

Oracle
Construction Intelligence Cloud Analytics
P6 EPPM Cloud Application Setup Guide

December 2023



Oracle Construction Intelligence Cloud Analytics P6 EPPM Cloud Application Setup Guide

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Overview

To analyze P6 EPPM data in Construction Intelligence Cloud Analytics, as a first step, you need to port P6 data from select projects into CIC Analytics.

To ensure the current data is ready for CIC Analytics, you will need to:

- 1) Configure settings for each project
For more details, see **Configuring P6 EPPM Projects** (see "**Configuring P6 EPPM Projects for CIC**" on page 11).
- 2) Run P6 EPPM publication services to prepare the data for CIC Analytics.
For more details, see **Publishing P6 Projects** (on page 21).

This guide describes how to accomplish the above objectives.

For a high-level perspective of where you are in the setup process, see **Roadmap for Setting Up CIC Analytics** (on page 6).

Audience

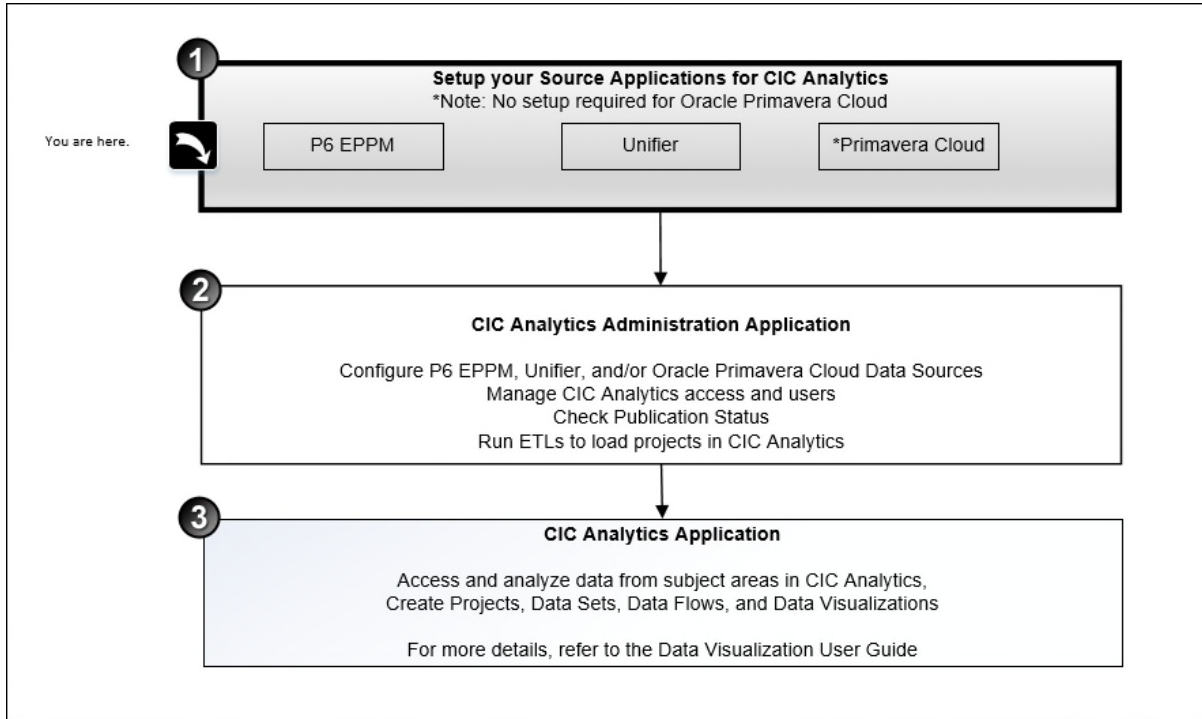
P6 EPPM application administrators should use this document.

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Roadmap for Setting Up CIC Analytics

This roadmap provides an overview of the applications you need to setup to display data from the source applications supported by CIC Analytics.



Complete the following sequence to set up the required applications to view your data in CIC Analytics:

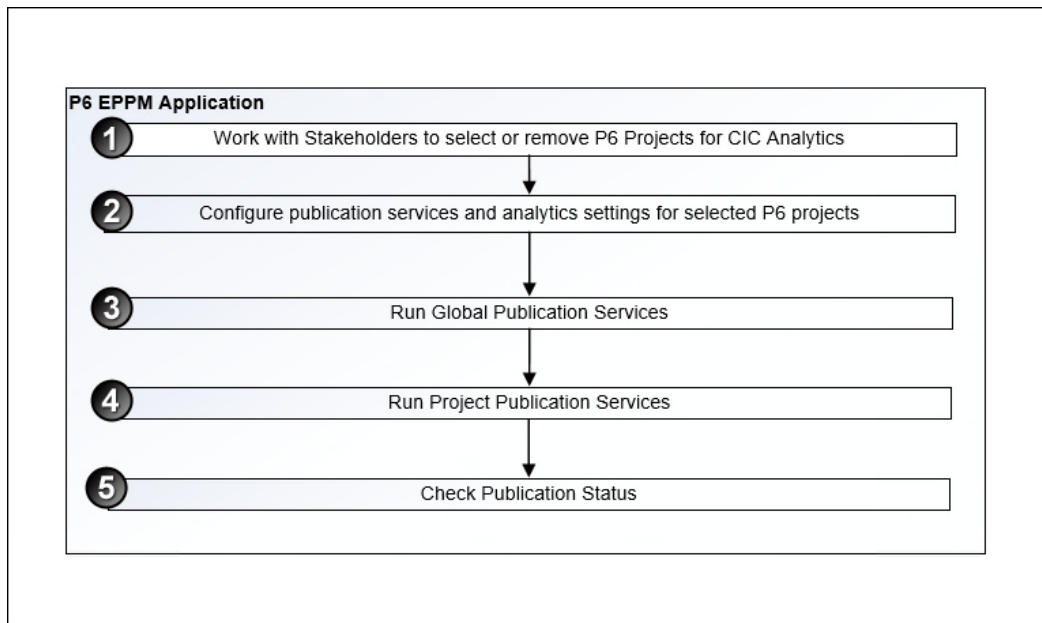
- 1) Configure P6 EPPM application to prepare the data that will be sent to CIC Analytics as documented in this guide.
- 2) Configure CIC Analytics administration application to set up P6 data sources, manage users, and run ETLs to load data into CIC Analytics.
- 3) Access and use CIC Analytics to analyze and discover insights that drive business goals for your organization.

How to Use This Guide

To successfully configure P6 EPPM for CIC Analytics, complete the task sequence outlined in the *Roadmap for Configuring and Publishing P6 EPPM Projects* (on page 9).

Roadmap for Configuring and Publishing P6 EPPM Projects

Use the following roadmap to configure and publish P6 projects for CIC Analytics.



To configure P6 EPPM projects for CIC Analytics:

- 1) Work with key stakeholders in your organization to identify P6 projects to be made available in CIC Analytics.

Note: If you are also licensed for CIC Advisor, then all projects enabled for publication in P6 are included in CIC Advisor and CIC Analytics.

- 2) For the identified P6 projects, configure settings for history data, publication services and analytics settings. For more details, see **Enabling History and Publication Services Settings for P6 Projects** (on page 12).
- 3) Run global publication services in P6 EPPM to prepare global data for CIC Analytics. For more details, see **Enabling Automatic Publishing of P6 Global Data** (on page 25) or **Manually Publishing P6 Global Data** (on page 27).
- 4) Run project publication services in P6 EPPM to prepare project data for CIC Analytics. For more details, see **Enabling Automatic Publishing of P6 Project Data** (on page 26) or **Manually Publishing P6 Project Data** (on page 28).
- 5) Check the publication status in after the publishing process is completed.

Configuring P6 EPPM Projects for CIC

Construction Intelligence Cloud relies on data from P6 EPPM as a data source. To ensure current data is ready for CIC, you will need to configure settings for each project and then run P6 publication services to load data into P6 Extended Schema for the next ETL run in CIC.

This chapter describes how to configure P6 projects for CIC.

You can also click the Video and watch how to configure P6 for Analytics.

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Configuring User Access for P6 Analytics Module

Users who will be given access to view projects in CIC must be given access to the P6 Analytics module in P6 EPPM.

To configure user access to the P6 Analytics module:

- 1) Sign in to P6 EPPM with administration privileges.
- 2) Click **Administration**.
- 3) On the Administration navigation bar, click **User Administration**.
- 4) On the **User Administration** page, click **Users**.
- 5) On the **Users** page, select a user.
- 6) In the **Module Access** detail window, select **P6 Analytics** option to grant access to the selected user.
- 7) On the **Users** page, click **Save**.

Selecting P6 Projects for CIC for the First Time

When you receive Oracle's Welcome email for CIC, an initial ETL has already been processed with *all* published P6 projects loaded into CIC. Therefore, work with the key stakeholders in your organization to identify:

- ▶ projects that need to be removed from CIC

- ▶ projects that need to be visible in CIC

For example, your organization has 35 ongoing projects. The initial load will include all 35 projects in CIC. However, your organization may want to draw insights for only the top 10 high priority projects. Therefore you will need to remove the remaining projects from being loaded to CIC.

