portlet reports data.

    Instance Type

    Specifies the type of page the portlet can be placed on. If you select General, the portlet can be added to any CA Clarity PPM page. If you select an Object, the portlet can only be added to CA Clarity PPM pages associated with that Object.

    Visualization File (.swf)

    Specifies the .SWF file used for the interactive portlet content.

    Click the Browse icon to select the .SWF file. Do not enter or copy the file path.

4. Save the changes.

    The Xcelsius visualization is imported into the interactive portlet.

Create Object or Global Parameters

Interactive portlet object or global parameters define the data that is exchanged between CA Clarity PPM and the Xcelsius visualization. Your CA Clarity PPM administrator defines the Flash variables in Xcelsius while designing the visualization. The Flash variables allow the visualization to accept information from CA Clarity PPM. You use the Flash variable name when you create parameters in the interactive portlet.

Your CA Clarity PPM administrator must first create the Xcelsius visualization and the required Flash variables before you can create object or global parameters.

Important! You can delete object and global parameters from the parameters list page. Use care when deleting global and object parameters. Deleting these parameters can cause data instability in the Xcelsius visualization.

Follow these steps:

1. In CA Clarity PPM, open the interactive portlet.

2. Click Parameters.

3. Click New and select one of these:

    ■   Object Parameter

    ■   Global Parameter

4. Complete the requested information. The following fields require explanation:

Global Parameter

(Global Parameter only) Displays the selected global parameter.

Required: Yes

Object

(Object Parameter only) Displays the name of the object to which this object parameter is associated.

Field

(Object Parameter only) Specifies the field name. Values are associated with the selected object.

Required: Yes

Flash Variable Name

Defines the name for the flash variable. This name must be the same as the Flash Variable Name associated with the visualization.

For Global Parameter, BusinessObjects Session ID, displays the required value: CELogonToken

Required: Yes

Description

Defines the description for the parameter.

Limits: 240 characters

Required: No

5. Save the changes.

Chapter 3: Xcelsius Implementation Examples

This section contains the following topics:

Interactive Portlet using Web Services Connection Method

The following scenario example illustrates how you can create interactive portlets and display real-time data using the CA Clarity PPM Web Service connection method.

The Problem: Request to Analyze Resource Capacity and Demand

Human Resources Executive: William

William is a Human Resource executive for Forward, Inc. and is responsible for analyzing resource capacity and demand for the company. William wants to see the resource capacity and demand using full-time equivalent (FTE) so that he can view information centrally and decide on staffing. He wants to analyze data in CA Clarity PPM from the Resource Dashboard.

The Solution: Create an Xcelsius Visualization with Real-Time CA Clarity PPM Data

Administrator: Samantha

Samantha is a CA Clarity PPM administrator for Forward, Inc. She has received a request from William to build a dashboard that can help him analyze resource use. Samantha must use Xcelsius and CA Clarity PPM to implement an Xcelsius visualization using CA Clarity PPM Web Services.

Sample Files for this Example

The solution shown in this example uses a portion of the sample design file Resource Dashboard.xlf that comes with the download: *Design Files for Stock Xcelsius Visualizations.* The supporting xid_qry_resCapDemand query is available from the WDSL Query to create or review the NSQL used in this example.

Create the Visualization and the NSQL Query

1. In Xcelsius, Samantha designs a visualization that includes:

    – A gauge displaying the average forecasted use by FTE or by hours

    – A bar graph of capacity and demand

    The following figure illustrates the model for her visualization:
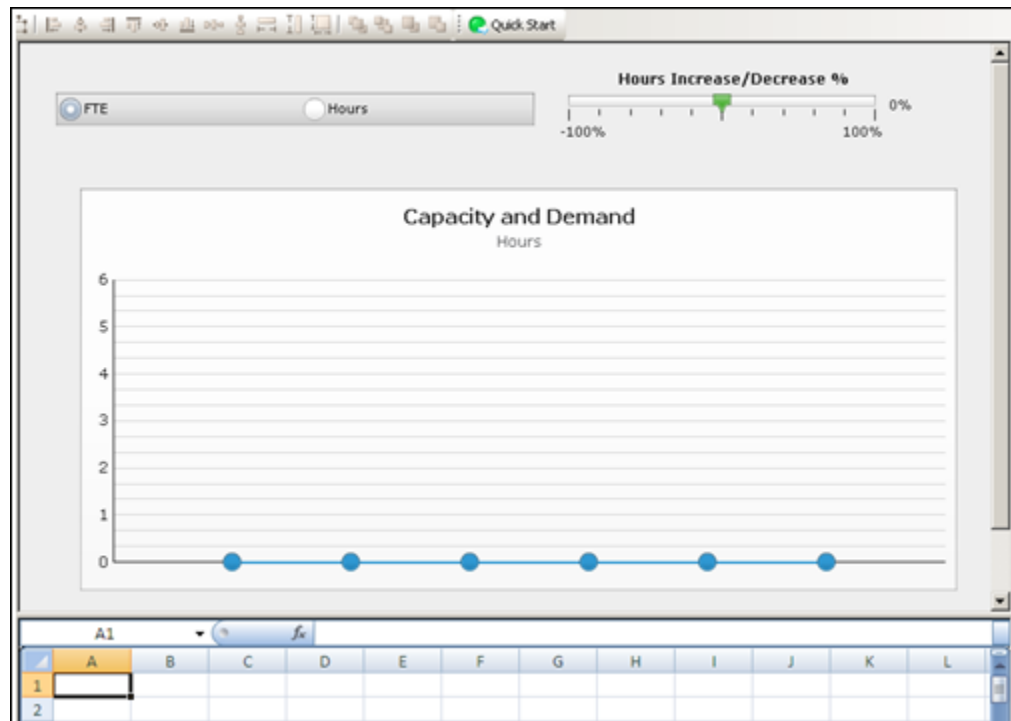
2. Samantha then maps the components in the visualization to the appropriate fields in CA Clarity PPM using the embedded Excel spreadsheet.

