<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling Unexpected Timeouts During Database Refresh</td>
<td>2-16</td>
</tr>
<tr>
<td>Resolving Performance Issues with Smart Push</td>
<td>2-16</td>
</tr>
<tr>
<td>Optimizing Data Retrieval from Aggregate Storage Option Cubes</td>
<td>2-17</td>
</tr>
<tr>
<td>- Merging Data Slices and Removing Zeros</td>
<td>2-17</td>
</tr>
<tr>
<td>- Merging Data Slices and Removing Zeros Using A Job</td>
<td>2-18</td>
</tr>
<tr>
<td>- Merging Incremental Data Slices and Removing Zeros Using Calculation Manager</td>
<td>2-19</td>
</tr>
<tr>
<td>Compacting the Outline</td>
<td>2-19</td>
</tr>
<tr>
<td>- Compacting ASO Outline Using a Job</td>
<td>2-20</td>
</tr>
<tr>
<td>- Compacting ASO Outline Using Calculation Manager</td>
<td>2-20</td>
</tr>
<tr>
<td>Creating Required Aggregate Views</td>
<td>2-21</td>
</tr>
<tr>
<td>- Collecting User Data Retrieval Patterns and Creating Aggregate Views Using Jobs</td>
<td>2-21</td>
</tr>
<tr>
<td>- Enabling Query Tracking and Creating Aggregate Views Using Calculation Manager</td>
<td>2-22</td>
</tr>
<tr>
<td>Reviewing Dimension Hierarchy Types</td>
<td>2-23</td>
</tr>
<tr>
<td>Getting Help from Oracle</td>
<td>2-23</td>
</tr>
<tr>
<td>Making Financial Reporting Reports More Efficient</td>
<td>2-24</td>
</tr>
<tr>
<td>Fixing Smart View Issues</td>
<td>2-27</td>
</tr>
<tr>
<td>Diagnosing Consolidation Failures and Performance Issues in Financial Consolidation and Close</td>
<td>2-28</td>
</tr>
<tr>
<td>- Check for Poor Application Design</td>
<td>2-28</td>
</tr>
<tr>
<td>- Identify Unnecessary Calculations</td>
<td>2-30</td>
</tr>
<tr>
<td>- Optimize Configurations and Extensions</td>
<td>2-32</td>
</tr>
<tr>
<td>- Perform Regular Housekeeping</td>
<td>2-35</td>
</tr>
<tr>
<td>- Enable Consolidation Rules Logs and Submit Feedback to Oracle</td>
<td>2-36</td>
</tr>
<tr>
<td>- Address Functional Issues</td>
<td>2-38</td>
</tr>
<tr>
<td>Troubleshooting Data Load Performance Issues</td>
<td>2-40</td>
</tr>
<tr>
<td>Resolving Other Performance Issues</td>
<td>2-41</td>
</tr>
<tr>
<td>Handling Financial Consolidation Data Inaccuracies</td>
<td>2-41</td>
</tr>
<tr>
<td>- Check for Poor Application Design</td>
<td>2-42</td>
</tr>
<tr>
<td>- Remove Customizations</td>
<td>2-43</td>
</tr>
<tr>
<td>- Check Known Consolidation Issues</td>
<td>2-45</td>
</tr>
<tr>
<td>- Get Help from Oracle</td>
<td>2-47</td>
</tr>
<tr>
<td>Handling Data Loss in an Environment</td>
<td>2-48</td>
</tr>
<tr>
<td>Resolving Order Processing Issues</td>
<td>2-49</td>
</tr>
<tr>
<td>Resolving IP Whitelisting Functional Issues</td>
<td>2-49</td>
</tr>
<tr>
<td>Requesting a Temporary Loaner Environment</td>
<td>2-49</td>
</tr>
<tr>
<td>Responding to Customer Diagnostic Alerts</td>
<td>2-50</td>
</tr>
<tr>
<td>Managing Other Functional Issues</td>
<td>2-50</td>
</tr>
</tbody>
</table>
# EPM Cloud Release Change Management Process

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding Oracle’s Change Management Process</td>
<td>3-1</td>
</tr>
<tr>
<td>Resolving Regression Bugs in Test Environments</td>
<td>3-2</td>
</tr>
<tr>
<td>Resolving Regression or Blocking Bugs in Production Environments</td>
<td>3-2</td>
</tr>
<tr>
<td>Understanding Change Migration Procedures</td>
<td>3-2</td>
</tr>
<tr>
<td>Requesting Upgrade Delay for Production Environments</td>
<td>3-3</td>
</tr>
<tr>
<td>Requesting a Rollback of Production Environments</td>
<td>3-4</td>
</tr>
<tr>
<td>How Oracle Communicates the Update Schedule</td>
<td>3-5</td>
</tr>
</tbody>
</table>
Documentation Accessibility

For information about Oracle’s commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.
Documentation Feedback

To provide feedback on this documentation, send email to epmdoc_ww@oracle.com, or, in an Oracle Help Center topic, click the Feedback button located beneath the Table of Contents (you may need to scroll down to see the button).

Follow EPM Information Development on these social media sites:

LinkedIn - http://www.linkedin.com/groups?gid=3127051&goback=.gmp_3127051
Twitter - http://twitter.com/hyperionepminfo
Facebook - http://www.facebook.com/pages/Hyperion-EPM-Info/102682103112642
YouTube - https://www.youtube.com/oracleeppminthecloud
Understanding the EPM Cloud Troubleshooting Process

How often have you looked for steps to troubleshoot issues in Oracle Enterprise Performance Management Cloud business processes? This guide discusses some common customer reported problems and the procedures to correct them.

Use this guide to self-diagnose the reason why some EPM Cloud issues occur and the steps involved in correcting them. If the suggested steps prove ineffective, this guide lists the information that you must provide while seeking help from Oracle.

In This Section:

• Creating a Backup Snapshot
• Reviewing the Activity Report to Identify Performance Bottlenecks
• Understanding Access Limits
• Monitoring the Service
• Managing User Accounts
• Client Compatibility
• Best Practices for Production Environments

Creating a Backup Snapshot

All troubleshooting activities must be performed in a test environment.

Begin by creating a backup of the application in the current environment and downloading it to a local computer. See these information sources:

• Backing Up and Restoring an Environment Using the Maintenance Snapshot in Getting Started with Oracle Enterprise Performance Management Cloud for Administrators
• Backing Up Artifacts and Application in Administering Migration for Oracle Enterprise Performance Management Cloud

Reviewing the Activity Report to Identify Performance Bottlenecks

Generated automatically every day, the Activity Report helps identify issues that may impact the performance of your application.

Before contacting Oracle for help, especially for performance-related issues, review the Activity Report to identify bottlenecks. Specifically, carefully review the following sections of the Activity Report to identify areas that you may streamline to improve performance:

- **Number of Users**: This section helps you determine if there is a correlation between the number of users and the performance of the application.
- **Top 7 User Interface Requests by Duration**: This section, which identifies the top seven user actions by duration, provides you a starting point to identify why these actions take time to complete.
- **Top 30 Worst Performing User Interface Actions over 2 Seconds**: This section, which identifies the worst performing actions and objects (for example, rule), helps identify artifacts that you need to evaluate to improve performance.
- **Top 10 Worst Performing Business Rules over 30 Seconds**: This section identifies the business rules that take the most time to run, and are candidates for optimization.
- **Top 5 Worst Performing Calc Scripts Commands over 1 Min**: This section identifies specific sections in a rule that takes a long time to execute and should be reviewed to improve performance.
- **Top 10 Worst Performing Essbase Queries over 15 seconds**: This section lists the worst performing Essbase queries, which may be optimized to yield better performance.

### Getting Help From Oracle

Before approaching Oracle Support for assistance, complete the troubleshooting steps available in this book to diagnose and fix the issue.

Specific information that Oracle requires to troubleshoot your issue is identified in each discussion. These topics provide additional information.

- Using Fiddler to Capture Diagnostic Information
- Collecting Network Performance Trace Using a Browser
- Creating a Provide Feedback Submission
- Submitting a Service Request. The service request must indicate whether you are in the production phase (as opposed to implementation or testing) and whether this issue is stopping you from performing critical business operations, for example, preventing you from closing the current financial cycle or creating urgent reports for management.

### Using Fiddler to Capture Diagnostic Information

Use Fiddler to capture HTTPS traffic while you recreate EPM Automate and Oracle Smart View for Office login or performance issues. Fiddler trace file contains statistics and inspectors that help Oracle debug issues more efficiently.

Watch this video for an overview of the information on configuring Fiddler to capture HTTPS traffic.
Collecting Network Performance Trace Using a Browser

Oracle Support may require network performance data to resolve some Oracle Enterprise Performance Management Cloud performance issues. Use this information to collect network diagnostics data using Google Chrome, Firefox, and Internet Explorer.

Collecting Network Traces Using Google Chrome

1. Clear Chrome cache.
   a. Click (Customize and control Google Chrome icon), then select History, and then History.
   b. Click Clear Browsing data.
   c. Select all check boxes in Clear Browsing data.
   d. In Time range, select All time.
   e. Click Clear data.

2. Open Network Diagnostics.
   a. Click (Customize and control Google Chrome icon), then select More tools, and then Developer tools.
   b. Click Network.

3. Sign in to the EPM Cloud environment and perform the use case that causes performance or functional issues.

4. Sign out of EPM Cloud.

5. Sign in to the EPM Cloud environment again and perform the same use case that causes performance or functional issues to ensure that the browser has cached static content.

6. Right-click in the Name column and select Save all as HAR with content, and save the trace information to a local directory.

Collecting Network Traces Using Firefox

1. Clear Firefox cache.
   a. Click (View history, saved bookmarks, and more icon), then select History, and then Clear Recent History.
   b. In Time range to clear, select Everything.
   c. Click Clear Now.

