



# Oracle's Primavera P6 On-Premise to Cloud Migration

---

Oracle White Paper and Frequently Asked Questions  
Oracle Construction and Engineering

June, 2020 | Version 1.00  
Copyright © 2020, Oracle and/or its affiliates  
Confidential: Public

## TABLE OF CONTENTS

<b>Purpose Statement</b>	<b>2</b>
<b>Disclaimer</b>	<b>2</b>
<b>What are the Types of Primavera P6 Migrations to the Cloud?</b>	<b>3</b>
<b>Base Migration</b>	<b>3</b>
<b>Standard Migration</b>	<b>4</b>
<b>Cloud Migration Options</b>	<b>9</b>
Option 1: Migrate the entire legacy Primavera P6 database to the cloud.	10
Option 2: Migrate selected data from Legacy environment to the cloud.	10
<b>What are general considerations regardless of approach?</b>	<b>11</b>
<b>Frequently asked Questions</b>	<b>14</b>
<b>Other Considerations – Partial Database Migration and Consolidation of Multiple Primavera P6 Databases</b>	<b>15</b>
<b>Questions that should be considered while planning for database consolidation</b>	<b>16</b>

## PURPOSE STATEMENT

This purpose of this document is to answer commonly asked questions about Oracle's Primavera P6 EPPM On Premise to Cloud migration process. This is a living document and will be updated often with new questions and information. If there are questions that you would like to see included, please send them to your Oracle Construction and Engineering Professional Services Representative.

This document is neither a proposal nor an offer to perform specific services. It is intended for information purposes to help you understand the level of investment that may be necessary for Oracle's Primavera P6 EPPM On Premise to Cloud migration projects.

The information contained herein, is based on our experiences with Oracle's Primavera P6 EPPM Cloud migrations and various important assumptions associated with Cloud migration services, and are subject to change.

## DISCLAIMER

This document in any form, software or printed matter, contains proprietary information that is the exclusive property of Oracle. Your access to and use of this confidential material is subject to the terms and conditions of your Oracle software license and service agreement, which has been executed and with which you agree to comply. This document and information contained herein may not be disclosed, copied, reproduced or distributed to anyone outside Oracle without prior written consent of Oracle. This document is not part of your license agreement nor can it be incorporated into any contractual agreement with Oracle or its subsidiaries or affiliates.

This document is for informational purposes only and is intended solely to assist you in planning for the implementation and upgrade of the product features described. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described in this document remains at the sole discretion of Oracle.

Due to the nature of the product architecture, it may not be possible to safely include all features described in this document without risking significant destabilization of the code.

# Oracle's Primavera P6 On-Premise to Cloud Migration

White Paper and FAQ  
Oracle Construction and Engineering



## WHAT ARE THE TYPES OF ORACLE'S PRIMAVERA P6 MIGRATIONS TO THE CLOUD?

The type of migrations to the cloud can be classified into the following broad categories for Oracle's Primavera P6 EPPM (Primavera P6).

1. **Base Migration**
2. **Standard Migration**
  - a. **Database Conversion**
  - b. **Data Cleanup**
  - c. **Consolidation of Primavera P6 Instances**

In this document, we will discuss the characteristics of these project types as well as common items that customers should take into consideration while planning for these types of projects.

### BASE MIGRATION

If a customer wants to move their whole database (instead of starting over from scratch or importing a few strategic projects) from on premise to the Primavera P6 SaaS cloud, there are some pre-requisites a customer needs to prepare their database for the move. For some customers, Oracle can provide this preparation assistance as part of their service subscription. In order for customers to qualify for this service, they must meet certain criteria. If a customer does not match the criteria, they may still be able to migrate to the cloud, they will just need to engage Oracle Construction and Engineering Professional Services to assist with preparations. Please note customers on SQL Lite cannot migrate their database directly to the cloud.

Step-by-step guide

If the answer to any of the below questions is "No", the customer does not qualify for the migration support that comes with their service description and should pursue Oracle Construction and Engineering Professional Services for assistance:

1. Is the customer on Primavera P6 EPPM version 8.1 or better? (older versions require more consulting on what's new/what's changed than is provided with the free support. Conversion from Primavera P6 PPM is out of scope.)