    For information about how to map data in Xcelsius, refer to the *SAP Xcelsius 2008 User Guide,* or see the sample design file *Resource Dashboard.xlf*.

3. In CA Clarity PPM, Samantha creates a query that defines the SELECT statements for the data source. The query also defines the SECURITY clause to restrict user access to the data. She names the query xid_qry_resCapDemand.

    The following illustration shows an abbreviated version of the xid_qry_resCapDemand query to demonstrate the SELECT statements and the SECURITY clause.

```
SELECT  @SELECT:DIM:USER_DEF:IMPLIED:TEAM:cal.month_key:month_key@,
        @SELECT:DIM_PROP:USER_DEF:IMPLIED:TEAM:cal.period_start_date:start_date@,
        @SELECT:DIM_PROP:USER_DEF:IMPLIED:TEAM:cal.period_end_date:end_date@,
        @SELECT:DIM_PROP:USER_DEF:IMPLIED:TEAM:
                ROUND(SUM(amts.avail_hrs),0):capacity_hrs@,
        @SELECT:DIM_PROP:USER_DEF:IMPLIED:TEAM:
                ROUND(SUM(amts.alloc_hrs),0):demand_hrs@,
        @SELECT:DIM_PROP:USER_DEF:IMPLIED:TEAM:
                ROUND(SUM(amts.avail_hrs)/stdcal.avail,2):capacity_fte@,
        @SELECT:DIM_PROP:USER_DEF:IMPLIED:TEAM:
                ROUND(SUM(amts.alloc_hrs)/stdcal.avail,2):demand_fte@,
        @SELECT:DIM_PROP:USER_DEF:IMPLIED:TEAM:stdcal.avail:month_hrs@
FROM  SRM_RESOURCES r
INNER JOIN PRJ_RESOURCES prjr ON r.ID = prjr.prid
LEFT OUTER JOIN SRM_RESOURCES rl ON prjr.prprimaryroleid = rl.ID
INNER JOIN NBI_DIM_CALENDAR_TIME cal ON cal.hierarchy_level = 'MONTH'
INNER JOIN ( SELECT full_name, res_id, role_id, SUM(@NVL@(avail_hrs,0)) avail_hrs,
SUM(@NVL@(alloc_hrs,0)) alloc_hrs, slice_date
        FROM (
         SELECT r.ID res_id, r.full_name, prjr.prprimaryroleid role_id, SUM(@NVL@(s.slice,0))
avail_hrs, 0 alloc_hrs, s.slice_date
            FROM   SRM_RESOURCES r
            INNER JOIN PRJ_RESOURCES prjr ON r.ID = prjr.prid  AND prjr.prisrole <> 1
            INNER JOIN PRJ_BLB_SLICES_M_AVL s ON r.ID = s.prj_object_id
            WHERE r.is_active = 1
            AND s.slice_date BETWEEN @DBUSER@.XID_DOM_FIRST_FCT(@SYSDATE@) AND
@DBUSER@.XID_DOM_LAST_FCT(DATEADD(MM,5,@SYSDATE@))
            GROUP BY r.ID, r.full_name, prjr.prprimaryroleid, s.slice_date
        UNION ALL
            SELECT r.ID res_id, r.full_name, prjr.prprimaryroleid role_id,  0 avail_hrs,
SUM(@NVL@(s.slice,0)) alloc_hrs, s.slice_date
            FROM  PRTEAM tm
            INNER JOIN SRM_RESOURCES r ON tm.prresourceid = r.ID
            INNER JOIN PRJ_RESOURCES prjr ON r.ID = prjr.prid
            INNER JOIN PRJ_BLB_SLICES_M_ALC s ON tm.prID = s.prj_object_id
            WHERE r.is_active = 1
            AND s.slice_date BETWEEN @DBUSER@.XID_DOM_FIRST_FCT(@SYSDATE@) AND
@DBUSER@.XID_DOM_LAST_FCT(DATEADD(MM,5,@SYSDATE@))
                    GROUP BY r.ID, prjr.prprimaryroleid, r.ID, r.full_name,  tm.prid, s.slice_date
                        ) A
                GROUP BY full_name, res_id, role_id, slice_date
        )  amts ON r.ID = amts.res_id AND amts.slice_date BETWEEN cal.period_start_date AND
cal.period_end_date
```

```
LEFT OUTER JOIN (SELECT r.ID res_id, SUM(s.slice) avail, s.slice_date
        FROM SRM_RESOURCES r
        LEFT OUTER JOIN PRJ_BLB_SLICES s ON r.ID = s.prj_object_id
        INNER JOIN PRJ_BLB_SLICEREQUESTS sr ON s.slice_request_id = sr.ID AND sr.request_name =
'MONTHLYRESOURCEAVAILCURVE'
        WHERE r.unique_name = 'xc_admin'
        GROUP BY r.ID, s.slice_date
        ) stdcal on stdcal.slice_date BETWEEN cal.period_start_date AND cal.period_end_date
WHERE @FILTER@
AND @WHERE:SECURITY:RESOURCE:r.id@
GROUP BY  cal.month_key, cal.period_start_date, cal.period_end_date,stdcal.avail
HAVING @HAVING_FILTER@
```