To remove P6 projects from being selected for CIC:

- 1) Sign into P6 as a user.

`http://<host>:<port>/p6/action/login`

Note: Ensure you have the following security privileges: *Edit Project Details Excepts Costs/Financials* project security privilege, *Add/Edit/Delete Global Activity and Assignment Layouts, Views and Filters* global security privilege.

- 2) Click **Projects**.
- 3) On the **Projects** navigation bar, click **EPS**.
- 4) On the **EPS** page:
 - a. Click the **Views** list and select a view.
 - b. In the EPS / Project Grid, deselect the **Enable Publication** option to remove each project from CIC.

Note: If your organization is a customer of Primavera Analytics also, then any P6 projects deselected for CIC will also not be available for Primavera Analytics.

- 5) Run publication services in P6 EPPM to publish only the selected projects to P6 Extended Schema for an ETL upload to CIC.

For more details, see [Enabling Automatic Publishing of P6 Project Data](#) or [Manually Publishing P6 Project Data](#).

Enabling History and Publication Services Settings for P6 Projects

In P6, you can enable the following settings to determine what type of data is to be captured in CIC:


- ▶ define history level and interval settings per project to configure the type of data stored in CIC and for a specific time interval
- ▶ establish the frequency of data being uploaded to the data warehouse
- ▶ enable publication settings for each project to ensure the data is picked up by P6 EPPM Publication Services

You can also click the Video and watch how to configure P6 for Analytics

To configure the above settings:

- 1) Sign in to P6 EPPM.

Note: A user must have the **Edit Project Details Except Cost/Financials** profile to edit the history settings.

- 2) Click **Projects**.
- 3) On the **Projects** navigation bar, click **EPS**.
- 4) On the **EPS** page:
 - a. Select a project.
 - b. From the **Actions**  menu, select  **Set Project Preferences**.
- 5) In the **Project Preferences** pane, click **Analytics & Services**.
 - a. In the **Publication** section, select the **Enable Publication** option to ensure the project is selected for publication services runs.

Tip: You can also expand an EPS node on the **EPS** page and then select the **Enable Publication** option for multiple projects belonging to the node.

- b. In the **Analytics** section:
 1. Choose one of the following for **History Level**:
 - **None** (default)
 - **Project**
 - **WBS**
 - **Activity (Daily)**
 - **Activity (Weekly)**
 - **Activity (Monthly)**
 1. Choose one of the following for **History Interval - Project or WBS**:
 - **Month** (default)
 - **Week**
 - **Quarter**
 - **Year**
 - **Financial Period**

Note: If you select **Activity (Daily)** or **Activity (Weekly)** or **Activity (Monthly)** as the **History Level**, this will automatically set the **History Interval** for Activity and Resource Assignment history to the corresponding activity time interval. Use caution when selecting which projects you choose to have daily history captured for as this can affect the amount of time and the volume of data processed when running the ETL process. You still need to set the history interval level when selecting Activity level history, which will apply to project and WBS-level history only.

1. Select one of the following values from the **Data Warehouse Update Frequency (ODI Only)** list:
 - *Scheduled*: When the ETL runs and the project data is pulled into analytics

- *Immediate*: The data is extracted any time a change is identified in the project.

Note: Immediate project updates are focused more on the specific scheduling areas of the project – costs, dates, durations. They are geared towards outages or scenarios where live updates are required for short length projects. Immediate project updates should be used sparingly only for a small select group of projects. Not all projects should be set to *Immediate*, this can have side effects on update frequency and performance. If a project is completed *Immediate* updates should be turned off.

- 6) Click **Save** to continue working or click **Save and Close** if you are finished.
- 7) Publishing P6 EPPM Projects.

Enabling Slowly Changing Dimensions for P6 Projects

Slowly changing dimensions (SCDs) or Type 2 dimensions are used when it is important to preserve the historic context of facts in CIC Analytics. SCDs can be enabled for each field.

Submit a service request to Oracle Support if you want to:

- ▶ Enable or disable SCDs for a field or
- ▶ Delete SCD data for an effective date or a specific date range

Adding Additional Financial Periods

To add additional financial periods, submit a service request to Oracle Support.

Configuring P6 EPPM Projects for Burn Down Calculations

To setup projects for burn down calculations in CIC Analytics complete the following tasks in P6 EPPM:

- 1) ***Adding Project-Level UDFs for Burn Down Calculations*** (on page 14)
- 2) ***Selecting Projects for Burn Down Calculations*** (on page 15)
- 3) ***Setting the Date/Time Period for Burn Down Calculations*** (on page 16)

Adding Project-Level UDFs for Burn Down Calculations

Only P6 EPPM projects can be manually included to take advantage of the Burn Down tables and functionality. This section describes how to create and configure the necessary P6 EPPM project level user-defined fields (UDFs) that the STARETL process needs to include project(s) in Burn Down.