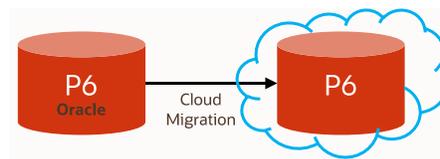
2. Is the customer using an Oracle Database version 10g or better? (Conversion from versions prior to 10g is not in scope. SQL Server conversion is not in scope)
3. Is the database less than 100GB? (If more, its an indication of poor practices and consulting is recommended to evaluate usage and data cleanup prior to migration)
4. Is the database in its original state (i.e. no extra tables, triggers, indexes, etc)? (Database customizations are not allowed in the cloud environment. A strategy must be devised to remove them.)
5. Is the database on Characterset AL32UTF8? (Characterset conversions can be tricky if customer uses long names with special characters. May require consulting support to perform conversion/data cleansing.)
6. Can the customer provide their database to the United States via sFTP? (some international customers cannot export their data to the US)
7. Does the customer have a single production database to migrate? (Migrating multiple databases or consolidating databases in order to migrate one are out of scope)

If the answer to any of the below questions is "Yes", customer may qualify for the migration support that comes with their service description but require supplementary services from Professional Services or a Partner.

1. Does the customer have BI Publisher reports?
2. Does the customer use a separate file repository: WCC, Sharepoint or otherwise? (only database file storage is in scope with migration support)
3. Does the customer have existing Primavera P6 interfaces? (migration of interfaces is not in scope, consulting to convert interfaces to be 'cloud ready' is strongly recommended)
4. Did the customer purchase PVD?
5. Is the customer looking to implement SSO?
6. Is the customer looking for training on new features and functions in the new cloud version?

## STANDARD MIGRATION

A standard upgrade involves taking a single Primavera P6 database instance, upgrading it to the latest cloud version, and migrating that to the cloud.



The standard migration starts with a cloud readiness exercise where we obtain details on your current system, identify potential effects of the upgrade/migration and provide recommendation on next steps. Based on these recommendations we receive your production database, upgrade it, configure web components, perform data validation / data integrity review, setup job services and then provide upgraded database to the Cloud Service team to load into your Cloud Service environment. Following and acceptance testing phase we provide the accepted database and publish it to your SaaS production instance. You may wish to include time for training and post go-live assistance in order to complete your cloud migration.

The following characteristics can be included in the Standard upgrade and migration process but will require additional steps and activities (relative to the above) to complete.

- Primavera P6 Professional instances
- Database customizations
- Migration of external file repositories
- Migration of BI Publisher Reports
- Custom Integrations
- Custom Training

The Oracle team can assist customers in determining if this cloud migration offering applies and if any supplementary services are recommended.

Oracle will work with each customer to determine the appropriate amount of services based on the above-mentioned exclusions as well as any other requirements necessary to make the cloud migration successful. These migration requirements are typically discovered in a Future Ready Workshop and/or a Discovery Questionnaire.

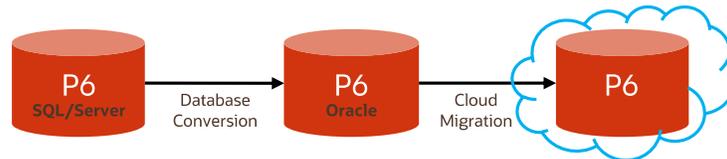
## Database Cleanup

The functional aspects of the standard upgrade may include time to cleanup Primavera P6 instances in order to maximize the performance and efficiency of the new environment. When planning for a Primavera P6 Cloud Standard Upgrade, customers should consider the following Database Cleanup items:

Database Cleanup Type	Examples
<b>Management of Projects &amp; Copies</b>	<b>Project Archival/Data Retention</b> <b>Current Project Backups</b> <b>Business Continuity</b>
<b>Baseline Management</b>	<b>Formal Process &amp; Documentation</b> <b>Baseline Limits</b> <b>Baseline Types &amp; Rationale</b> <b>Deletion/Archival of Baselines</b>
<b>Security Scheme</b>	<b>Cloud Environment Security Requirements</b> <b>Security Privilege Changes</b> <b>Improved Security</b> <b>Responsibilities &amp; Management</b>
<b>Data Governance</b>	<b>Formal Change Process &amp; Forms</b> <b>Clearly Defined Roles &amp; Responsibilities</b> <b>Change Workflow &amp; Documents</b>
<b>Data Alignment</b>	<b>Unused Data Elements</b> <b>Redundant Fields</b> <b>Global/Project/Personal Data</b> <b>Naming Convention</b>

## Database Conversion

Customers running Primavera P6 on a SQL/Server database will need to migrate their environment to an Oracle database as part of the upgrade to the cloud. Oracle provides standard services for this type of database migration and can seamlessly integrate this into the steps to move to the new cloud environment.