4. Samantha navigates to the CA Clarity PPM Web Services using the following URL and views the web query WDSL:

http://*<servername:port>*/niku/wsdl/Query

The following illustration shows an example of the result:
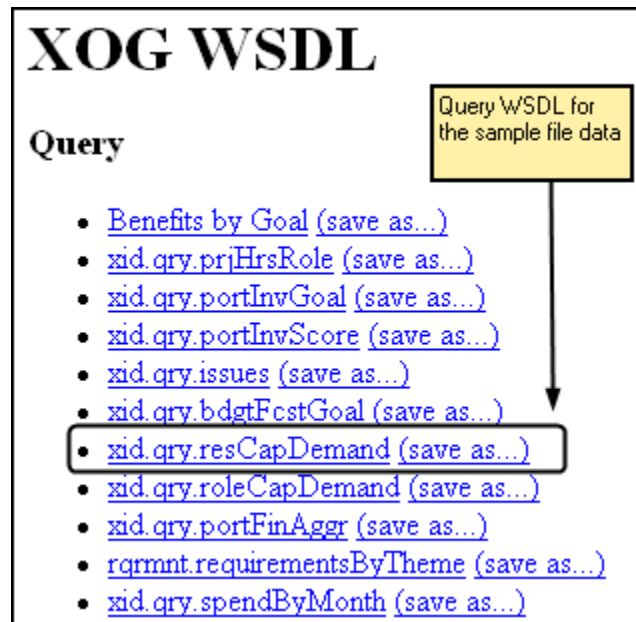
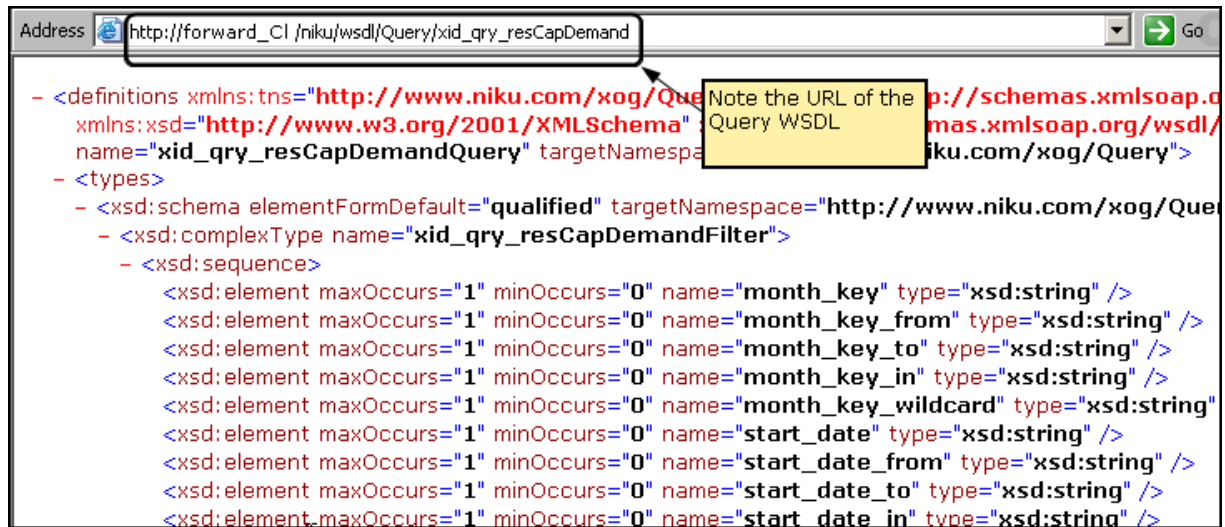5.   Samantha locates Query and selects the xid_qry_resCapDemand query.

The following illustration shows an example of the result:

6.   Samantha makes note of the query URL (also known as the WDSL URL).

Samantha works with the Xcelsius Data Manager next to link the visualization to CA Clarity PPM data.

Add the Connection Definition to Link to CA Clarity PPM Data

1. In Xcelsius, Samantha opens the Data Manager and sets up the web service to establish the data connection with CA Clarity PPM.