To create the project UDFs:

- 1) Sign in to P6 EPPM with a user account that has the privilege to change enterprise data (for example, admin).
- 2) From the **Administration** menu, select **Enterprise Data**.
- 3) On the **Enterprise Data** page, expand **Projects** and select **Project UDFs**.
- 4) On the **Project UDFs** page:
 - a. Click **+ Add** to add a **sys_workdown** UDF with a **Text** data type.
 - b. Click **+ Add** to add a **sys_workdown_date** UDF with a **Start Date** data type.

Selecting Projects for Burn Down Calculations

For a project to be included in the Burn Down tables and subject area, you must configure specific project UDF and History Level settings in P6.

To select which P6 EPPM projects to include in Burn Down tables and metrics:

- 1) Sign in to P6 EPPM.
- 2) In P6, click **Projects**.
- 3) On the **Projects** navigation bar, click **EPS**.
- 4) On the **EPS** page:
 - a. Select a project.
 - b. From the  **Row Actions** menu, select **Set Project Preferences**.
- 5) In the **Project Preferences** pane, click **Analytics & Services**.
 - a. On the **Analytics & Services** page, click the **History Level** list and then select **Activity**.
 - b. In the **Project Preferences** dialog box, click **Save and Close**.
- 6) On the **Projects** navigation bar, click **EPS**.
- 7) On the **EPS** page, add the **sys_workdown** and **sys_workdown_date** UDF columns to the page.
- 8) For the projects you want to add to the Burn Down subject area:
 - a. In the **sys_workdown** column, enter *project*.
 - b. In the **sys_workdown_date** column, enter a date. This date is used as the snapshot date for comparison to actual project values. If no date is entered here, the **Project Start Date** is used.

Note: The date used for the initial Burn Down data capture is one day before the date entered for this UDF. For example, if the **sys_workdown_date** is 03/31/2022, then the STARETL process uses 03/30/2022 for the Burn Down comparison.

Setting the Date/Time Period for Burn Down Calculations

It is important that the date/time period specified in P6 EPPM under the **Administration, Application Settings, Services, Publication Period** section is later than the latest project finish for ALL project(s) that will be included for Burn Down.

For example, in P6 EPPM Publication Services settings, if you specify a start date of February 25, 2020 and the finish date is current date plus setting is two years, the finish date for all of the Burn Down/Work Planning project(s) must have a finish date before February 24, 2022. If a project extends past the finish date setting in the publication services settings, the Burn Down portion of the STARETL process generates an error.

Note: Setting a finish date range that is too long will affect the STARETL process run time. Each day the publication services are run, the finish date range also extends by one day.

Configuring Projects for Work Planning Calculations and Metrics

To set up P6 EPPM projects for work planning calculations and metrics, complete the following tasks:

- 1) **Adding Project UDFs for Work Planning** (on page 16)
- 2) **Selecting Projects for Work Planning Calculations** (on page 17)
- 3) **Setting the Date/Time Period for Work Planning Calculations** (on page 18)

Adding Project UDFs for Work Planning

You can manually include P6 EPPM projects to take advantage of the Work Planning tables and functionality.

You must create and configure the necessary P6 EPPM project-level user-defined fields (UDFs) that the STARETL process needs to include projects in Work Planning.

To add project UDFs:

- 1) Sign in to P6 EPPM.
- 2) From the **Administration** menu, select **Enterprise Data**.
- 3) On the **Enterprise Data** page, expand **Projects** and select **Project UDFs**.
- 4) On the **Project UDFs** page:
 - a. Add a **sys_workprocess** UDF with a data type of **Text**.
 - b. Add a **sys_scope_freeze** UDF with a data type of **Text**.
 - c. Add a **sys_schedule_freeze** UDF with a data type of **Text**.

Selecting Projects for Work Planning Calculations

The Work Planning subject area is designed for ongoing project work typical of routine and online maintenance projects. In these projects, planning metrics are tracked week over week and workweek metrics are tracked daily. There are specific Project UDF and History Level settings required in P6 to include a project in the Work Planning subject area.