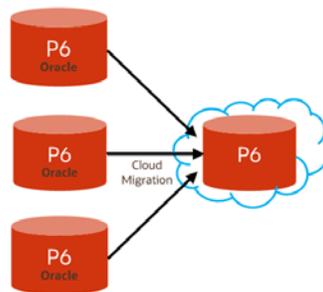


The following factors should be taken into consideration when planning for a Primavera P6 database conversion from SQL/Server to Oracle:

- SQL/Server and Oracle database versions
- Size of source and target environment
- Timings for database conversion
- Identification of custom stored procedures or scripts

## Consolidation of Primavera P6 Instances

Customers with multiple Primavera P6 instances may look at the migration to the cloud as an opportunity to consolidate these instances into a single instance or consolidate multiple instances into a smaller number of regional instances.



The first step in an enterprise redeployment of multiple Primavera P6 instances in the cloud is the consolidation process. There are several benefits related to consolidation of multiple Primavera P6 instances:

### IT Benefits

Reduction in footprint of Primavera environments

Reduction in internal IT hardware, software, and administration costs

Reduction in requirements for all associated technologies (applications, databases, middleware etc.)

Streamlined license management

Easier and more automated upgrades

### Business Benefits

Easier enterprise reporting and cross-functional integration of schedules

Reduced manual processes for data exchange or data alignment

Easier administration and enforcement of enterprise standards

As a first step in the consolidation process, customers will need to create a common inventory of the Primavera P6 instances within their organization. An instance is commonly referred to as a collection of Development, Test, Production and/or Training environments for each Primavera P6 database. Typically, a Primavera P6 database inventory will track basic information such as: database name, organization using it, number of users, environment type (dev/test/prod), as well as a number of other functional, technical and organizational characteristics.

Upon collection of the above-mentioned information, the consolidation process can begin. Consolidation of instances makes sense when the following can be established with respect to your Primavera P6 instance(s):

- A centralized application administration function
- Consistent project management practices
- Common business practices and standards can be enforced
- System maintenance requirements are similar and can be performed within a window that does not interrupt all users in the consolidated instance

### Consolidation Considerations

Consolidation of Primavera P6 instances should not be done without adequate consideration of a number of factors. These factors help decide whether or not specific Primavera P6 instances should be candidates for consolidation and which instances can be grouped into specific consolidated Primavera P6 target instances:

Consideration Area	Examples
<b>Legal &amp; Regulatory</b>	<ul style="list-style-type: none"><li>○ Joint Ventures data requirements may limit use of common data environments</li><li>○ Local governmental data management regulations may prohibit data being stored outside of governmental jurisdiction</li><li>○ Limiting access to confidential data may be required</li></ul>
<b>Regional Issues</b>	<ul style="list-style-type: none"><li>○ Remote Locations Lacking Connectivity – The lack of connectivity may</li></ul>

	<ul style="list-style-type: none"> <li>necessitate the need for a regional or local database</li> <li>o Language – single language selected in each database</li> <li>o Start Day of the Week</li> </ul>
<b>Global Data &amp; Settings</b>	<ul style="list-style-type: none"> <li>o Centralized Administration</li> <li>o Alignment of processes, practices, and structures across enterprise</li> <li>o Codes/UDFs/Resources/Calendars/Financial Periods</li> </ul>
<b>Performance</b>	<ul style="list-style-type: none"> <li>o Data Volume</li> <li>o User Concurrency</li> <li>o Job Services</li> <li>o System Response</li> <li>o Network Connectivity</li> <li>o Viability of Offline Mode – Check in/out or complete standalone</li> </ul>
<b>Project Organization and Access</b>	<ul style="list-style-type: none"> <li>o Business-Driven Enterprise Project Structure (EPS) – Hierarchical project structure</li> <li>o Facilitates rollup of projects for reporting purposes</li> <li>o EPS structure can assist with reporting views in conjunction with Codes, Filters and Views</li> <li>o Aligned Organizational Business Structure (OBS) – Controls and limits access to projects</li> <li>o Users of merging databases need to agree on both EPS and OBS structures</li> <li>o EPS/OBS integral to Primavera P6 security scheme</li> <li>o Business groups must agree on access to projects and security of projects</li> </ul>
<b>Administrative</b>	<ul style="list-style-type: none"> <li>o Establish central Administrative function for Primavera P6 application management</li> </ul>
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>o Interfaces must be supported without business interruption or delay</li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>o Region-specific and Enterprise-Wide Reporting must be supported</li> </ul>