    The following illustration shows the completed external data settings:
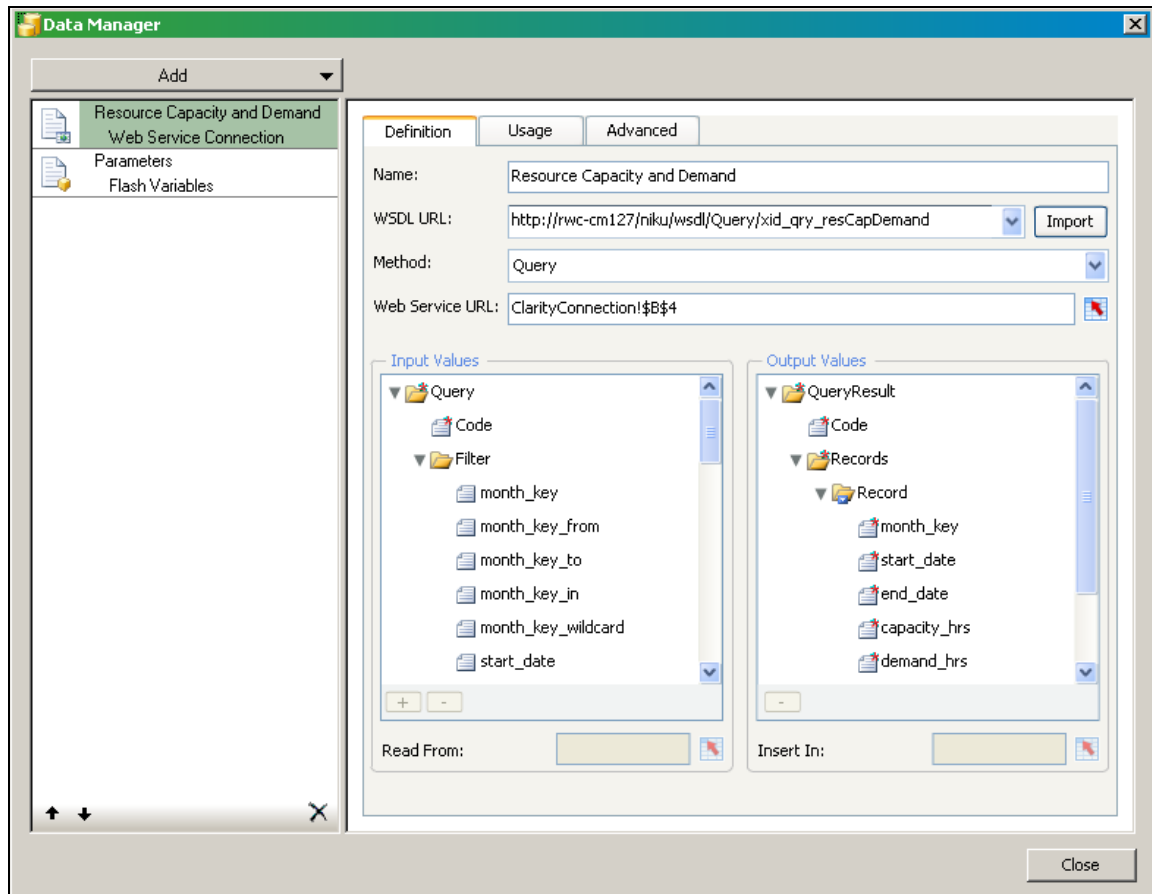
2. Samantha does the following:

    a. Adds a new Web Service Connection definition and names it: *Resource Capacity and Demand*.

    b. Enters the following WSDL URL and imports it:

        `http://forward_Cl/niku/wsdl/Query/xid_qry_resCapDemand`

        where *forward_cl* is replaced with your actual WSDL URL

    c. Selects the Method: Query.

        The method selected changes the attributes that appear in the Data Manager.

    d. Leaves the Data Manager open.

    The next series of steps involve linking or binding data to cells in the embedded spreadsheet.

3. In the embedded spreadsheet, Samantha creates two worksheets and names them:

    ■   ClarityConnection. Used to link values related to the Web Services connection, such as the Web Service URL and NSQL.

    ■   ResCapDemand. Used to link values associated with the real-time data that populates the visualization components.

4. In the ClarityConnection worksheet, Samantha does the following:

    a. Creates labels in the following cells, but does not enter a value in the corresponding B column:

        −   cell A1: Clarity Connection Information

        −   cell A2: Design-time Session ID

        −   cell A3: Design-time URL

        −   cell A4: Run-time Session ID

        −   cell A5 URL

        −   cell A6: NSQL Query

    b. In the Data Manager, Samantha clicks the Cell Selector to the right of the Web Service URL field.

    c. In the Select a Range window, Samantha elects cell B5 and clicks OK.

        This cell range is added to the Web Service URL field. In a later step, Samantha creates a Flash variable (for example, pSessionID). She also creates a global parameter with the same name in the interactive portlet. At runtime, these combined settings allow the Web Service URL to pass a value from CA Clarity PPM using the Global parameter to the Flash variable. The Flash variable saves the value to the linked cell.

    d. Leaves cell B4 for the run-time session ID empty.

        In a later step, she links the SOAP header to the session ID.

5. Using the same cell linking technique used for the Web Services URL, Samantha does the following:

    a. In Data Manager, links *Code* (from the Input Values section) to cell B6 of the ClarityConnection worksheet.