To select the P6 EPPM projects for the work planning subject area:

- 1) Sign in to P6 EPPM.
- 2) In P6, click **Projects**.
- 3) On the **Projects** navigation bar, click **EPS**.
- 4) On the **EPS** page:
 - a. Select a project.
 - b. From the Actions _ menu, select _ Set Project Preferences.
- 5) In the **Project Preferences** dialog box:
 - a. Ensure the project is configured for publication services.
 1. In the **Project Preferences** pane, click **Services**.
 2. On the **Services** page, in the **Publication** pane, select the **Enable Publication** option.
 - b. Configure the project's History Level setting.
 1. In the **Project Preferences** pane, click **Analytics**.
 2. On the **Analytics** page, in the **History Level** list, select **Activity**.
 - c. Click **Save and Close**.
- 6) On the **Projects** navigation bar, click **EPS**.
- 7) On the **EPS** page, add the **sys_workprocess**, **sys_scope_freeze**, and **sys_schedule_freeze** UDF columns to the page.
- 8) For the projects you want to add to the Work Planning subject area:
 - a. Enter `workweek` in the **sys_workprocess** column.

Note: Use the format `T-<x>w` (where `<x>` equals the number of weeks prior to scope freeze and schedule freeze) must be followed exactly when entering the **sys_scope_freeze** and **sys_schedule_freeze** UDF values.

- b. Enter a value in the **sys_scope_freeze** column. This is a relative value for each week in a project's schedule. For example, if you enter `T-2w`, scope freeze for each week in a project is calculated as two weeks prior to the Planned Start Date of that week. Scope freeze metrics, such as Scope Freeze New or Scope Freeze Lost, are captured for each week in a project schedule from each week's calculated scope freeze date up to and including its completion.

- c. Enter a value in the **sys_schedule_freeze** column. This is a relative value for each week in a project's schedule. For example, if you enter $T-1w$, schedule freeze for each week in a project is calculated as one week prior to the Planned Start Date of that week. Schedule freeze metrics, such as Schedule Freeze New or Schedule Freeze Lost, are captured for each week in a project schedule from each week's calculated schedule freeze date up to and including its completion.

Setting the Date/Time Period for Work Planning Calculations

It is important that the date/time period specified in P6 EPPM under the **Administration, Application Settings, Services, Publication Period** section is later than the latest project finish for ALL project(s) that will be included for Work Planning.

For example, in P6 EPPM Publication Services settings, if you specify a start date of February 25, 2020 and the finish date is current date plus setting is two years, the finish date for all of the Work Planning project(s) must have a finish date before February 24, 2022. If a project extends past the finish date setting in the publication services settings, the Work Planning portion of the STARETL process will generate an error.

Note: Setting a finish date range that is too long will affect the STARETL process run time. Each day the publication services are run, the finish date range also extends by one day.

Using Graded Approach for Schedule Adherence

Graded approach to schedule adherence is a method for tracking adherence using four distinct levels of work scheduling (A, B, C, and D).

The levels of work scheduling are:

- ▶ **A (Hourly):** Used when you require the most control, adherence, and management oversight. Reasons include risk (probability safety analysis/risk assessment), personnel safety, or other significant concerns. Users must finish Level A activities within one hour of the target planned finish date.
- ▶ **B (Daily):** Used for work requiring multi-discipline coordination, significant tagouts, or risk significant work. Users must finish Level B activities on the same day as the target planned finish date.
- ▶ **C (Weekly):** Used for non-risk significant and routine work that does not require support from other work groups. Users must finish Level C activities within the week of the target planned finish date.
- ▶ **D (No Tracking):** Used for housekeeping, shop work, and other types of work that have no impact to the plant. Level D activities are considered "fill-in" work and are not tracked for schedule adherence.

For graded schedule adherence, ensure history exists for the project as of the scheduled freeze date and T-0 baseline date for the week the STARETL process will run.

During T-0 for a given week when you run the STARETL process, the Baseline Planned Finish Date (as of T-0) and the Schedule Freeze Planned Finish Date (as of schedule freeze UDF) for the activities will be captured. You can use these dates along with the assigned adherence grade to calculate the graded schedule adherence in CIC Analytics.

To configure graded schedule adherence:

- 1) Ensure you have enabled a project for Work Process.
The `sys_workprocess=WORKWEEK`, `sys_scope_freeze`, and `sys_schedule_freeze` UDFs are populated and **History Level** is set to *Activity*.
- 2) Ensure history exists for the project as of the scheduled freeze date and T-0 baseline date for the week the STARETL process will run in CIC Analytics.
- 3) Code activities using an Activity Code or UDF to identify the adherence grade (A, B, C, D). For example, in the sample data, Activity Code 11 (Schedule Adherence Priority) is used.

Enabling P6 Location Data for Mapping

P6 EPPM supports the ability to enter location data at the dictionary level that can be assigned to Projects, Activity, and Resources for use in CIC Analytics.