2. Open Network Diagnostics.
   a. Click (Open Menu icon), then select Web Developer, and then Network.
   b. Select the Persist Logs check box on the Network Monitor tab.
   c. Sign in to the EPM Cloud environment and perform the use case that causes performance or functional issues.
   d. Sign out of the EPM Cloud environment.
Collecting Network Traces Using Internet Explorer

1. Clear Internet Explorer cache.
   a. From Tools, select Internet Options.
   b. In Browsing history, click Delete.
   c. Select all check boxes in Delete Browsing History and then click Delete.
   d. Click OK.

2. Open Network Diagnostics.
   a. From Tools, select F12 Developer Tools.
   b. Click Network. If the Network Profiling Session is not active, click Start Profiling Session.
   c. Sign in to the EPM Cloud environment and perform the use case that causes performance or functional issues.
   d. Sign out of the EPM Cloud environment.
   e. Sign in to the EPM Cloud environment and perform the same use case that causes performance or functional issues to ensure that the browser has cached static content.
   f. Click Export as HAR icon, and save the trace information to a local directory.

Creating a Provide Feedback Submission

Use the Provide Feedback utility to gather the information that Oracle Support needs to identify and fix your problem. While creating the submission, reproduce your issue and capture relevant screenshots that clearly show the steps to reproduce your issue.

See Helping Oracle Collect Diagnostic Information Using the Provide Feedback Utility in Getting Started with Oracle Enterprise Performance Management Cloud for Administrators for more information.

Be sure to consent to the submission of an application snapshot so that Oracle can reproduce your issue inhouse.

Note:

The utility generates a reference number for your submission, which you should include in the service request. The reference number is included in the feedback notification email sent to Service Administrators.
Submitting a Service Request

Sign in to Oracle Support web site and create a service request. Be sure to include the reference number that the Provide Feedback utility created. Depending on your business process and issue, Oracle needs information such as:

- POVs
- User and substitution variables
- Expected and actual performance parameters (for example, expected time for consolidation versus actual time)
- Fiddler trace or HAR file of the session
- Log files

Understanding Access Limits

Can I Access the Database Used with my Cloud Environment?

No. You cannot access the database that supports your Oracle Enterprise Performance Management Cloud environment. Access to all cloud content is provided through the provided user interfaces, application program interfaces, and utilities only. Direct access to the database using SQL is not provided.

Can I Access the EPM Cloud Operating System?

No. You cannot directly access the operating system that hosts your EPM Cloud environments. Direct access to the file system and other platform components is not provided.

Can I Access the Operating System and Application Log Files?

No. You cannot directly access the operating system and application log files from the server that hosts your EPM Cloud environments.

Monitoring the Service

This section lists queries related to monitoring Oracle Enterprise Performance Management Cloud environments.

How do I monitor service performance?

Service Administrators can monitor performance through My Services, which provides historic performance metrics. Service Administrators can also view Activity Reports, which helps streamline application design by identifying calculation scripts and user
requests that impact application performance. See Monitoring Your Service in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.

**Is there a way to performance test an environment under load?**

Use the `replay` EPM Automate command to simulate system load to verify that user experience is acceptable when the service is under a specified load. For example, you can test the user experience on a test environment under a heavy load to ensure that the service will perform well after you migrate the application from the test environment to the production environment.

See these sections in *Working with EPM Automate for Oracle Enterprise Performance Management Cloud*

- Command Reference
- Preparing to Run the Replay Command

**Is there an Activity Report in Narrative Reporting?**

Activity Report and access logs are not available from Narrative Reporting screens.

Activity Reports and access logs are generated and stored in Narrative Reporting server. You can download them using the `downloadFile` EPM Automate command.

Additionally, you can generate a System Audit log, a CSV file, to identify changes to the service over a period of time. See "Performing an Audit" in *Administering Narrative Reporting* for detailed information.

**How do I view service details?**

Use My Services to view service status, uptime, and utilization data. Additionally, from My Services, you can access service console, environments, and the Oracle store.

See "Viewing Service Details in My Services" in *Managing and Monitoring Oracle Cloud*.

**How do I monitor notifications related to outages?**

Use the My Services Notifications page to monitor ongoing service outages and planned service outages that Oracle schedules for service maintenance. You can filter and sort the list of notifications.

See "Monitoring Notifications" in *Managing and Monitoring Oracle Cloud*.

**How do I ensure that only authorized users can access EPM Cloud environments? How can I ensure that users can only connect using our organization's VPN?**

Use a whitelist or blacklist to control access to EPM Cloud environments. See these information sources:

- Setting Up Network Restricted Access in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.
How do I determine the current size of data in an environment?

Use the Details page of the environment in My Services to monitor data size. The details page displays the data size in an environment in these formats:

- Usage trend as a graph
- Usage trend as a table
- Most recent data size in Gigabytes (GB)

To determine the data size:

2. Click the name of an environment.
3. Click Business Metrics.
4. Select Size of Data (GB).

See Monitoring Service Status, Account Balance, and Utilization in a Domain in Managing and Monitoring Oracle Cloud.

What contributes to the data size in an environment?

Data size in a service environment is the sum of the following:

- Application data stored in Essbase.
- Artifact snapshot created by the daily maintenance process
- Snapshots that you created using Migration and EPM Automate.
- Snapshots that you uploaded using Migration and EPM Automate.
- Data and metadata files that you uploaded using Migration and EPM Automate.

The Activity Report lists application size information including data size (includes the size of snapshots, and files available in the inbox and outbox), size of Essbase data, and the size of the maintenance snapshot. See Application Design Information in Getting Started with Oracle Enterprise Performance Management Cloud for Administrators.

What is the maximum allowed data size in an environment?

The default maximum size of your environment is 150 GB; you can purchase additional storage to extend this limit. Please see your Order Documents for details of your purchased subscriptions.

Your service will work after the data size reaches the 150 GB limit. Oracle may remind you to reduce the data size when it exceeds 150 GB. You can reduce the data size by deleting unnecessary snapshots, metadata, and data files from the service.

If the total size of all snapshots is over 150 GB, Oracle will delete the snapshots (older first) until the total size of all snapshots is within 150 GB limit or only Artifact Snapshot remains. Artifact Snapshot is never deleted irrespective of the size.

Services other than Narrative Reporting can use the deletefile command to remove unnecessary files from an environment. See Command Reference in Working with EPM Automate for Oracle Enterprise Performance Management Cloud.
Managing User Accounts

This section lists common queries about SSO and user accounts.

**If my service is configured for SSO, does EPM Cloud manage user passwords?**

If the service is configured for SSO, Oracle Enterprise Performance Management Cloud user names and passwords, and password policies, are managed by the directory server of your organization.

Service Administrators who need to access clients, such as EPM Automate, must have EPM Cloud accounts enabled for identity domain credentials. See Ensuring that Users Can Run EPM Cloud Utilities After Configuring SSO in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*. For these accounts, EPM Cloud maintains passwords.

All users, including automation and system users, must periodically change their passwords. EPM Cloud sends reminder emails every day, starting seven days prior to password expiry, asking users to change their passwords. New passwords must adhere to the EPM Cloud password policies listed on the My Profile page of the My Services application. See Changing Your Password in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.

**My service is not configured for SSO. Is there a way to ensure that EPM Cloud password policies mirror that of my company?**

No. EPM Cloud password policies cannot be changed to mirror the policies of an organization. If you want to use your own password policies, configure SSO.

Client Compatibility

This section addresses questions about browser and Oracle Smart View for Office compatibility.

**How do I determine if users are using a recommended browser?**

Use the Activity Report to track browser usage. This report lists the following:

- Browsers with unsupported versions and the number of users who used them
- Versions of the browsers that were used to access the service and the number of users who used them

Use these topics in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*:

- Using Activity Reports and Access Logs to Monitor Usage
- Supported Browsers

**How do I track the version of Smart View being used?**

Use the Activity Report to track Smart View usage. This report lists the following:

- Smart View versions being used and the number of users who use them
- The 10 most active Smart View users who do not use the current version of Smart View
Best Practices for Production Environments

This section explores some Oracle recommended best practices for managing Oracle Enterprise Performance Management Cloud. Topics include change management process and the use of maintenance mode.

Oracle recommends that all activities related to building and fine-tuning, and testing applications be performed in the test environment before migrating fully tested applications from the test to the production environment.

Use Maintenance Mode while Performing Administrative Tasks

The maintenance mode is a state in which only Service Administrators can perform tasks within the application; all other users are locked out. The application remains in maintenance mode until a Service Administrator returns it to regular use by turning off the maintenance mode.

When you set the application in maintenance mode, active users are signed out, which may result in losing unsaved data. To avoid data loss when an environment goes into maintenance mode, Oracle recommends that Service Administrators communicate the planned invocation of maintenance mode to users, advising them how to avoid losing unsaved data.

The following administration tasks, which consume a sizable amount of available computing resources, must be performed in maintenance mode.

- Adding a cube
- Refreshing cubes
- Restructuring an application
- Loading metadata
- Loading data

Limit the number of users who are assigned to the Service Administrator role

Assign the Service Administrator role, the most powerful role in EPM Cloud, to only a few users. If required, assign application roles to augment the privileges of users to allow them to perform tasks that are not permitted by their role assignment in identity domain.

See Managing Role Assignments at the Application-Level in Administering Access Control for Oracle Enterprise Performance Management Cloud for details.
Troubleshooting EPM Cloud Issues

Issues discussed include improving performance of consolidation process, business rules, and Financial Reporting reports.