        This action links the query to the visualization.

    b. In the ClarityConnection worksheet cell B6, enters the name of the following query:

        `xid_qry_resCapDemand`

        The value of this cell is manually entered because once a query is created, it is absolute.

c. In the ClarityConnection worksheet cell B2, enters an active CA Clarity PPM session ID in the following SOAP format:

<n0:Auth><n0:SessionID>0000</n0:SessionID></n0:Auth>

where *0000* is her current Clarity Session ID.

Note: To get your current session ID, go to the About page in CA Clarity PPM, and copy and paste the session ID.

This information will enable you to test the real-time CA Clarity PPM data connection from Xcelsius.

d. In the ClarityConnection worksheet cell B3, enters the Web Service URL.

This link is used at design-time to preview and test the connection from Xcelsius.

The one remaining cell to define is the Run-time session ID. This cell is addressed in a later step when creating Flash variables.

In the next set of steps, Samantha selects the data and selects a range of records. The range varies depending on the number of fields in the query and the number of records expected from the output.

Best Practice: In the worksheet, reserve the first column and first row for labels. To optimize performance, keep the output to 20 rows.

6. Samantha does the following to define the destination output for the data:

a. (Optional) In the resCapDemand worksheet, creates the column labels and creates a border and background to identify the perimeter of the data range. For this example, the cell range is B2 to I21 (eight columns and 20 rows).

b. In the Data Manager, links *Record* (from the Output Values section) using the Cell Selector to a range of cells in the resCapDemand worksheet.

7. In the Data Manager, Samantha does the following:

a. On the Usage tab, selects the Refresh Before Components Are Loaded option.

b. On the Advanced tab, links the SOAP Header to cell B2 on the ClarityConnection tab.

Samantha creates Flash variables next.

Set Up Flash Variables

Samantha is ready to create the Flash variables that map to the global and object parameters in the interactive portlet.

1. In the Data Manager, Samantha adds a new Flash Variable definition and names it *parameters*.

2. Samantha selects CSV as the Variable Format.

3. Samantha creates the required session ID Flash variable and does the following:

   – Enters the Name: pSessionID.

   – Links to the Session ID cell B4 in the ClarityConnection worksheet.

   This named Flash variable is mapped to the interactive portlet as the Clarity Session ID in SOAP Header global parameter.

4. Samantha creates the option Web Service URL Flash variable and does the following:

   – Enters the Name: pWSURL.

   – Links to the URL cell B5 in the ClarityConnection worksheet.

   This named Flash variable is mapped to the interactive portlet as the Clarity Web Service URL global parameter.

Note: The Flash variable (*pLangID*) shown in the preceding figure is present in the sample design file but is not covered in this example. The Flash variable has a corresponding global parameter in the sample design file which is also called pLangID. This corresponding global parameter is designed to manage languages. For information about handling this parameter, see the Xcelsius product documentation. You can see one implementation of the parameter by viewing the downloaded sample file in Xcelsius.

Samantha is now ready to test the connection between CA Clarity PPM and Xcelsius by viewing the data.

Test the Visualization and Create an Interactive Portlet

Samantha now views the visualization in Xcelsius to make certain the connection is good and data is moving from CA Clarity PPM to Xcelsius. When the test is done, Samantha can create the interactive portlet that displays the visualization in CA Clarity PPM

1. In Xcelsius, Samantha selects Preview from the File menu.

    She sees that information is populating the bar graph and determines that the visualization is working exactly as designed.

2. From the File menu, Samantha selects Export, and then selects Flash (SWF).
    She indicates a place on her computer where the SWF file (capDemand.swf) is to be stored.

3. In CA Clarity PPM, Samantha creates the Resource Capacity and Demand interactive portlet using Studio and imports the capDemand.swf file.

4. Samantha defines the following global parameters for the new interactive portlet with the same names as the Flash variables created in Xcelsius:

General	Parameters	Access to this Portlet ▼

Portlet: Resource Capacity and Demand - *Interactive Portlet Parameters List*

☐	Flash Variable Name	Parameter Type	Object	Field/Name	Description
☐	pSessionID	Global		Clarity Session ID in SOAP Header	
☐	pWSURL	Global		Clarity Web Service URL	