To create location data in P6 EPPM:

- 1) Sign in to P6 EPPM with an account that has the privilege to change enterprise data (for example, admin).
- 2) From the **Administration** menu, select **Enterprise Data**.
- 3) In the **Enterprise Data** pane, expand **Global**, and then select **Locations**.
- 4) Enter the location data as appropriate for your specific needs.
- 5) Assign locations data to projects, activities, and resources as needed.

Note: See the P6 help for information about entering and assigning location data.

- 6) After all of the location data is entered and assigned where appropriate for your environment, run all of the Global publication services to ensure that the data in the publication tables is up to date for CIC Analytics.

Publishing P6 Projects

After identifying and configuring projects that are to be displayed in CIC Analytics, you will need to run global and project publication services.

To publish P6 projects:

- ▶ enable P6 publication services setting for P6 projects
- ▶ run P6 publication services to transform data and move it to P6 EPPM Extended Schema

This chapter describes how to accomplish the above tasks and complete steps 3 and 4 of the **Roadmap for Configuring and Publishing P6 EPPM Projects** (on page 9). The projects will then be ready for to be picked up by the ETL process of CIC Analytics.

Prerequisites

Complete **Configuring P6 EPPM Projects** (see "**Configuring P6 EPPM Projects for CIC**" on page 11)

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Typical Workflow For Publishing P6 Projects

Here are the common tasks to publish P6 projects for CIC Analytics.

Task	Description	More Information
Configure Publication Services Settings in P6	Enable publication settings for specific projects.	Configuring P6 EPPM Publication Services Settings (on page 24)
Publish P6 global data	Run global publication services to prepare P6 global data Tip: Publish global data before publishing project data.	Enabling Automatic Publishing of P6 Global Data (on page 25) or Manually Publishing P6 Global Data (on page 27)

Task	Description	More Information
Publish P6 project data	Run project publication services to prepare P6 project data	<i>Enabling Automatic Publishing of P6 Project Data</i> (on page 26) or <i>Manually Publishing P6 Project Data</i> (on page 28)

Selecting P6 Projects for CIC Analytics for the First Time

When you receive the welcome message from Oracle, an initial ETL has already been processed with *all* published P6 projects loaded into CIC Analytics. Therefore, work with the key stakeholders in your organization to identify:

- ▶ projects that need to be removed from CIC Analytics
- ▶ projects that need to be visible in CIC Analytics

For example, your organization has 35 ongoing projects. The initial load will include all 35 projects in CIC Analytics. However, your organization may want to draw insights for only the top 10 high priority projects. Therefore you will need to remove the remaining projects from being loaded to CIC Analytics.

To remove P6 projects from being selected for CIC Analytics:

- 1) Sign into P6 as a user.

http://<host>:<port>/p6/action/login

Note: Ensure you have the following security privileges: *Edit Project Details Excepts Costs/Financials* project security privilege, *Add/Edit/Delete Global Activity and Assignment Layouts, Views and Filters* global security privilege.

- 2) Click **Projects**.
- 3) On the **Projects** navigation bar, click **EPS**.
- 4) On the **EPS** page:
 - a. Click the **Views** list and select a view.
 - b. In the EPS / Project Grid, deselect the **Enable Publication** option to remove each project from CIC Analytics.

Note: If your organization is a customer of CIC Advisor also, then any P6 projects deselected for CIC Advisor will also not be available for CIC Analytics.

- 5) Run publication services in P6 EPPM to publish only the selected projects to P6 Extended Schema for an ETL upload to CIC Analytics.

For more details, see [Enabling Automatic Publishing of P6 Project Data](#) or [Manually Publishing P6 Project Data](#).

P6 EPPM Publication Services Overview

If you are using P6 EPPM as a data source, Primavera Data Warehouse relies on data from the P6 EPPM Extended Schema and related publication services. Configure the P6 EPPM publication services and run them successfully prior to running a STARETL process. The publication services are responsible for moving and transforming P6 EPPM data into the P6 EPPM Extended Schema.

There are two types of publication services within P6 EPPM that need to be run in order to ensure that the data in the P6 EPPM Extended Schema is up-to-date prior to running the STARETL process.

- ▶ **Global Scheduled Services:** Global services are responsible for moving global/enterprise level data (users, security, codes, or hierarchies) from the P6 EPPM base tables into the Extended Schema.