In This Section:

- Resolving Login Issues
- Dealing with Down Environments
- Resolving Import and Export Errors
- Resolving EPM Automate Issues
- Resolving User, Role, and Group Management Issues
- Optimizing Slow Business Rules
- Resolving Form Performance Issues
- Handling Unexpected Timeouts During Database Refresh
- Resolving Performance Issues with Smart Push
- Optimizing Data Retrieval from Aggregate Storage Option Cubes
- Making Financial Reporting Reports More Efficient
- Fixing Smart View Issues
- Diagnosing Consolidation Failures and Performance Issues in Financial Consolidation and Close
- Troubleshooting Data Load Performance Issues
- Resolving Other Performance Issues
- Handling Financial Consolidation Data Inaccuracies
- Handling Data Loss in an Environment
- Resolving Order Processing Issues
- Resolving IP Whitelisting Functional Issues
- Requesting a Temporary Loaner Environment
- Responding to Customer Diagnostic Alerts
- Resolving Other Performance Issues
Resolving Login Issues

This section lists common issues related to logging into Oracle Enterprise Performance Management Cloud using VPN, using vanity URLs, and connecting with Oracle Smart View for Office.

Resolving connection issues

If you can connect to websites outside of your organization's network, but cannot connect to EPM Cloud:

- Verify that the connection URL and the credentials you are using are valid.
  If your environments are configured for SSO but you are not setup to use identity domain credentials make sure that you are using your SSO credentials.
- Check if you can connect to the service from a different network (a wireless network or outside your organization's network).
- Verify that the browser is configured for EPM Cloud. See these topics in Getting Started with Oracle Enterprise Performance Management Cloud for Administrators:
  - Configuring Internet Explorer
  - Configuring Firefox
- Verify that EPM Cloud and Oracle domains (cloud.oracle.com and oraclecloud.com) are not blacklisted.
- If you are using Virtual Private Network (VPN), connect to EPM Cloud without using VPN. If the connection is successful, the issue may be related to your VPN setup or internet proxy settings. Contact your network administrator for help.

Resolving login failures when connecting to EPM Cloud through VPN

Connect to EPM Cloud without using VPN to ensure that the EPM Cloud URL and credentials are valid. If you can access the service, connectivity issue may be localized to the following, which requires help from your network administrator:

- Internet proxy setting on your computer
- Your organization's VPN setup

Deciding which sign in option to use when two options are available

In SSO-enabled environments, a sign in screen similar to the following is displayed for users who are permitted to maintain identity domain credentials; typically, Identity Domain Administrators and Service Administrators who need to use clients such as EPM Automate.
You may sign in using the **Company Sign In** option to access the environment using your SSO credentials. Alternatively you can use your identity domain credentials to access EPM Cloud environments.

**Using vanity URLs for redirection**

Vanity URLs are not supported for accessing EPM Cloud.

**Getting Help**

If the preceding solutions do not resolve your login issues, seek Oracle’s help. See *Getting Help From Oracle*.

- Generate a Fiddler trace file of your login session, if possible. See *Using Fiddler to Capture Diagnostic Information*.
  
  If you are unable to generate a Fiddler trace file of your session, see *Collecting Network Performance Trace Using a Browser* for information on collecting network trace using a browser.

- If you are able to log in, create a Provide Feedback submission and include its reference number in the service request. See *Creating a Provide Feedback Submission*.

- Create a service request and provide the following to Oracle. See *Submitting a Service Request*.
  
  - Fiddler trace or HAR file if possible
  - Screenshot of the error
  - Date, time, and time zone when the error occurred.
  - URL of the environment
  - Specify if the error occurred for a specific user or for all users
  - Specify whether the error occurred at one or all locations
  - Specify whether you are in the production phase (as opposed to implementation or testing)
  - Specify whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management

**Dealing with Down Environments**

Use these steps to fix issues with down Oracle Enterprise Performance Management Cloud environments.
1. Restart the environment.
   Use the resetService EPM Automate command to restart the environment. Restarting an environment does not affect your application. However, sessions of currently connected users will be terminated and any unsaved data is lost. See EPM Automate Commands in *Working with EPM Automate for Oracle Enterprise Performance Management Cloud* for command usage and example.

2. If restarting the environment does not resolve the issue, create a service request. See Submitting a Service Request. The service request must contain the following additional information:
   - Screenshot of the error message or a detailed description of the behavior of the environment.
   - The date, time, and timezone when the environment went down.
   - Specify whether you are in the production phase (as opposed to implementation or testing).
   - Specify whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

**Resolving Import and Export Errors**

Migration supports two types of exports: backup of the environment and incremental export of artifacts. When you backup the environment, you create a snapshot of the environment, similar to the maintenance snapshot, by exporting the application with all of its data and artifacts. You export from an environment to create an incremental backup of specific artifacts.

**About Exports**

The Migration Status report, which is displayed after you initiate the export operation from Migration, indicates Failed as the status if the operation fails for any reason. Click Failed in the report to open the Migration Details screen, which indicates why the export failed and the corrective action. You can attempt the export operation again after correcting the error that caused the export to fail.

**About Imports**

You import snapshots to create a clone of another environment or to migrate artifacts from another environment.

You cannot import a backup snapshot into an environment where an application already exists. If you want to import a backup snapshot into an environment with an existing application, first run the recreate EPM Automate command (with removeAll=false setting) to restore your environment to a clean state, and then import the backup snapshot. See EPM Automate Commands in *Working with EPM Automate for Oracle Enterprise Performance Management Cloud* for command usage and example.

You import specific artifacts from a backup snapshot or an incremental snapshot to migrate artifacts from one environment to another. For example, you can import a snapshot of tested artifacts from a test environment into a production environment. Similarly, you can import Essbase data and artifacts from an incremental snapshot created by exporting them from another environment.
The Migration Status report, which is displayed after you initiate the import operation from Migration, indicates *Failed* as the status if the import fails for any reason. Click **Failed** in the report to open the Migration Details screen, which indicates why the import failed and the corrective action. You can attempt the operation again after correcting the error that caused the import to fail.

**Getting Help**

If import or export continues to fail after you correct the errors reported in the Migration Status report, seek help from Oracle.

To get help from Oracle:

1. Create a Provide Feedback submission, which includes screenshots of the import or export process.  
   Be sure to authorize Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See [Creating a Provide Feedback Submission](#).

2. Create a service request that identifies the Provide Feedback reference number. See [Submitting a Service Request](#). Ensure to attach additional screenshots, if needed, to the service request. In the service request, specify:
   - Whether you are in the production phase (as opposed to implementation or testing)
   - Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

**Resolving EPM Automate Issues**

This section lists common issues that you may encounter while using EPM Automate and how to resolve them.

**Resolving session failures if the environment is configured for SSO with an identity provider**

The EPM Automate does not work with SSO (identity provider) credentials that you use to access Oracle Enterprise Performance Management Cloud or Oracle Smart View for Office.

If the service is configured for SSO, an Identity Domain Administrator must enable EPM Automate users to sign in with their identity domain credentials.

See [Ensuring that Users Can Run EPM Cloud Utilities After Configuring SSO](#) in Getting Started with Oracle Enterprise Performance Management Cloud for Administrators.

Also, see [Enabling Sign In With Identity Domain Credentials](#) in Administering Oracle Cloud Identity Management.

**Resolving script execution failures after changing EPM Cloud password**

You will receive periodic password expiry warnings from oraclecloudadmin_ww@oracle.com. After changing your EPM Cloud password, EPM Cloud credentials are required to run EPM Cloud. Scripts that use EPM Cloud credentials will fail to run after you update identity domain password.
If you use an encrypted password file to run scripts, update your password encryption file to reflect the new password. See the `encrypt` command in EPM Automate Commands in Working with EPM Automate for Oracle Enterprise Performance Management Cloud for command usage and examples. If you use plain text passwords in scripts, be sure to update them.

**Resolving EPMAT-11 Internal Server Error, Connection timed out**

This error is displayed if a connection cannot be established because of a bad URL or invalid proxy settings on the computer.

- Verify that you are using a valid URL
- If your organization requires the use of a proxy server to connect to the internet, verify that the proxy setting in Internet Explorer is accurate.

If your proxy settings require you to authenticate with the proxy server, then you must enter the proxy server domain, user name, and password as parameters to the `login` command. Contact your network administrator for help with proxy server domain name and credentials. See the `login` command in "Working with EPM Automate for Oracle Enterprise Performance Management Cloud" for usage information and examples.

**Resolving EPMAT-11: Unable to connect to URL error when connecting from a Linux computer**

This error can occur if proxy settings are not specified in environment variables.

On Linux computers, verify that the following environment variables are set. The utility looks for the value of these variable to determine proxy settings:

- `proxyHost`
- `proxyPort`
- `https.proxyHost`
- `https.proxyPort`

**Correcting FileNotFoundException: .prefs (Access is denied) error in Windows environments**

This error is displayed if you do not have write permission in the Windows directory from which you execute EPM Automate. EPM Automate creates a `.prefs` file, which contains user information, and log files in the current Windows directory.

To resolve this error, ensure that the Windows account of the current user has Read/Write access to the directory from which EPM Automate is run. Additionally, this user must have appropriate access to any other directory from which a file is accessed (for example, while running the `uploadFile` command) or written (for example, while running the `downloadFile` command).

**Resolving Unsupported protocol: https error when connecting from a Windows computer**

This error can occur if the SSL certificate of the proxy server is not installed in the JRE being used by EPM Automate.

EPM Automate is not able to establish a trusted communication channel with the proxy server because the certificate store (`C:\Oracle\EPM Automate\jre1.8.0_111\lib`)
security\cacerts does not contain the required certificate to secure communication between EPM Automate and the proxy server that you use to channel internet communications.

Work with the IT Administrator of your Windows network to identify the required certificate. Generally, this certificate is available on your computer; you need to import it into the certificate store used by EPM Automate.