Displaying 1 - 2 of 2

New ▼	◇ Delete	Continue	Return

5. In Studio, Samantha adds the new interactive portlet to a Resource dashboard.

6. Samantha opens the Resource dashboard and looks at the data in the new interactive portlet.

7. Samantha sends William a message that he can open the Resource dashboard and see the data he requested.

The Result: Performing the Analysis Based on the Xcelsius Visualization

Executive: William

William logs in to CA Clarity PPM and goes to the Resource dashboard. William sees the interactive portlet displaying visual information. Bars on the graph show the FTE developer role demand by month. The blue horizontal line shows the capacity for that role. The FTE percent increase/decrease is currently set at zero percent.
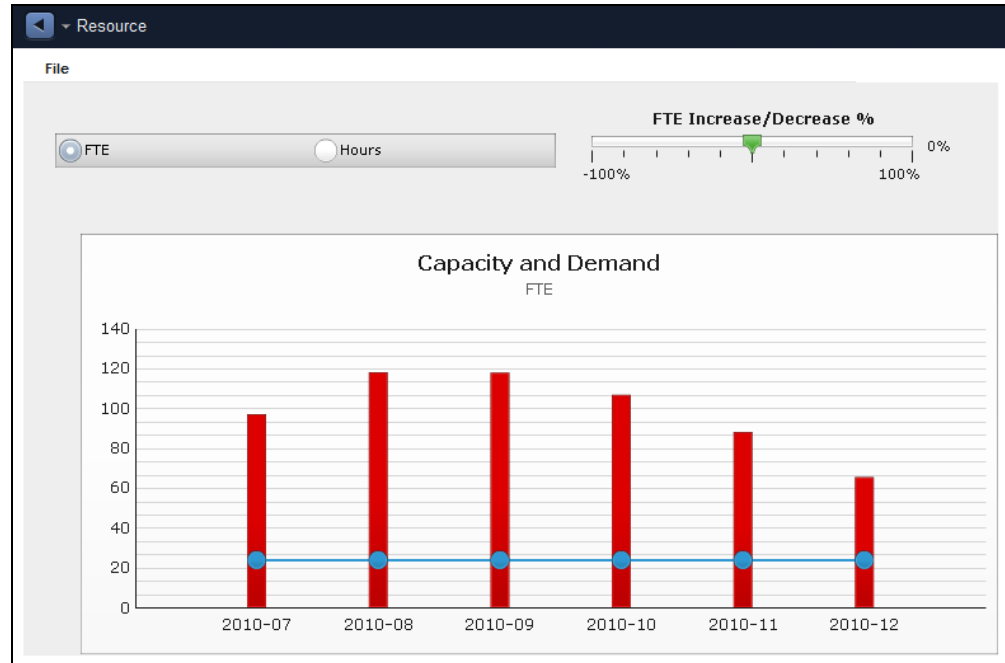
Based on the information displayed in the Capacity and Demand graph, William can see that the role demand per month exceeds the role capacity. Using the gauge, William performs a what-if scenario by increasing the FTE percent to see if resolves the staffing issue. Based on the analysis, William contacts the project manager and recommends hiring five developers and reassigning five developers from nonstrategic projects.

Example: Using an Object Parameter to Filter Portfolio Investments

Suppose that Samantha, the administrator responsible for designing Xcelsius visualizations and adding them to interactive portlets, wants to create an Xcelsius visualization that can filter portfolio investments for analysis.

Samantha creates a prototype, identifies the CA Clarity PPM data needed, and determines that the portfolio ID can be used to filter portfolio investments. Samantha designs an Xcelsius visualization for portfolios that has the following:

- A filter to select investments for the analysis

- A set of charts to display the data

Samantha sets up the Xcelsius visualizations for real-time CA Clarity PPM data exchanges using the CA Clarity PPM Web Services connection method. She creates a Flash variable named pPortfolioID, which is used to filter the data in the visualization based on the portfolio ID. The exact Flash variable is mapped to the interactive portlet using an object parameter. She exports the visualization as a .SWF file.

In CA Clarity PPM, Samantha does the following from Studio:

1. Creates an interactive portlet named Portfolio.

2. Creates global parameters that maps to the Flash variable names created for the CA Clarity PPM Web Services connection.

3. Creates an object parameter based on the Portfolio object and maps it to the Flash variable named pPortfolioID.

4. Defines the object parameter based on the following properties:

5. Adds the interactive portlet to the Portfolio object.

Users who have access to the Portfolios menu can view the Portfolio interactive portlet and analyze select investments in their portfolio.

Appendix A: Stock Interactive Portlets

This section contains the following topics:

Design Files for Stock Xcelsius Visualizations

Stock Xcelsius visualization design files (.xlf files) are provided to help you get started with Clarity and Xcelsius. You can use .xlf files as they are without modification, or you can use them as a starting point for your own designs.

You must have the following access right to download these sample files:

Software Download - Xcelsius

Required to download Xcelsius.

Type: Global

Follow these steps:

1. In CA Clarity PPM, open Home, and from Personal, click Account Settings.

2. Click Software Downloads.

3. Click the Download link next to *Design Files for Stock Xcelsius Visualizations* and save the .zip file to a location on your computer.

4. Navigate to the DesignFiles_for_StockXcelsiusDashboards.zip file and extract the contents to a designated folder. For example:

   ```
   c:\Xcelsius\ClaritySamples
   ```

The .zip archive contains:

- Portfolio Dashboard.xlf.

  Corresponds to the Portfolio stock interactive portlet.

- Resource Dashboard.xlf.

  Corresponds to the Resource stock interactive portlet.

5. Open these files in Xcelsius to review setup procedures and to test web service connections.

Best Practice: Always make copies of the stock Xcelsius dashboards, visualization files, and queries before applying any customizations. Customize the copied versions. CA provides periodic updates to the stock dashboards that overwrite any changes you make directly to them.

Stock Queries Used in Xcelsius Dashboards

The queries shown in the following table are used in the stock Xcelsius dashboards.