Global scheduled services include the following:

- ▶ **Publish Enterprise Data Service** calculates and publishes enterprise-level business objects containing calculated and denormalized fields, including cost accounts, currencies, calendars, codes, funding sources, resource teams, role teams, timesheet dates, UDFs and more. Enterprise data does not usually change frequently, so consider scheduling this service to run less frequently.
- ▶ **Publish Enterprise Summaries Service** calculates and publishes EPS-level spread data for currently published projects in a given EPS. Depending on the spread interval you intend to use, EPS-level spread data can change frequently, so it might be appropriate to consider scheduling this service to run more frequently.
- ▶ **Publish Resource Management Service** calculates and publishes the resource hierarchy, resources, resource rates, resource limits, role rates, resource role assignments, and resource security. Resource management data does not usually change frequently, so consider scheduling this service to run less frequently.
- ▶ **Publish Security Service** publishes users, the OBS, and security profiles and calculates security for the P6 Extended Schema. Security data does not usually change frequently, so consider scheduling this service to run less frequently.

- ▶ **Project Level Service:** This service updates data in the P6 EPPM Extended Schema for each project. This service can be configured to run at specific time intervals or based on a number of changes interval. This service processes projects sequentially depending on the **Publication Priority** assigned to each project. Projects with a lower value for **Publication Priority** are published before those with a higher value for **Publication Priority**.

Publishing Process for P6 Projects

Before running the ETL process in CIC Analytics, P6 EPPM projects must be loaded into P6 Extended Schema.

To load P6 EPPM projects to P6 Extended Schema, complete the following tasks:

- 1) **Configuring P6 EPPM Publication Services Settings** (on page 24)
- 2) **Enabling Automatic Publishing of P6 Global Data** (on page 25) or **Manually Publishing P6 Global Data** (on page 27)
- 3) **Enabling Automatic Publishing of P6 Project Data** (on page 26) or **Manually Publishing P6 Project Data** (on page 28)

Configuring P6 EPPM Publication Services Settings

To configure and run publication services in P6 EPPM:

- 1) Sign in to P6 EPPM as a user.
http://<host>:<port>/p6/action/login

Note: Ensure you have the following security privileges: *Edit Application Settings, Administer Global Scheduled Services, and Administer Project Scheduled Services* global security privileges.

- 2) Click **Administration**.
- 3) On the **Administration** navigation bar, click **Application Settings**.
- 4) In the **Application Settings** page, select **Services** in the sidebar.
- 5) In the **Publication** area, use the following fields to set the amount and frequency of data updates in the P6 EPPM Extended Schema.
 - ▶ **Start Date:** Enter the start date for all time-distributed data published.
 - ▶ **Finish date is current date plus:** Enter the rolling end date for all time-distributed data published.
 - ▶ **Time distributed interval:** Enter the spread data bucket types (day or week).
- 6) In the **Project Publication** section, select the **Enable Publish Projects** option. This option must be marked to publish projects and to run the Check Overallocation service. You should not enable Publish Projects until *all* projects that you have selected are ready for publication. Configure the remaining fields in this section as needed for your data. For more details on configuring these options, see *P6 Help*.

The projects that qualify for publication publish to P6 EPPM Extended Schema.

Note: To verify the status of each project publication job in P6, click the **User** menu and select **View Service Status**.

Enabling Automatic Publishing of P6 Global Data

You can configure P6 to automatically publish any of the following types of global data to reporting tables.

- ▶ Enterprise Data
 - ▶ Project Data
 - ▶ Activity Data
 - ▶ Resource Data
 - ▶ Calendar Data
 - ▶ Enterprise Data dictionary definitions
- ▶ Enterprise Summary Data including portfolio data
- ▶ Resource Management Data
- ▶ Security Data
- ▶ Audit Data

To automatically publish P6 global data:

- 1) Sign into P6 EPPM.

http://<host>:<port>/p6/action/login

Note: Ensure you have the following security privileges: *Administer Global Scheduled Services* and *Administer Project Scheduled Services* global security privileges.

- 2) Click **Administration**.
- 3) On the **Administration** navigation bar, click **Scheduled Services**.
- 4) On the **Scheduled Services** page, select **Global**.
- 5) On the **Global** page:
 - a. Select a service, then configure its settings in the **Service Settings** detail window to set how often and when the services should run. For example, you might specify that the service runs daily on Wednesdays with a start time of 10:15 PM.

Note: Oracle recommends running the Publish Security service first if the Run After Previous option is selected in the Run Service list for other publication services. Running the Publish Security service first will ensure that security data updates in the extended schema as soon as possible and ensures that the security restrictions are in place before you run the report.

- b. Select the **Enabled** option for any of the global services listed.
- c. If you choose to run one or more services with the relative frequency value of **After previous service**, click **Move Up** or **Move Down** to arrange the services in your preferred sequence.
- d. Click **Save**.

Enabling Automatic Publishing of P6 Project Data

You can enable projects for publication, and set options to schedule project publication. Then, as you work, P6 automatically detects the changes to your projects that trigger the publication of their data.