After careful consideration of the functional and technical aspects listed above, it is now possible to identify consolidated Primavera P6 target instances and begin the process of actually consolidating the Primavera P6 databases. At a high level, these are the basic steps in the consolidation process:

- Define approach – New database or one target legacy database
- Database cleanup and alignment with standard structures
- Determine common process for migrating structures (filters, dashboards, EPPM views)

- Align security profiles
- Automation of data migration from source database to consolidated database
- Validate migrated data

## CLLOUD MIGRATION OPTIONS

When Primavera P6 customers consider moving to the cloud, a key initial decision will involve the migration approach. Common migration approaches can be grouped into two options:

Option 1	Option 2
Migrate the <b>entire legacy Primavera P6 database</b> to the cloud.	Migrate <b>select data from Legacy environment</b> to new Primavera P6 database on the cloud.

Both options can provide successful migration outcomes for customer and the decision should be primarily driven by the customer business needs. Basically, the difference between the two migration methods comes down to a question of data quality versus effort expended to configure and populate a new Primavera P6 environment. This decision will impact the way the basic configuration of the database is prepared for production usage. The primary difference in the two approaches is whether the preparation process for the final configuration will be a process of subtraction or addition.

Using the legacy database in the first method (Option 1) means that all legacy data in the database would be transferred to the new environment. Customers can then use the subtraction method to remove or delete any structures or data elements that are not wanted in the new environment. This will remove unwanted data elements that can be seen in the user interface, but it will not remove any corrupted data or unused data elements that are hidden or can only be seen in the back end of the database. To fix data cleanup issues an effort focused on quality may be warranted.

The second method (Option 2) utilizing a clean database starts with a blank environment. This requires customers to use the addition method to create the required structures and content in the Primavera P6 database. This involves a variety of processes including building some structures from scratch, importing other structures (as Primavera P6 business rules allow) and importing data elements associated with projects along with the projects themselves during the project import process. Although many of the data elements will be imported with the projects, structures utilizing a hierarchy in their structure would require that their hierarchy be reestablished after projects are imported.

Customers should also consider performance of the consolidated Primavera P6 database when choosing a migration method. Although it is difficult to directly quantify the impact of unwanted data elements and extraneous data structures on the performance of the application, as data volume and the complexity of data structures increase, performance can be negatively impacted. If any of the legacy databases is experiencing performance issues, these issues could potentially be magnified in the consolidated environment. If performance is a concern, the clean database approach should be seriously considered.

For many Primavera P6 upgrades, migrations and/or consolidations, the new database approach is the recommended best practice method when moving to the cloud. This method provides a clean database as the starting point for newly created consolidated Primavera P6 environments and should minimize the amount of

cleanup required to remove unwanted data. It also allows customers to start with an environment that is essentially void of any orphaned records or corrupted data.

**Option 1: Migrate the entire legacy Primavera P6 database to the cloud.**

Use a copy of one of the legacy (source) databases as the starting point for the consolidated (target) Primavera P6 environment. Data (projects and structures) from the remaining source databases will be imported or constructed in the consolidated environment.

Benefits of this approach	Drawbacks of this approach
Database migration can be performed with limited resources. Work effort is primarily technical.	Cannot be used to consolidate data from multiple source databases. Only one source database can replace the cloud database.
All legacy structures are migrated with minimal possibility of data loss.	Legacy data may have integrity issues that could carry over to the cloud database.
Database migration process is developed and supported by Oracle.	Legacy data may be too old and no longer relevant for current and future use of the system.
Users are carried over during the transfer. User specific preferences and layouts are retained. Users and user preferences will not need to be manually created in the new environment.	Layouts in Primavera P6 Professional may get corrupted during the migration and could cause application errors. New layouts created in the cloud database are less susceptible to corruption since they are created after the migration.
Cutover to cloud is a one-time event. Total migration time is minimal resulting in minimal downtime.	Database retains unnecessary or unwanted data elements that have appeared in the legacy Primavera P6 database.