Query	ID
Budget and Forecast by Goal - v13	xid.qry.bdgtFcstGoal
Investment Approval Status - v13	xid.qry.invApprSts
Issues - v13	xid.qry.issues
Project Hours by Role - v13	xid.qry.prjHrsRole
Project Information - v13	xid.qry.prjInfo
Risks - v13	xid.qry.risks
Spending Plan by Month - v13	xid.qry.spendByMonth

Resource Planning Portlet

The interactive Resource portlet contains Xcelsius visualizations with multiple components. The visualizations help you identify resource forecasted utilization and also the capacity and demand of the roles in the next six months.

■ The gauge component measures the forecasted resource utilization.

■ The column graph compares demand and capacity by month.

■ The pie chart shows capacity by role and demand by role. This same information is displayed in the list, except it displays incremental cost information.

■ The grid component displays the capacity and demand for a role for the next six months. Incremental cost in the grid displays the increase or decrease in cost when the FTE/hours slider is increased or decreased respectively.

Prerequisites

■ The following must exist in CA Clarity PPM:

– Entities, departments, fiscal periods

– Location OBS

– Roles

– Projects

■ Resources must be:

– Financially enabled

– Associated with roles

– Added to projects

– Assigned project tasks

■ Projects must be:

– Financially enabled

– Associated with tasks

– Associated with a rate source

■ The following jobs must be run to display data in the portlets:

– Update Business Objects Report Tables

– Cost Matrix Extraction

– Time Slicing

■ Add this dashboard to a tab on the resource planning page.

The Resource portlet displays the following information:

Average Forecasted Utilization

Displays the utilization of roles in an organization.

Role Capacity/Demand

Displays the total capacity in percentage. Each pie segment represents the total capacity and demand for a role.

Capacity and Demand

Displays the total capacity and demand for all roles.

Capacity and Demand by Role

Displays the total capacity and demand for each role for six months starting with the current month. You can replace a role with resources that can complete the work.

The following columns display on the Capacity and Demand by Role chart:

Role

Displays the roles associated for this project.

Incremental Cost

Displays the increase or decrease in cost when FTE or hours are increased or decreased respectively. The values are taken from the cost matrix.

Capacity

Displays the total number of available hours for the associated resource.

Demand

Displays the total number of assigned or allocated hours for the associated resource.

Remaining Capacity

Displays the difference between the total demand and the total capacity for six months for all investments.

Portfolio Portlet

The interactive Portfolio portlet contains Xcelsius visualizations for a selected portfolio.

Prerequisites

Run the following jobs:

- Time Slicing

- Datamart Extraction

- Datamart Rollup - Time Facts and Time Summary

- Rate Matrix Extraction

Add the interactive portlet to a tab on a Portfolio page layout using one of the following techniques:

From Studio:

1. Add a new tab to any Portfolio Page Layout.

2. Add the Xcelsius interactive dashboard portlet to the tab content.

3. Publish the Portfolio Page.

4. Assign the Portfolio Page Layout to a Portfolio.

Personalize an existing portfolio layout:

1. With the portfolio open, navigate to the tab, and click the Personalize icon, or the Manage Tabs icon.

2. Add the Xcelsius interactive dashboard portlet to the tab content.

3. Save the changes.

View Investment Information

Follow these steps:

1. Open the portfolio and navigate to the Xcelsius Dashboard tab.

   Note: Navigation depends on how you or the CA Clarity PPM administrator configures this portlet.

2. In the left pane, select the investments to factor into the analysis.

3. Move selected investments to the right or left pane by clicking the appropriate arrow.

4. Click Update.

5. Click Filter.

Portfolio Dashboard

Use Portfolio Dashboard to analyze the impact to your portfolio by adding and removing investments from the dashboard.

Prerequisites

The following must exist in CA Clarity PPM:

- Projects that are activated, approved, and financially enabled

- Project cost plans

- Project issues and risks

- Posted project costs

- Project baselines

- Portfolio. Add the projects as individual investments to the content page in the portfolio.

The dashboard displays information about the portfolio. The following fields require explanation:

Approved Investments Budget

Displays the approved investment budget for all investments in the portfolio.

Cost Variance

Displays a stoplight that shows a view of a portfolio performance.

Values:

- Green. Approved investment's planned cost is less than that of the portfolio.

- Red. Approved investment's planned cost is greater than that of the portfolio.

Budget/Forecast by Goal

The Budget/Forecast by Goal displays a column chart. Goals for all investments for a portfolio are represented in the Y-axis, and budget and forecast amounts from the cost plan are represented in the X-axis.

Balance

The Balance portlet displays a bubble graph that shows how the score of each investment balances between corporate alignment and the finish date. Investments use three factors when scoring; business alignment, cost, and risk. For example, if you defined a budget for a portfolio for this year only, its costs restrict to this year. In addition, changing the planned cost of an investment changes its bubble size.

The portlet displays information about investments. The following field requires description.

Alignment Score

Investments appear on the graph somewhere between good and poor according to their alignment with business goals. An investment with a low y-coordinate (distance from the origin) lies somewhere within the red zone on the graph. Investments move up the graph vertically based on their business alignment scores.

Values: Bubble colors display the risk color

- Green (65 and 100). Investment is well aligned.

- Yellow (35 and 64). Investment is average aligned.

- Red (0 and 34). Investment is poorly aligned.

- White. Alignment data is undefined.

Investment Financial Grid

The Investment Financial Grid tab on the portfolio dashboard page displays all the investments that you have access to and the ones that match the filter settings that you selected.