To enable P6 publication services for project data:

- 1) Sign into P6 EPPM as a user.

http://<host>:<port>/p6/action/login

Note: Ensure you have the following security privileges: *Administer Global Scheduled Services* and *Administer Project Scheduled Services* global security privileges, and *Edit Application Settings* security privilege.

- 2) Click **Administration**.
- 3) On the Administration navigation bar, click **Application Settings**.
- 4) On the **Application Settings** page, select **Services**.
- 5) On the **Services** page, in the **Project Publication** section:
 - a. Select **Enable Publish Projects** to manually publish projects and run the Check Overallocation service. You should not enable publish projects until *all* projects are ready for publication.
 - b. In the **Publish projects every** field, select an interval by which projects are polled to be published. The interval should be set to a low number (less than 5 minutes) to ensure that ASAP Publish Project and Check Overallocation services are processed in a timely fashion. However, if your users will not be using these ASAP services, you can set this value higher.
 - c. In the **Start Time** field, enter the start time for scheduled jobs when the Publish projects every field contains a value less than 1 day.
 - d. In the **Publish a changed project when the...** section:

1. Enter a number in the **Number of changes exceeds** field. This threshold setting determines the number of edits users can make to the project data before P6 publishes its data. Assuming a constant rate of change among projects, a lower value will result in more frequent publication of project data. If you enter a value of 0, projects with tracked changes will be automatically published.
 2. Enter a time period for the **Time since last publication exceeds** field. This threshold setting determines how often the publication of project data should occur. For example, if you enter 12 hours, the project data will be published every 12 hours unless the threshold for the number of changes has already been reached.
- e. Select **Publish idle projects** to add projects to the service queue that are enabled for publication but have not been changed during the time threshold. This setting is only valid for the initial run of the service.
 - f. In the **Maximum number to publish** field, enter the maximum number of pending idle Publish Project services that can be present at once in the service queue. This prevents performance problems during peak demand when enabling the publication of a large number of projects. For example, if the service runs and queues 40 projects that have exceeded specified thresholds and must be published, or that have been manually published, and you have set the maximum to 100, P6 will schedule up to 60 idle projects for publication.
 - g. Select **Publish resource and role data** if you want to be able to publish resource and role data in the Team Usage view.
 - h. Select **Enable Baseline Publication** if you want to be able to publish baseline data.
 - i. Select **Enable Notification Email** and type an email address in the **Notification Email address** field if you want to receive an email if publication services fail.
 - j. Click **Save** .

Manually Publishing P6 Global Data

Under special circumstances, if you want to manually publish any of the following types of global data to the reporting tables t, perform the steps below.

- ▶ Enterprise Data
 - ▶ Project Data
 - ▶ Activity Data
 - ▶ Resource Data
 - ▶ Calendar Data
 - ▶ Enterprise Data dictionary definitions
- ▶ Enterprise Summary Data including portfolio data
- ▶ Resource Management Data
- ▶ Security Data
- ▶ Audit Data

P6 will automatically publish global data; however, you may want to publish the data manually in special cases such as when generating an important report at a specific time.

To manually publish P6 global data:

- 1) Sign in to P6 as a user.

http://<host>:<port>/p6/action/login

Note: Ensure you have been assigned the following security privileges: *Administer Global Scheduled Services* global security privilege to run a global scheduled service.

- 2) Click **Administration**.
- 3) On the **Administration** navigation bar, click **Scheduled Services**.
- 4) On the **Scheduled Services** page, select **Global**.
- 5) On the **Global** page:
 - a. Select any of the global services listed.
 - b. Click **Run Service**.
 - c. In the resulting message box, click **OK**.

Tip

- ▶ If the service listed under the manually selected service is configured to run *After previous* service, it will run automatically when the selected service finishes.

Manually Publishing P6 Project Data

If you may want to publish the data manually in special cases such as to include a project in CIC Analytics within a specific timeframe, complete the following procedure.

To manually publish P6 project data:

- 1) Sign into P6 EPPM as a user.

http://<host>:<port>/p6/action/login

Note: Ensure you have been assigned the following security privileges: *Administer Global Scheduled Services*, *Administer Project Scheduled Services* global security privileges, and *Edit Application Settings* security privilege.

- 2) Click **Projects**.
- 3) On the **Projects** navigation bar, click **EPS**.
- 4) On the **Actions** menu of the **EPS** page, click **Publish Projects**.

What's Next?

Congratulations! You have now completed the first step of the ***Roadmap for Setting Up CIC Analytics*** (on page 6).

Now proceed to the second step to administer data sources and manage users. For more details, see the *CIC Analytics Administration Guide* English/admin/admin_cloud_guide/index.htm.