To install the proxy server SSL certificate in EPM Automate JRE:

1. Create a backup copy of EPM Automate certificate store (generally, C:\Oracle\EPM Automate\jre1.8.0_111\lib\security\cacerts

2. From Windows Settings, search for, and open Internet Options Internet Properties is displayed.

3. On Content, click Certificates.

4. On Certificates, open Trusted Root Certification Authorities.

5. Select the authority that issues the proxy certificate and then export it. You will be asked for the name and location for an export file.

6. In a Command Prompt window, navigate to C:\Oracle\EPM Automate\jre1.8.0_111\bin and run the keytool:

   keytool -import -alias CA_NAME -keystore "C:\Oracle\EPM Automate\jre1.8.0_111\lib\security\cacerts" -file EXPORTED_FILE_NAME, where CA_NAME is the name of the certificate authority and EXPORTED_FILE_NAME is the location and name of the exported certificate file. for Example:

   keytool -import -alias "Certum CA" -keystore "C:\Oracle\EPM Automate\jre1.8.0_111\lib\security\cacerts" -file "C:\Oracle\EPM Automate\Certum_CA.cer"

7. Enter changeit when prompted for password.

Handling login failures after switching networks

After you switch from one network to another, initial EPM Automate login attempt fails because of the change in the MAC address of the client machine. For example, this failure occurs at your first login attempt after you switch from a wifi connection to a LAN connection.

To resolve this error, sign in again to make EPM Automate use the current MAC address.

Getting Help

If your issue persists after trying the preceding tips, seek help from Oracle Support. See Getting Help From Oracle.

Submit the following:

• **If you can sign into your environment using EPM Automate:**
  
  – Sign in to your environment.
  
  – Upgrade to the latest version of EPM Automate by running the upgrade command.
    
    ```bash
epmAutomate upgrade
    ```
– Check if your issue is resolved.
– If your issue persists, create a Provide Feedback submission using the feedback command. Be sure to attach relevant EPM Automate-based script files that you are using. For example:
  ```
  epmAutomate feedback "ListFile command in example.ps1 failed"
  file=example.ps1
  ```

• **If you cannot sign into your environment using EPM Automate:**
  Use an EPM Cloud screen to create a Provide Feedback submission. See Creating a Provide Feedback Submission for information on providing feedback from EPM Cloud screens.

• A service request that identifies the Provide Feedback reference number. See Submitting a Service Request for instructions. In the service request:
  – Specify whether you are in the production phase (as opposed to implementation or testing)
  – Specify whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

## Resolving User, Role, and Group Management Issues

Use this information to resolve cases where user, role, or group management processes completed using EPM Automate or My Services are not reflected in the environment.

Sometimes, a role assignment may not take effect in an environment. For example, a user who was recently assigned a role in My Services may get *Not Allowed* error while accessing the environment.

If the issue persists, seek help from Oracle.

1. Create a Provide Feedback submission.
   
   Be sure to authorize Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.

2. Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. Ensure to attach the following to the service request.
   • Screenshot of the My Services screen showing the roles assigned to the user.
   • The current Role Assignment report available in the environment.
   • A detailed description of the problem.
   • Specify whether you are in the production phase (as opposed to implementation or testing).
   • Specify whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.
Optimizing Slow Business Rules

How often have you asked the question "How can I optimize slow business rules identified in the Activity Report?". This section describes the steps involved in optimizing slow business rules.

Optimization Steps include:

- Reviewing the Activity Report to Identify Candidates for Optimization
- Identifying Areas for Rule Optimization
- Optimizing Rules: An Example

Reviewing the Activity Report to Identify Candidates for Optimization

The Activity Report contains information on the impact of the calculation scripts used by the application to overall performance.

See Reviewing the Activity Report to Identify Performance Bottlenecks. Carefully review the following sections of the report to identify the business rules that are taking the longest time to execute.

- **Top 10 Worst Performing Business Rules over 30 Seconds**, which identifies the business rules that take the most time to run, and are candidates for optimization.
- **Top 5 Worst Performing Calc Scripts Commands over 1 Min**, which identifies specific sections in a rule that takes a long time to execute and should be reviewed to improve performance.

Begin by identifying the name of the calculation scripts that are reported as being the worst performers. For example, the areas highlighted in red, in following illustration shows the name of the scripts reported among top 5 worst performing scripts.

<table>
<thead>
<tr>
<th>Top 5 Worst Performing Calc Scripts Commands over 1 Min</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration (Min:Sec)</strong></td>
</tr>
<tr>
<td>21:23</td>
</tr>
<tr>
<td>21:35</td>
</tr>
<tr>
<td>21:15</td>
</tr>
</tbody>
</table>

See Reviewing the Activity Report to Identify Performance Bottlenecks. Carefully review the following sections of the report to identify the business rules that are taking the longest time to execute.
Identifying Areas for Rule Optimization

Run the slow performing business rule from Calculation Manager to identify the steps that take the longest time.

**Note:**
You cannot run Consolidation and Close rules directly from Calculation Manager because the run time parameters that are required to execute rules cannot be specified from Calculation Manager.

To identify steps that take the longest time:

1. Launch Calculation Manager.
   a. Sign in to the environment as a Service Administrator
   b. On the Home page, click (Navigator), and then, from Create and Manage, select Rules.
2. Locate and then double-click the rule to open it.
3. Click (Launch) to run the rule.
4. Input the required runtime parameters and click OK.
5. Click Log Messages to open the log file.
6. Assess the log messages, paying special attention to how the total business rule execution time is spread across the number of calculation passes. Identify the following, which are candidates for optimization.

- Passes that consume a bulk of the total rule execution time.
  
  For example, in the preceding illustration, pass 3 takes the most time to complete (0.187 seconds) and occupies 96.392% of the pass time, indicating that it is a prime candidate for optimization. The start of a new pass is shown in bold. Review the Pass # and Pass % columns to determine which pass is consuming most of the rule execution time.

- Messages that indicate dynamic calc dependencies. Dynamic calc dependency messages identify member formulas that are dependent on another dynamically calculated member. Dynamic calc dependency, especially dependencies on sparse dynamically calculated members, can slow the overall calculation performance.

- XREF session messages. XREF session messages indicate that a member formula contains a member that is calculated by referencing a member in another cube. XREF sessions can slow the overall calculation performance.

**Note:**

You may export the log messages to an XLS format file for easier evaluation and for submitting to Oracle Support, if needed.

**Note:**

Use of CALCPARALLEL and FIXPARALLEL for concurrent processing in business rules by many users may result in slow performance because such rules consume more resources compared to business rules that are processed serially.

A single invocation of a business rule that uses CALCPARALLEL and FIXPARALLEL may perform acceptably. However, overall performance will deteriorate if multiple concurrent users execute such business rules (same or different). As more users concurrently run calculations with CALCPARALLEL and FIXPARALLEL, resource usage increases and may reach capacity thereby decreasing the overall performance. Do not use CALCPARALLEL and FIXPARALLEL for business rules run by end users. Also, do not use CALCPARALLEL and FIXPARALLEL for business rules run in batch that are run concurrently with end user business rules.

**Optimizing Rules: An Example**

After identifying the passes to optimize, edit the business rule. Ensure that the optimal logic and conditions are specified for each pass.
Consider the following business rule definition, which calculates two YTD accounts and then aggregates the values through the Product and Entity dimensions:

```
SET UPDATECALC OFF;
/* PASS 1 BEGINS*/
FIX ("BaseData","Plan","FY17","FY16")
    "BU Version_1"{
        IF(@ismbr("Jan"))
            "4110_YTD" = "4110"; "4120_YTD" = "4120";
            "4130_YTD" = "4130";
            "4140_YTD" = "4140";
            "4150_YTD" = "4150";
        Else
            "4110_YTD"="4110" + @prior("4110_YTD"); "4120_YTD"="4120"
                + @prior("4120_YTD");
            "4130_YTD"="4130" + @prior("4130_YTD"); "4140_YTD"="4140"
                + @prior("4140_YTD");
            "4150_YTD"="4150" + @prior("4150_YTD");
        Endif
    }/* PASS 1 ENDS -- PASS 2 BEGINS*/
Agg("Entity","Product");
/* PASS 2 ENDS */
ENDFIX
```

On running this rule in Calculation Manager (see Identifying Areas for Rule Optimization), the Log Message tab shows a message similar to the following when Pass Only is selected:

![Log Message](image)

An analysis of the information in the log file indicates that 99.995% of the execution time (79.235 seconds) is spent on pass 1, and only 0.005% on pass 2.

If you deselect Pass Only, blocks, read, and write information similar to that shown in the following illustration is displayed:

![Rule Definition](image)

The preceding rule definition has these issues:
• It does not have a FIX on Entity and Product dimensions, thereby forcing all the rules to be run on all levels of Entity and Product dimensions.

• Pass 1 needlessly calculates the upper levels. The Agg function in pass 2 does this and overwrites what is done in pass 1.

The script can be optimized as follows:

SET UPDATECALC OFF;
FIX ("BaseData","Plan","FY17")

/* PASS 1 BEGINS*/

FIX(@LEVMBRS("Entity",0), @LEVMBRS("Product",0))
"BU Version_1"{
  IF(@ismbr("Jan"))
    "4110_YTD" = "4110";
    "4120_YTD" = "4120";
  Else
    "4110_YTD"="4110" + @prior("4110_YTD");
    "4120_YTD"="4120" + @prior("4120_YTD");
  Endif)
ENDFIX
/* PASS 1 ENDS --- PASS 2 BEGINS*/

Agg("Entity","Product");
/* PASS 2 ENDS */
ENDFIX

On running the updated rule in Calculation Manager (see Identifying Areas for Rule Optimization), the Log Message tab shows a message similar to the following:

An analysis of the information in the log file indicates that the execution time taken in pass 1 is 15.901 seconds less compared to the previous run.