**Option 2: Migrate selected data from Legacy environment to the cloud.**

A new Primavera P6 database with no legacy data or sample data would be created for the target consolidated environment. Data from all source databases would be imported or constructed in the consolidated environment.

Benefits of this approach	Drawbacks of this approach
Only the projects that are required moving forward are migrated to the Cloud, reducing clutter and	The process will require strict coordination between IT and Business representative to determine which projects and

overall database size.	data to migrate and will require more extensive planning.
Provides a good opportunity to clean up the structures (EPS, OBS, codes, calendars, resources, etc.) to ensure those are designed with current and future needs in mind.	There are programmatic methods available to migrate projects but some data will have to be manually re-created (such as user preferences, dashboards, and user-specific filters and layouts).
Since only select data is being migrated, it will significantly reduce occurrences of data anomalies resulting in a more stable environment for users.	A specific data migration sequence must be followed to ensure complete transfer of data. Comprehensive testing is required to ensure all required data is correctly migrated.

## WHAT ARE GENERAL CONSIDERATIONS REGARDLESS OF APPROACH?

### Define what areas are in scope for the migration

Structures, services, and data elements that should be considered for migration or configuration in a cloud database are provided below. This list may not be comprehensive or applicable to all Primavera P6 environments under consideration. As part of the database consolidation or migration, companies should create a checklist of these items and address each item on this list. If some items are not used in the Primavera P6 instance being reviewed and are not planned for use in the cloud environment, they should be marked as reviewed and not applicable to the current solution.

1. Projects
2. Resources
3. Roles
4. Layouts
5. Filters
6. Global Changes
7. Resource Curves
8. Users & Assignments
9. Security Profiles
10. EPS/OBS
11. User Preferences
12. Application Settings
  - a. Data Limits
  - b. Earned Value
  - c. ID Lengths
  - d. Services
  - e. Time Periods
13. Enterprise Data
  - a. Financial Periods
  - b. Calendars – Global, Project, & Resource
  - c. Notebook Topics
  - d. Baseline Types
  - e. UDFs – Project, Resource, Activity, WBS, Expense, Step, Assignment, Documents, ...

- f. Codes – Project, Resource, Activity
  - g. WBS Categories
  - h. Cost Accounts
  - i. Expense Categories
  - j. Step Templates
  - k. Resource Curves
  - l. Units of Measure
  - m. Document Categories
14. Project Data/Settings
  15. Schedule Options
  16. Reports

The cleanup effort the structures listed above are often addressed and handled by project team members. Many of our customers are comfortable with the processes and methods used for a methodical and structured cleanup and consolidation of Primavera P6 databases. As such, the listing above only details items that could be addressed but does not address the methods to be used. If there are questions about any of these items, they can be addressed outside of this document during a consultation with the Oracle Construction and Engineering Professional Services team.

## Review Migration Process and Timeline

The timeline for the migration process is typically divided into three phases:

1. Pre-Migration/Preliminary Work
2. Prior to Go-Live Window
3. Go-Live/Final Migration

Activities are shown in the phase of the timeline when it is suggested that they be worked. There is considerable pre-migration work that can start well in advance of the cloud migration. It is not required that all the activities in each phase be completed prior to the next phase. However, it is recommended that the activities be performed as soon as the project timeline, assigned resources, and data availability allow. This will reduce the amount of work that has to be performed during the transition to production window.