The tab displays information about investments. The following fields require explanation.

Investment

Displays the name of the investment in the drop-down. Click an investment name to view the detailed properties for that investment.

Goal

Defines the goal of this project.

Values: Cost Avoidance, Cost Reduction, Grow the Business, Infrastructure Improvement, or Maintain the Business.

Alignment

Displays how well the investment aligns to the organization's business goal. The higher the value, the stronger the alignment. This metric is used in portfolio analysis when you use comparable business alignment criteria across all portfolio investments.

Values:

- Green (65 and 100). Investment is well aligned.

- Yellow (35 and 64). Investment is average aligned.

- Red (0 and 34). Investment is poorly aligned.

- White. Alignment data undefined.

Risk

Displays a stoplight that helps you assess the risk of a project. The project total risk score determines the color of the stoplight, including:

Values:

- Green (0 to 33). Project is low risk.

- Yellow (34 to 68). Project is medium risk.

- Red (68 to 100). Project is high risk.

- White. Risk data undefined.

Planned Cost

Defines the amount of money available for investments in this project. This information is important when planning a portfolio because it helps you decide how much more money you need to spend on an investment.

Actual Cost

Displays the actuals for the entire project (the sum of all actuals posted for the investment). Like Planned Cost, this information is important when planning a portfolio. Actual Cost helps you decide how much more money you need to spend on an investment.

Remaining Cost

Displays the difference between the planned costs and the actual costs.

Role Allocation Demand

Displays the total effort required to complete the investment tasks.

Role Actuals

Displays the aggregated total actuals of all the resources and roles irrespective of their investment role for each investment.

Remaining Role Allocation

Displays the aggregated total remaining allocation value for all resources and roles.

Project Status Portlet

Use the Project Status Portlet to analyze a single project.

Prerequisites

The following must exist in CA Clarity PPM:

- Projects that are activated, approved, and financially enabled.

- Project cost plans.

- Project issues and risks.

- Posted project costs.

- Project baselines.

- Add the portlet to the project Dashboard tab on any project page layout.

Information Displayed

Manager

Specifies the manager of the investment.

Start

Displays the start of the investment.

Finish

Displays the end of the investment.

Baseline Finish

Displays the baseline finish date.

Status

Displays a graphical representation of the status. For example, if the status is "Approved," the visual representation is a green stoplight. The selection is displayed as a stoplight symbol when saved.

Values: Red, Yellow, and Green

Investment Allocation Hours by Role

Displays the roles assigned for an investment in hours.

Spending Plan by Month

Displays the cost plan for the month.

Schedule Variance

Displays the difference between the baseline finish and the finish dates. If there is no baseline, the variance is the current date minus the finish date.

Issues

Displays the issue name, status, and priority.

Values:

- Green. No high or medium priority issues exist.

- Yellow. Medium priority issues exist.

- Red. High priority issues exist.

- White. Issue status not defined

Risks

Displays the risk name, status, and priority.

Values:

- Green (0 to 33). Project is low risk.

- Yellow (34 to 68). Project is medium risk.

- Red (68 to 100). Project is high risk.

- White. Risk data is undefined.

Buttons

Investment

Navigates to the properties page.

Issues

Navigates to the Issues list for the project.

Risks

Navigates to the Risks list for the project.

Investment Overview Dashboard

Use the Investment Overview Dashboard to analyze your investments. You can select from the following filter criteria to determine the investments that appear in the Selection drop-down field on the dashboard:

- Project Manager

- Status (approved or unapproved)

- Active

- Investment Type

Prerequisites

The following must exist in CA Clarity PPM:

- Projects that are activated, approved, and financially enabled

- Project cost plans

- Project issues and risks

- Posted project costs

■   Project baselines

Suggested Use

■   Add this dashboard to a tab on the Overview page layout. For example, create a tab named Investment Overview.

Information Displayed

Investment

Displays the name of the investment. Click an investment name to view the detailed properties for that investment.

Manager

Defines the manager of the investment.

Start

Displays the start of this particular investment.

Finish

Displays the end of this particular investment.

Baseline Finish

Displays the baseline finish date.

Status

Displays a graphical representation of the status. For example, if the status is "Approved," the visual representation of the status is a Green stoplight. The selection is displayed as a stoplight symbol when saved.

Values: Red, Yellow, and Green.

Investment Allocation Hours by Role

Displays the roles assigned for an investment in hours.

Spending Plan by Month

Displays the cost plan for the month.

Schedule Variance

Displays the difference between the baseline finish and the finish dates. In the absence of baseline, it is the current date minus finish date.

Issues

Displays the issue name, status, and priority.

Values:

- Green. No high or medium priority issues exist.

- Yellow. Medium priority issues exist.

- Red. High priority issues exist.

- White. Issue status not defined.

Risks

Displays the risk name, status, and priority.

Values:

- Green (0 to 33). Project is low risk.

- Yellow (34 to 68). Project is medium risk.

- Red (68 to 100). Project is high risk.

- White. Risk data undefined.

Buttons

Investment

Navigates to the investment in CA Clarity PPM.

Issues

Navigates to the Issues list for a project.

Risks

Navigates to the Risks list for a project.