If you deselect **Pass Only**, blocks, read, and write information similar to that shown in the following illustration is displayed for pass 1:
A comparison of the blocks, read, and write information with similar data from pre-optimization indicates an across the board reduction in the processing statistics of the business rule.

**Getting Help**

If you were unable to optimize the rule using the information in the preceding sections, review these factors before seeking help from Oracle, especially if the issue manifested itself recently:

- **Recent changes to the application**
  Compare the following tables in the Activity Report with the information available in an Activity Report from a previous date when the rule was working well. This comparison will help you identify application design changes that have taken place between the two dates:
  - Application Size
  - Essbase BSO Cube Statistics
- **Recent changes to the use of the impacted business rule** (for example, different values of run-time prompts, change in user or substitution variables, more concurrent users, etc.)
- **Re-run the rule in Calculation Manager and export the log messages output.** Then use the Provide Feedback utility to gather the information that Oracle Support needs to identify and fix your problem. See Helping Oracle Collect Diagnostic Information Using the Provide Feedback Utility in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.

If log messages cannot be exported for any reason, be sure to include the rule name and the timestamp (and timezone) of the start and end time of the rule run.

- **Submit a service request indicating the reference number that the Provide Feedback utility created.**
- **Answer these questions:**
  1. When was the issue first observed? (required)
  2. Was there any recent application or rule usage change that could have caused this issue? (optional)
  3. Are in the production phase (as opposed to implementation or testing)?
  4. Is this issue stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management?
- **Provide the following to Oracle:**
Resolving Form Performance Issues

Performance issues in forms may be caused by factors such as business rule execution settings and the complexity of business rules. Other factors impacting performance include database design, the number of cells on the form, and dynamic content in the form.

Use the procedures in this section to identify and correct issues that may cause unacceptable Planning forms performance.

1. Review the Activity Report, which contains information on the impact of business rules on performance. Specifically, review the Business Rules Attached to a Form Taking Longer than 3 Seconds section of the report to determine if an attached business rule is causing poor performance. Use the instruction in Optimizing Slow Business Rules to optimize business rules attached to the form.

2. If performance does not improve after completing the preceding steps, review the application design, the number of cells on the form, and dynamic content in the form in order to improve the performance. Also, ensure that the member data storage property of all Level 0 members that do not use a member formula is set to Never Shared.

3. If performance still does not improve, seek help from Oracle.
   • Create a Provide Feedback submission, which includes screenshots of the form as you run it in your environment.
     Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.
   • Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following additional information:
     – Name and path of the form, all POVs, and all user and substitution variables being used
     – Expected performance parameters and actual results
     – If the performance of the form was acceptable previously, but is not now, the date, time, and timezone when performance was acceptable.
– Snapshot of the environment, if available, from the last time when the performance of the form was acceptable.
– Form changes that you made since the last time when the performance was acceptable.
– The environment type (Test or Production) where this issue is observed.
– Whether you are in the production phase (as opposed to implementation or testing).
– Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

Handling Unexpected Timeouts During Database Refresh

Seek help from Oracle if database refresh results in timeouts or does not perform as you expect.

1. Create a Provide Feedback submission that captures your actions while refreshing the database.
   Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.

2. Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following additional information:
   • If the process was working and performing better previously, but is not now, the date, time, and timezone when the process was working as expected.
   • Snapshot of the environment, if available, from the last time when the database refresh worked and performed better.
   • Application changes that you made since the last time the database refresh worked properly and performed better.
   • Whether you are in the production phase (as opposed to implementation or testing).
   • Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

Resolving Performance Issues with Smart Push

If you encounter performance issues while performing smart push, try to optimize them.

To optimize smart push:
• Drop aggregate views
• Enable query tracking
• Run a few smart pushes to ensure that everything works as designed
• Create aggregate views based on query tracking
• Setup a nightly job to drop and recreate aggregate views
If these optimization steps do not improve performance, seek help from Oracle.

1. Create a Provide Feedback submission that captures your actions. Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.

2. Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following additional information:
   - Detailed steps to reproduce the issue.
   - If the process was performing better previously, the date, time, and timezone when mart push was performing as expected.
   - Snapshot of the environment, if available, from the last time when smart push was performing better.
   - Application changes that you made since the last time smart push was performing better.
   - Whether you are in the production phase (as opposed to implementation or testing).
   - Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

Optimizing Data Retrieval from Aggregate Storage Option Cubes

Performance while retrieving data from ASO reporting cubes is governed by many factors including the number of slices in the cube, the outline of the cube, and the type of dimensions in the cube.

Optimizing data retrieval from ASO cubes involves the following steps:

- Merging Data Slices and Removing Zeros
- Compacting the Outline
- Creating Required Aggregate Views
- Reviewing Dimension Hierarchy Types
- Getting Help from Oracle

Merging Data Slices and Removing Zeros

A data slice is an incremental store for data. Fewer data slices improve a cube’s performance and reduce the database size.

A data slice, an incremental store of the data, is created in the following situations:

- When you load data into an ASO cube
- When you submit data from Oracle Smart View for Office
- When you run a calculation or allocation
Creating a data slice when loading data improves the performance of incremental data loads, but increases the size of the database. After loading the new slice into the database, Essbase creates all necessary views on the slice (such as aggregate views) before the new data is visible to queries. The number of incremental data slices is displayed under **Essbase ASO Cube Statistics** in the Activity Report. See About the Activity Report in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.

Fewer data slices improve a cube’s performance. To improve performance, you can merge all incremental data slices into the main database slice. Alternatively, you can merge all incremental data slices into a single data slice without changing the main database slice.

If you cleared data before you push the data into an ASO cube, the affected data cells show the value 0 instead of #Missing. Additionally, when you delete a value through Smart View or data forms, the value is set to 0 instead of #Missing. For optimal performance, you must replace 0 with #Missing.

You can merge data slices and remove zeros manually from Calculation Manager or schedule the process as a job. Because the database is locked during the process, Oracle recommends scheduling the job when users are not using the application.

**Merging Data Slices and Removing Zeros Using A Job**

Jobs are actions that you can schedule to start at a convenient time. To merge data slices you create and schedule a **Merge Data Slices** job.

To merge incremental slices and remove zeros using a job:

1. Sign into Oracle Enterprise Performance Management Cloud.
2. Click **Application**, then **Jobs**, and then click **Schedule Jobs**.
3. Select **Merge Data Slices** as the job type.
4. In **Name**, enter a name for the job.
5. Select when to run the job. You can run a job right away or schedule it to run at a later time.
6. Click **Next**.
7. Specify merge options in **Job Details**:
   a. Select the cube.
   b. Select how you want to merge data slices. Choose one of the following:
      • **Merge all into the main slice** to merge all data slices into the main data slice.
      • **Merge all into a single incremental slice** to consolidate all data slices
   c. Under **Merge Options**, select **Remove cells with zero value** to replace 0 with #Missing as the value in cells from which data has been cleared prior to data push.
8. Click **Next** and then review the selected job settings.
9. Click **Finish**.
Merging Incremental Data Slices and Removing Zeros Using Calculation Manager

You can merge data slices and remove zeros by running the merge operation using Calculation Manager. You cannot schedule the merge operation in this manner.

To merge data slices and remove zeros using a business rule:

1. Sign into Oracle Enterprise Performance Management Cloud.

2. Click (Navigator) and then Rules under Create and Manage Calculation Manager is displayed.

3. In Calculation Manager, Click Actions and then Database Properties.

4. From Enterprise View, expand the database node

5. Right-click the cube and select Merge Data, then All, and then Remove cells with zero value.

6. Click OK to start the merge process.

Compacting the Outline

Although ASO cubes do not contain blocks, cube fragmentation may occur when members or dimensions are added or deleted. Compacting cube outline, especially after changing metadata, defragments the cube to improve performance and reduce size. Compacting the outline optimizes size, but does not clear data.

You must compact the ASO cube outline on a routine basis, especially after modifying hierarchies. Because compacting the outline requires locking the cube, this process is best scheduled to run when the application is idle. If you are in development phase, you may compact the cube manually using Calculation Manager and review the output to identify areas for optimization.
Compacting ASO Outline Using a Job

To schedule a job to compact the outline:

1. Sign into Oracle Enterprise Performance Management Cloud.
2. Click Application, then Jobs, and then click Schedule Jobs.
3. Select Compact Outline as the job type.
4. In Name, enter a name for the job.
5. Select when to run the job. You can run a job right away or schedule it to run at a later time.
6. Click Next.
7. In Job Details, select the cube to compact.
8. Click Next and then review the selected job settings.
9. Click Finish.

Compacting ASO Outline Using Calculation Manager

Compact the outline from Calculation Manager to run the process right away. When the process is complete, you can review details of the process to optimize the outline. This process is recommended for streamlining outlines in development environments.

To compact outlines using Calculation Manager:

1. Sign into Oracle Enterprise Performance Management Cloud.
2. Click (Navigator) and then Rules under Create and Manage Calculation Manager is displayed.
3. In Calculation Manager, Click Actions and then Database Properties.
4. From Enterprise View, expand the database node
5. Right-click the cube and select Compact Outline.
6. Click OK to start the process.

When the process finishes, Compact Outline Action Status is displayed.

7. Click Show Details to view process status. Review warnings to identify changes that can be made to optimize the outline. Some sample warnings:

Invalid formula for member [<Member1>](reason: depends on a member[<Member2>] with invalid formula) will be ignored during execution

The formula for member [<Member1>] is Complex. If possible add a non-empty directive to optimize for sparse data

Invalid Formula for member [<Member1>](reason: depends on a member[<Member2>] with higher solveorder) will be ignored during execution
Evaluate the warnings and make changes to the indicated member using the Dimension Editor.