Phase	Activity
<b>Pre-Migration/Preliminary Work</b>	Invoke Governance Establish Primavera P6 Application Administration Create Application Administration Documentation Define & Document Global Naming Convention Define User Community Map Business Processes to Primavera P6 Functionality Establish Project Structure Define Security Scheme

	<ul style="list-style-type: none"> <li>Align Data Structures</li> <li>Merge Legacy Structures</li> <li>Identify Migration Projects</li> <li>Establish Baseline Management</li> <li>Migrate Designated Projects</li> <li>Validate Primavera P6 Data</li> </ul>
<b>Prior to Go-Live Window</b>	<ul style="list-style-type: none"> <li>Define Go-Live Plan</li> <li>Create Go-Live Schedule</li> <li>Invoke Design Freeze</li> <li>Conduct Data Structure Review</li> <li>Create Pre-Go-Live Checklist</li> <li>Define Go-Live Logistics</li> <li>Create List of Migration Projects</li> <li>Create Database Copy</li> <li>Establish Change Control</li> </ul>
<b>Go-Live/Final Migration</b>	<ul style="list-style-type: none"> <li>Enable Consolidated Database Access</li> <li>Remove Legacy Database Access</li> <li>Migrate Final Copy of Active Projects</li> <li>Establish Baselines</li> </ul>
<b>Actions for Non-Migrated Projects</b>	<ul style="list-style-type: none"> <li>Review Agency Data Retention Policies</li> <li>Review Project Archival Requirements</li> <li>Export and Archive Projects</li> </ul>

## FREQUENTLY ASKED QUESTIONS

Q. How are the Cloud migration activities structured?

A Cloud migration can be loosely grouped into the following groups of activities:

- Planning the cleanup and migration
- Cleaning the data
- Testing the Migration
- Preparations for cut-over
- Cut-over to Production
- Post-production activities

Q. How do I plan for a smooth database migration to the Cloud?

- Make sure you establish regular cadence with your assigned Customer Success Manager (CSM) from the Oracle Cloud team.
- Take inventory of your existing Primavera P6 databases and communicate the approximate size of the database to your assigned Oracle representative to ensure correct sizing of your environment.
- Read this document and engage Oracle's Construction and Engineering Professional Services team for a discussion of options.

Q. What work is required during the Test Migration cycle?

- If your Primavera P6 version does not match the Cloud approved version, convert/upgrade the Primavera P6 database to the Cloud approved version of Oracle DBMS and Primavera.
- If the DB export is over 2 GB in size, split it into multiple files with each file not exceeding 2 GB in size. This will expedite the file transfer process and minimize failures.
- Make sure to note the time required for each of the activities such as DB Upgrades and export, upload of Database to ftp server, and elapsed time for the environment to be available for testing. This will be helpful in planning for the actual production cut-over and communicating the migration timeframe to your users.
- Once you receive the communication from your CSM that your Primavera P6 database has been loaded into the Cloud environment, perform thorough testing of the environment. Examples include (but not limited to) the following:
  - Verify user provisioning and assign Primavera module and project access.
  - Validate that Users' access rights are consistent with your cloud security model.
  - Run data-intensive functions such as Summarization, Scheduling, and Leveling to ensure performance is adequate.
  - Ensure BI Publisher reports are running correctly.
  - Verify that the import and export of Primavera data functions correctly.

- Identify and resolve any issues with company-mandated browsers or browser versions.
- Conduct testing from a variety of locations using all applicable modules of Primavera to ensure that performance is acceptable to all users. Work with your Oracle CSM and Oracle Support team to resolve any concerns for inadequate performance.
- Any issues during testing will need to be entered into the Oracle Support system as Service Requests (SRs). All critical issues need to be resolved before the test migration can be considered a success.

Q. What is expected to occur during the Cut-over Preparation phase?

- Based upon the training plan, conduct the transition training for all users. The training should ideally be done no more than two weeks in advance of the go-live date.
- Ensure that your help desk is staffed and ready to support your users' Primavera queries.
- Based on your experience with the Test migration, create a checklist of sequential activities starting from bringing your legacy system down to opening the Cloud environment to your users for production use. It is recommended that you document each discrete step including the time each step will be performed, a person or a team responsible for each step, and how the handoff between steps will occur.
- Ensure all users are aware of the system outage window.

Q. What types of activities are scheduled to occur during production cut-over (go-live)?

- Disable user access to the legacy environment and perform the final DB cleanup to ensure data integrity.
- Create a Cloud-compatible DB schema export by converting/upgrading to the Cloud approved version.
- Verify successful upload of the Primavera DB to the Cloud FTP site.
- Once the DB is loaded by Cloud team, review the Cloud environment to validate data accuracy.
- Obtain management's concurrence on go/no-go decision.

Q. What are considered Post-production activities?

- Deploy a "war room" team that will respond to users' queries for first few days of deployment.
- Work with your CSM to get access instructions communicated to the user base. Send out formal communication through your company channels to users that the system is available to use.