Creating Required Aggregate Views

Aggregate or materialized views are higher level dimension intersections that calculate and store a part of the data to disk based on hierarchies. They enhance retrieval performance by storing calculated data. You must recreate aggregate views when new data slices are created.

Optimizing aggregation can significantly improve the performance of ASO cubes. ASO cubes support default aggregation and query tracking aggregation. Query tracking aggregation requires that you enable query tracking and allow a sufficient time to allow the system to capture user data retrieval patterns which can then be used to create aggregate views. You can enable query tracking using a job or using Calculation Manager.

Note:
Existing query tracking data, if any, is removed when you merge data slices.

- Collecting User Data Retrieval Patterns and Creating Aggregate Views Using Jobs
- Enabling Query Tracking and Creating Aggregate Views Using Calculation Manager

Collecting User Data Retrieval Patterns and Creating Aggregate Views Using Jobs

To enable query tracking and to create aggregate views using jobs:

1. Sign into Oracle Enterprise Performance Management Cloud.
2. Click Application, then Jobs, and then click Schedule Jobs.
3. Select Optimize Aggregation as the job type.
4. In Name, enter a name for the job.
5. Select when to run the job. You can run a job right away or schedule it to run at a later time.
6. Click Next.
7. In Job Details, select the ASO cube for optimizing aggregation.
8. Select what you want to do:
   - Select Enable query tracking to start capturing user data retrieval patterns (queries).
   - Select Execute Aggregation Process to create aggregate views, and then select options:
Enabling Query Tracking and Creating Aggregate Views Using Calculation Manager

To use Calculation Manager to enable query tracking and to create aggregate views:

1. Sign into Oracle Enterprise Performance Management Cloud.

2. Click (Navigator) and then Rules under Create and Manage
   Calculation Manager is displayed.

3. In Calculation Manager, Click Actions and then Database Properties.

4. From Enterprise View, expand the database node

5. Select an option:
   • To enable the collection of data retrieval patterns, right-click the cube and select Set Query Tracking.
   • To create aggregate views, right-click the cube and select Execute Aggregation. If you are creating aggregate views using query tracking data, select options:
     – Select Include rollup option? to include secondary hierarchies (with default level usage) in the view selection process.
     – Select Include growth size option? and enter the ratio for maximum cube growth to aggregate the views the server selects, until the maximum growth reaches the ratio that you specify.

6. Click OK to start the process.

Note:
Do not select these options to run default aggregation.

– Select Based on query data? to use recorded query data to select the most appropriate set of aggregate views. Use this option only if query tracking has been turned on.
– Select Include rollup option? to include secondary hierarchies (with default level usage) in the view selection process.
– Select Include growth size option? and enter the ratio for maximum cube growth to aggregate the views the server selects, until the maximum growth reaches the ratio that you specify.

9. Click Next and then review the selected job settings.

10. Click Finish.
Reviewing Dimension Hierarchy Types

Each ASO dimension is assigned a hierarchy type: Store, Dynamic, or Multiple. Elements of Store type dimensions are stored and aggregations are materialized in aggregate views. Elements of Dynamic dimensions cannot be aggregated into views. In Multiple type dimensions, generation 2 (children of the top node) are set to Store or Dynamic.

For Multiple hierarchy type, you choose the hierarchy type as either Store or Dynamic at generation 2. The first generation 2 child (usually the main hierarchy) must be of type Store. For such hierarchies, you should edit all generation 2 members and select either Store (preferred) or Dynamic as hierarchy type. Use Dynamic hierarchy type only if the child has shared members of attached formulas.

Stored dimensions are preferred to ensure optimal performance. Because the hierarchy types you choose impacts the number of aggregate views that can be created, Oracle recommends the following:

- Use only Store type dimensions, if possible.
- Use Dynamic dimensions only if Multiple or Store type dimensions cannot be used.
- For Multiple hierarchy dimensions, set Generation 2 to Store rather than Dynamic, if possible.
- Account dimension must always be Dynamic because it is the ASO compression dimension.

Getting Help from Oracle

If the preceding optimization steps do not improve the performance of ASO cubes, seek help from Oracle.

1. Create a Provide Feedback submission that captures your actions. Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.

2. Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following:

   - The name of the ASO cube that you are trying to optimize.
   - The Form or the Excel spreadsheet you are using to test cube performance.
   - If using a Form for testing, a chronological listing of the selections that must be made in the form to reproduce your issue. If a combination of steps demonstrates the issue while another does not, provide both set of selections.
   - If the issue is related to zooming in (not related to data retrieval), attach the spreadsheet before zoom and provide specific instructions to reproduce the issue; example: Open the spreadsheet, select cell B2, and then zoom in to next level. Also explain the result of the operation.
   - Screenshots of Oracle Smart View for Office Options (ensure that all options on each tab are captured).
• Whether you are in the production phase (as opposed to implementation or testing).
• Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

Making Financial Reporting Reports More Efficient

Poorly designed Financial Reporting reports can generate several MDX requests or Essbase queries leading to the consumption of significant Oracle Enterprise Performance Management Cloud resources. Excessive resource consumption results in performance degradation when concurrent users access such reports.

The presence of several segments in the report is the key reason for generating a large number of MDX requests. This section explains how to make Financial Reporting reports more efficient by reducing the number of segments.

Redesigning Reports: a Use Case

The Original Report

The following illustration depicts the original report design:

This report illustration shows these design elements:
1. Multiple rows for each Entity member 100, 200, 403, and 500.
2. Each Entity member has 8 rows each for different accounts.

The following table presents a high level view of the original report design and the optimized design:
### Original Report Design

<table>
<thead>
<tr>
<th>Entity member</th>
<th>Optimized Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple rows for each Entity member: 100, 200, 300, 400</td>
<td>Combines Entity members into one segment: 100, 200, 403, 500</td>
</tr>
<tr>
<td>Each Entity member has 8 rows each for different accounts. Example for member 100: 100 = Children of 1100, 100 = 1100, 100 = Children of 1200, 100 = 1200, 100 = Children of 1300, 100 = 1300, 100 = Children of 1400, 100 = 1400</td>
<td>Combines all segments for all members into one segment: Entity members 100, 200, 403, 500 = Children of 11</td>
</tr>
</tbody>
</table>

### The Optimized Report

The following illustration depicts the optimized report design, which reduces the number of segments. Reducing the number of segments makes the report run faster by reducing the number of MDX requests:

![Diagram of optimized report](image)

### Other Important Report Design Considerations

- If possible, avoid relational-type reports (reports with multiple row dimensions expanded using functions) with a large combination of members. Big reports may take a significant amount of time to execute (or may not execute). A report is considered big when the number of cells exceeds ten thousand. This is similar to treating Financial Reporting as a large scale data extraction tool, which it is not.
- Avoid reports with large number of cells with text functions (CellText, PlanningAnnotations and ListOfCellDocuments, etc.) that retrieve additional metadata from the data source.
- Use current POV, prompts or books instead of Page dimension; all Page members are retrieved at one time upon executing the report.
- Consider and test the impact of Conditional Formatting and Conditional Suppression, which can affect performance depending on the size of the report. Performance is contingent on the type of criteria and frequency with which they are used within the report. Criteria that are part of metadata or data query, for example, data value, member name, and member alias or description, are rendered fast. With large reports, minimize the use of criteria that are not part of the regular metadata or data query. Examples of such criteria include generation, level, account type, and attribute value.

Review Recent Application Changes

Identify if recent changes to the application causes report generation to slow down. You can do this by comparing the information in the Application Size table in the current Activity Report with the information in the Activity Report from a previous date when the report was working well. Also review any recent changes to the report design and usage to verify that such changes have not impacted the report.

Getting Help

After optimizing the report to reduce the number of MDX requests, if you do not see performance improvements, seek help from Oracle:

- Use the Provide Feedback utility to gather the information that Oracle Support needs to identify and fix your problem. Make sure that you consent to submitting the snapshot to Oracle. See Creating a Provide Feedback Submission
- Submit a service request indicating the reference number that the Provide Feedback utility created. See Submitting a Service Request.

In the Service request, answer these questions:

1. When was the issue first observed? (required)
2. Was there any recent application or usage change that could have caused this issue? (optional)

Provide the following information along with the service request:

- Report name
- All POVs
- User and substitution variables in use
- Expected and actual report generation times
- Whether you are in the production phase (as opposed to implementation or testing).
- Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.
Fixing Smart View Issues

Use the information in this section to resolve Oracle Smart View for Office login, functional, and performance issues. It also contains information on handling issues related to Smart View timeouts.

Diagnosing Login Issues

Smart View fails to establish a connection with a data source primarily because of errors in the shared or private connection URL that is being used. For information on connection types, see Shared Connections and Private Connections in Oracle Smart View for Office User’s Guide.

• Verify that the connection URL syntax and the credentials being used are accurate.
• Using a browser, access the environment that supports the data source. Make sure that you can login using the credentials that you are using to access the data source through Smart View.
• If the issue persists, seek Oracle's help using the steps detailed in the following section.

Other Issues

Use these steps to seek help from Oracle.

1. Generate a Fiddler trace file of your session while performing the activity that results in functional or performance issue. See Using Fiddler to Capture Diagnostic Information.

   Watch this video for an overview of the information on configuring Fiddler to capture HTTPS traffic.

   If you are unable to generate a Fiddler trace file of your session, see Collecting Network Performance Trace Using a Browser for information on collecting network trace using a browser.

2. Create a Provide Feedback submission, which includes the steps (and screenshots) leading up to the occurrence of this issue.

   Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.

3. Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following additional information:

   • Fiddler trace or network diagnostic HAR file that you created in Step 1.
   • Microsoft Windows version.
   • Microsoft Office version being used.
   • Smart View version being used.
   • Detailed steps to reproduce the issue.
• If the performance was acceptable previously, but is not now, the date, time, and timezone when performance was acceptable.
• Snapshot of the environment, if available, from the last time when the performance was acceptable.
• Changes that you made to the application since the last time when the performance was acceptable.
• Whether you are in the production phase (as opposed to implementation or testing).
• Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

Diagnosing Consolidation Failures and Performance Issues in Financial Consolidation and Close

Financial Consolidation and Close performance issues may be caused by poor application design, use of unnecessary calculations, suboptimal customizations, lack of regular housekeeping, or a software bug. It may also be caused by functional issues.

What Causes Performance Degradation and Functional Issues

To identifying and correct factors causing performance degradation complete these steps:
• Check for Poor Application Design
• Identify Unnecessary Calculations
• Optimize Configurations and Extensions
• Perform Regular Housekeeping
• Enable Consolidation Rules Logs and Submit Feedback to Oracle
• Address Functional Issues

Check for Poor Application Design

Faced with performance issues, a Service Administrator must review the application design and validate metadata to ensure that the application will yield optimal performance.

Using the Simplified Dimension Editor to Review and Fix Errors

Optimal consolidation performance requires that metadata properties of each dimension in the application is set correctly. Incorrect metadata properties may cause consolidation errors, leading to poor performance. Use the Simplified Dimension Editor to verify that your metadata abides by the best practices for consolidation.

Review application dimensions to ensure that they are defined with the correct member properties. For information on reviewing member properties, see Editing Member Properties in the Simplified Dimension Editor in Administering Financial Consolidation and Close.
To review and fix errors using the Simplified Dimension Editor:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click **Application** and then **Overview**.
3. On the **Dimensions** tab, click the name of the dimension, for example, Account, that you want to evaluate. The Edit Member Properties screen for the selected dimension is displayed.
   a. Click **(Zoom In All Levels)**.
   b. Click **(Validate Metadata Definition)**. A validation pane, which lists the validation errors in the current dimension, is displayed at the bottom of the screen.
   c. Use **Fix Validation Errors** to select and fix each validation error. Click **Apply** to apply changes to the metadata property value.
   d. Click **Save** after fixing all validation errors.
   e. Click **Cancel** to return to the **Dimensions** tab.
4. Repeat Step 3 for each dimension.
5. Refresh the database.
   a. From **Actions**, select **Refresh Database**.
   b. Click **Create**.
   c. In **Refresh the database**, set actions that are to be completed before and after refreshing the database.
   d. Click **Refresh Database**.
6. Run Consolidation to check if performance has improved.

**Validating Metadata**

Use the Metadata Validator to ensure that metadata properties, such as assigned default and consol cube data storage, consolidation operator, and parent member are valid. Invalid metadata property assignment may cause errors during consolidation leading to poor performance.

To validate metadata using the Metadata Validator:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click **Application** and then **Overview**.
3. From **Actions**, select **Validate Metadata**.
4. In **Validate Metadata**, click **Run**. Errors, if any, are displayed in [Parent].[Child] format along with an error description. For detailed information on error messages, see "Metadata Validation Messages" in *Administering Financial Consolidation and Close*.
5. Open the Dimension Editor and correct the reported metadata errors. See About Editing Dimensions in the Simplified Dimension Editor in *Administering Financial Consolidation and Close*. 
Identify Unnecessary Calculations

Financial Consolidation and Close performs many default calculations during the consolidation process. A Service Administrator must ensure that the process runs only calculations necessary for the organization’s needs. Turning off unnecessary calculations could yield performance improvements.

See Consolidation Process in *Administering Financial Consolidation and Close* for a detailed discussion of the consolidation process.

Consider Turning Off Automatic Calculation of Balance Seeded Account

If the Balance Sheet is out of balance, a balancing amount is calculated and posted to Balance, a seeded account. You may disable this calculation if you do not want the application to automatically balance the Balance Sheet for a scenario.

To stop automatic calculation of Balance seeded account:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click **Application** and then **Consolidation**.
3. Click **Balance the Balance Sheet** on **Local Currency** tab.
4. Add exclusion for one or more scenarios:
   a. Under **Disabled Scenarios**, click **Add Scenario** and select the scenario for which you do not want automatically calculate the Balance seeded account. You may disable this calculation for all scenarios, if you so wish.
   b. Click **Save and Deploy** to save and activate the exclusion rule.
5. Run Consolidation.

Consider Turning Off Ratio Calculations

Most ratios, including Liquidity Ratios, Asset Management Ratios, Profitability Ratios, and Leverage Ratios, are dynamically calculated as needed. The two performance Ratios; Days Sales in Inventory, and Days Sales in Receivables, are calculated as part of the consolidation process. To boost performance, consider excluding ratio calculations.
Consider Processing System Calculations on Custom Dimensions Using Top Member

By default, Financial Consolidation and Close performs system calculations for all level 0 members of the custom dimensions in the application. Consider processing system calculations using Top Member instead of level 0 members if your application does not require the level of detail provided by system calculations on level 0 members.

Note:
This suggestion does not apply to extended dimension-based applications.

To process system calculation on custom dimensions using Top Member:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Consolidation.
3. Click **Options**. System Calculation Options dialog box, listing the custom dimensions in the application, is displayed.

4. Select the custom dimensions for which Top Member processing is to be activated.

5. Click **Save**.

### Optimize Configurations and Extensions

Use of suboptimal logic in consolidation extensions and configurations can adversely impact performance.

Customers can extend the default consolidation logic of Financial Consolidation and Close applications. Methods that can be used to extend the consolidation logic include the following:

- Member formulas
- Calculation logic
- Translation or consolidation overrides

Use the information in the Activity Report, specifically, the information in the following sections, to identify scripts that take considerable time to run:

- Top 10 Worst Performing Business Rules over 30 Seconds
- Top 5 Worst Performing Calc Scripts Commands over 1 Min
- Top 10 Worst Performing Essbase Queries over 15 seconds

See Using Activity Reports and Access Logs to Monitor Usage in *Getting Started with Oracle Enterprise Performance Management Cloud for Administrators*.

#### Review Member Formulas

Review member formulas to optimize calculations and logic and to remove unnecessary formulas. You can review member formulas using Oracle Smart View for Office.

Use the Edit Member Properties screen to review, edit, and remove formulas from a dimension. You can remove formulas only from custom dimensions; seeded formulas, for example, YTD on default (out of the box) dimensions cannot be removed.

To edit or remove formulas from custom dimensions:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click **Application** and then **Overview**.
3. Click **Dimensions** to open the Simplified Dimension Editor.
4. Click the name of the dimension that you want to work with.
5. Click **Zoom in All Levels**.
6. In the **Console Formula** column, find the formula that you want to edit or remove.
Zoom in All Levels
You may remove columns from the current view to de-clutter the screen by right-clicking in the column header and deselecting some columns.

7. Edit or delete the formula as needed and then click Save to preserve your changes.

8. Click Save and then Cancel in Edit Member Properties.

Disable Custom Calculations Deployed to the Application

Financial Consolidation and Close uses many predefined rules templates to assist in the local currency or multi-currency calculation process. You may have modified these by including custom scripts and redeployed them to the application. To verify that custom calculation scripts are not affecting performance, disable (comment) out the custom scripts, redeploy them to the application, and then consolidation.

To disable custom calculations:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Consolidation.
4. Click After Opening Balance Carry Forward or Final Calculations to open Calculation Manager.
5. In Calculation Manager, display available rules by expanding these nodes: EPM Cloud, then the node for your application, then Consol, and then Rules.
6. Comment out custom script and redeploy the rule:
   a. Right-click a rule, for example, FCCS_10_After Opening Balance Carry Forward_Local_Currency, and select Open.
   b. Comment out any custom script to revert the rule to its default state as shown in the following illustration.
c. Redeploy the rule and then run consolidation to check performance. If performance improves, revise and optimize the script, paying special attention to roll ups and ad hoc calculations that may affect performance. You should then redeploy the rule to the application.

If performance does not improve, you can assume that this rule is not contributing to performance degradation. You should restore the custom script and then redeploy the rule to the application.

7. Perform Step 6 for each rule.

Undeploy Consolidation Rules

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Consolidation.
3. On the Consolidation Process tab, click Consolidated.
5. Undeploy consolidation rule set one at a time and then run consolidation to assess performance.

If performance improves, revise and optimize the rules in the rule set. You should then redeploy the rules and rule sets to the application.
If performance does not improve, you can assume that this rule set is not contributing to performance degradation. You should redeploy the rule set to the application.

Perform Regular Housekeeping

A Service Administrator must perform needed housekeeping tasks on a regular basis to guard against performance degradation. Tuning the Essbase by regularly removing unnecessary data blocks and ensuring that data block structure is stored efficiently are essential for optimal consolidation performance.

Note:
You may run the `restructureCube` EPM Automate command to remove empty blocks and restructure cube. See Working with EPM Automate for Oracle Enterprise Performance Management Cloud for information.

Clear Empty Blocks

Clearing empty blocks helps optimize database calculation speed. For example, if an initial calculation creates numerous consolidated level blocks, subsequent recalculations take longer, because the calculation must pass through the additional blocks.

To clear empty blocks:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. In the Home page, click Rules.
3. In Business Rules tab, click (Launch) in the ClearEmptyBlocks row.
4. In Business Rules, select the scenario, year, and period for which empty blocks are to be cleared.
5. Click Launch.
6. Run consolidation.

Restructure Dense Cubes

Data fragmentation occurs naturally in Block Storage (BSO) databases as a result of end user data updates, incremental data loads, and executing calculations. The
performance of Financial Consolidation and Close application will be impacted if the database is fragmented.