## **OTHER CONSIDERATIONS – PARTIAL DATABASE MIGRATION AND CONSOLIDATION OF MULTIPLE PRIMAVERA P6 DATABASES**

Q. What needs to be considered, if we need to consolidate multiple on-premise Primavera P6 instances into a single Cloud instance?

Consolidation of multiple Primavera P6 instances into a single Cloud instance requires careful planning and execution. Source data may have data integrity issues, and conflicting data elements coming from disparate sources may cause erroneous results and incorrect calculations in the merged environment.

- For example, global calendars with same names but different work schedules can result in incorrect calculated dates and/or resource requirements.
- Also, Resources with same IDs but different purposes can cause incorrect capacity and demand projections.
- Data conflicts like these should be addressed during the Primavera P6 data cleanup process as part of the cloud migration preparation. However, minor data issues that were previously undiscovered may occur.
- Please see the consolidation section in this document above for more information on consolidation concerns and specific options for addressing this topic.

## QUESTIONS THAT SHOULD BE CONSIDERED WHILE PLANNING FOR DATABASE CONSOLIDATION

Q: Are we going to operate as a true enterprise system or maintain silos in the Cloud environment?

- In case the organization's objective is to continue to operate as silos, owners of each legacy environment should qualify their global elements prior to migration to ensure uniqueness when brought into the Cloud environment. This may cause data replication but will avoid usage conflicts among users. Also, it may be beneficial to establish a standard naming convention that will uniquely identify data elements only used by individual siloed organization as well as those used across the enterprise.
- In case you will be operating as a true enterprise system once in the Cloud environment, items such as the following should be considered. Please note that this is not a complete list.
  - Determine how the target EPS hierarchy should look and identify a target EPS for each of the incoming projects.
  - Determine how security will be structured, and create an OBS and security profiles that will meet the needs of users yet provide comprehensive security mechanism.
  - Determine a set of standard global attributes (Codes - Project, Activity, Resource; Calendars etc.) and ensure that owners of individual legacy database owners include these in their setup.
  - If any structures local to a specific database must be migrated, then ensure that (when possible) such attributes are demoted to lower levels (global to project level etc.) during XML import process.

Q: What are the recommended methods for migrating project data?

- Out of the box, Oracle provides several options for project data migration such as XER, XML and XLS

formats. We recommend XML imports over XER as the former method provides for advanced data mapping capabilities. XML process also adheres to Primavera business logic more closely than XER import and will also avoid imports of orphaned records into the Cloud database. In addition, XML format also allows for export and import of project baselines thus eliminating the need to transfer baselines separately.

- In order to streamline the process of importing projects into Cloud environment and minimize import conflicts, it would be better to have an automated process that allows for following:
  - Processing of XML files from a central location
  - Modification of these files to adhere to Enterprise configuration parameters
  - Import projects into the Cloud environment in specific EPS nodes

Q: Other than migration of Projects, can you provide few examples of other considerations for migration of data during database consolidation process?

- When projects are migrated, most (depending on version you are migrating from) assigned objects such as resources, calendars, codes and UDFs are generally migrated. However, the process does not migrate any objects that are not included in any of the migrated projects. This can result in incomplete data dictionaries in the Cloud environment and any missing attributes may need to be re-created separately. This would include the recreation of parent fields that are not individually assigned.
- Objects such as EPS, OBS, and Security Profiles must be recreated (manually or via web services).
- Global and User layouts as well as Primavera P6 Professional reports will also need to be exported and imported separately.
- For Primavera P6 Web, items such as Dashboards, User Interface Views and Activity Views cannot be migrated and must be re-created in the target system.
- Filters cannot be migrated and must be rebuilt in the target system or imported through layout assignments.

## CONNECT WITH US

Call +1.800.ORACLE1 or visit [oracle.com](http://oracle.com).  
Outside North America, find your local office at [oracle.com/contact](http://oracle.com/contact).

 [blogs.oracle.com](http://blogs.oracle.com)

 [facebook.com/oracle](https://facebook.com/oracle)

 [twitter.com/oracle](https://twitter.com/oracle)

Copyright © 2020, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0120

Oracle's Primavera P6 On-Premise to Cloud Migration White Paper  
June, 2020