To check if a cube restructuring is required:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Consolidation.
3. Launch Calculation Manager by clicking Final Calculations.
4. In Calculation Manager, click (Database Properties)
5. In the left pane of Database Properties, expand EPM Cloud, then the node of your application, and then click Consol.
6. In the right pane, click Statistics.
7. Check the value of Average clustering ratio. If the displayed value is 1.00 (maximum) or close to it, a restructuring is not required. If the value is much lower, for example, 0.01032828, you must restructure the cube to defragment it.

Before running this command, ensure that no one is using the application.

To restructure a cube:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Jobs.
3. Schedule and run the Restructure Cube job.
   a. Click Schedule Jobs.
   b. From What type of job is this?, select Restructure Cube.
   c. Select Run Now to start the restructuring right away. Click Next, and then Finish. Alternatively, you can schedule the job to start at a later time.

Enable Consolidation Rules Logs and Submit Feedback to Oracle

If the corrective steps suggested in the preceding sections failed to resolve your performance issues, submit a service request to Oracle Support.

Before creating a service request, turn on consolidation log files, run consolidation, and then use the Provide Feedback utility to gather the information that Oracle Support needs to identify and fix your problem.
Turn on Consolidation Log Files

To turn on consolidation rules log files:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Settings.
3. In Application Settings, under Other Options, select Yes as the value for Enable Consolidation Rules Logging.
4. Click Save.
5. Run consolidation.

Restart Financial Consolidation and Close

Consolidation rules log file are analyzed when you restart Financial Consolidation and Close.

To restart the Financial Consolidation and Close environment:

1. Using EPM Automate, sign into the environment as a Service Administrator. See EPM Automate Commands in Working with EPM Automate for Oracle Enterprise Performance Management Cloud for usage information and examples.
2. Run the resetService command.
   
   epmautomate resetservice "Some Comment" -f

How to Get Help

After completing the preceding troubleshooting, if you do not see performance improvements, review these factors and then seek help from Oracle:

• Recent changes to the application
  
  Compare the following tables in the Activity Report with the information available in an Activity Report from a previous date when the rule was working well. This comparison will help you identify application design changes that have taken place between the two dates:
  
  – Application Size
  – Essbase BSO Cube Statistics
  – Top 5 Consolidation and Translation Jobs by Duration

• Recent changes in the use of calculations (for example, different values of runtime prompts, change in user or substitution variables, etc.), rules (for example, more concurrent users).

• Use the Provide Feedback utility to gather the information that Oracle Support needs to identify and fix your problem. Make sure that you consent to submitting the snapshot to Oracle. See Creating a Provide Feedback Submission.

• Submit a service request indicating the reference number that the Provide Feedback utility created. See Submitting a Service Request.

In the Service request, answer these questions:

1. When was the issue first observed? (required)
2. Was there any recent application or usage change that could have caused this issue? (optional)
3. Are in the production phase (as opposed to implementation or testing)?
4. Is this issue stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management?

Provide the following to Oracle with the service request:
- POVs
- User and substitution variables
- Expected and actual performance parameters (for example, expected time for consolidation versus actual time)

See Getting Help From Oracle.

Address Functional Issues

Functional issues such as the following are not addressed by the preceding steps:

- The application displays **Essbase Data Cache Full** error and terminates consolidation
- The application displays The following value is not valid for the runtime prompt `<ENTITY_NAME>` error when users select an entity for consolidation

Resolving **Essbase Data Cache Full** Error

Generally, the Financial Consolidation and Close application displays the **Essbase Data Cache Full** error because a shared member appears ahead of the primary member in the metadata hierarchy.

Corrective Actions
1. Use Oracle Smart View for Office or the Dimension Editor to view the hierarchy and locate the shared member that appears ahead of the primary member in the hierarchy.

2. Move the primary member ahead of the shared member in the hierarchy.

![Diagram showing hierarchy and swap members](image)
3. Refresh the database.
4. Run the consolidation rule that failed.

**Resolving the Unable to select an entity for consolidation Error**

You cannot launch consolidations for an entity that cannot be calculated correctly. In the illustration, us_Ops cannot be selected because it does not have a check mark for POV selector.

Additionally, typing in the name of an unselectable entity into the **Consolidate** screen displays the error.

**To resolving the Unable to select an entity for consolidation error:**

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click **Application** and then **Valid Intersections**.
3. Disable the valid intersection rule for the entity that cannot be selected for consolidation.

Troubleshooting Data Load Performance Issues

Seek help from Oracle if you encounter performance issues while loading data to Oracle Enterprise Performance Management Cloud using Data Integration or Data Management.

To get help from Oracle:

1. Create a Provide Feedback submission that captures the actions that you perform to load data.
   Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.

2. Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following additional information:
   • Detailed steps to reproduce the issue.
   • If the process was working previously, the date, time, and timezone when the process was performing as expected.
   • Snapshot of the environment, if available, from the last time when the process was working properly.
   • Application changes or data load rule changes that you made since the last time the process was working as expected.
   • Whether you are in the production phase (as opposed to implementation or testing).
   • Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.
Resolving Other Performance Issues

Use this process to resolve performance issues, especially overall performance issues that cause all activities in the environment to be slower than expected.

1. **Optional:** Restart the environment if all activities are slower than expected.
   
   Use the `resetService` EPM Automate command to restart the environment. Restarting an environment does not affect application. However, sessions of currently connected users will be terminated and any unsaved data is lost.

2. **Optional:** Generate a Fiddler trace:
   
   If overall performance is slower than expected even after restarting the environment, generate a Fiddler trace of your session
   
   See [*Using Fiddler to Capture Diagnostic Information*](#).

   ![Watch this video for an overview of the information on configuring Fiddler to capture HTTPS traffic.](#)

   If you are unable to generate a Fiddler trace file of your session, see [*Collecting Network Performance Trace Using a Browser*](#) for information on collecting network trace using a browser.

3. Create a Provide Feedback submission. Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See [*Creating a Provide Feedback Submission*](#).

4. Create a service request that identifies the Provide Feedback reference number. See [*Submitting a Service Request*](#). The service request must contain the following additional information:
   
   - Details of the activities that take more time than expected.
   - Fiddler trace file or network diagnostic HAR file.
   - If the activities were previously performing to expectation, the date, time, and timezone when performance was acceptable.
   - A snapshot of the environment, if available, from the last time when performance was acceptable.
   - Application changes that you made since the performance was acceptable.
   - Whether you are in the production phase (as opposed to implementation or testing).
   - Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

Handling Financial Consolidation Data Inaccuracies

Use the information in this section to analyze why you see data discrepancies (deviation from expected numbers) during the financial consolidation process.

These steps are involved in investigating why the consolidation numbers you expect to see are not coming up during consolidation:
• Check for Poor Application Design
• Remove Customizations
• Check Known Consolidation Issues
• Get Help from Oracle

Check for Poor Application Design

Incorrect metadata property settings in Financial Consolidation and Close is a primary reason for numbers mismatch. A Service Administrator must review the consolidation application design and identify and fix metadata errors to ensure the accuracy of numbers during consolidation.

Review and Fix Metadata Errors

Accuracy during consolidation is predicated on the metadata properties of each dimension in the application being accurate. Use the Simplified Dimension Editor to verify that your metadata abides by the best practices for consolidation.

Review application dimensions to ensure that they are defined with the correct member properties. For information on reviewing member properties, see "Editing Member Properties in the Simplified Dimension Editor" in Administering Financial Consolidation and Close.

To review and fix errors using the Simplified Dimension Editor:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Overview.
3. On the Dimensions tab, click the name of the dimension, for example, Account, that you want to evaluate.
   The Edit Member Properties screen for the selected dimension is displayed.
   a. Click (Zoom In All Levels).
   b. Click (Validate Metadata Definition).
      A validation pane, which lists the validation errors in the current dimension, is displayed at the bottom of the screen.
   c. Use Fix Validation Errors to select and fix each validation error. Click Apply to apply changes to the metadata property value.
   d. Click Save after fixing all validation errors.
   e. Click Cancel to return to the Dimensions tab.
4. Repeat Step 3 for each dimension.
5. Refresh the database.
   a. From Actions, select Refresh Database.
   b. Click Create.
   c. In Refresh the database, set actions that are to be completed before and after refreshing the database.
Validating Metadata

Use the Metadata Validator to ensure that metadata properties, such as assigned default and consol cube data storage, consolidation operator, and parent member are valid. Invalid metadata property assignment may cause errors during consolidation.

To validate metadata using the Metadata Validator:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Overview.
3. From Actions, select Validate Metadata.
4. In Validate Metadata, click Run.
   Errors, if any, are displayed in [Parent].[Child] format along with an error description. For detailed information on error messages, see Metadata Validation Messages in Administering Financial Consolidation and Close.
5. Open the Dimension Editor and correct all reported metadata errors. See About Editing Dimensions in the Simplified Dimension Editor in Administering Financial Consolidation and Close.
6. Rerun consolidation and check results.
   If data inaccuracies are not resolved, you can assume that metadata definitions are not responsible for inaccurate consolidation results.

Remove Customizations

Remove (undeploy) customized translation rules, consolidation rules, calculations, and dimension member formulas in the application to verify that consolidation accuracy is not compromised by customizations.

Undeploy Translation Rules

You undeploy translation rules from the Translation Override Rules screen.

To undeploy custom translation rules:

1. Sign into Financial Consolidation and Close as a Service Administrator.
2. Select Application and then Consolidation.
3. Open Consolidation Process, then select Translated, and then select Translation Overrides.
4. Click Show All Rules to list all deployed rules.
5. Select the translation rules with customizations.
6. Rerun consolidation and check results.
   If data inaccuracies are not resolved, you can assume that translation rules are not responsible for inaccurate consolidation results. You can now redeploy the rules. If inaccuracies are resolved, review the translation rules to identify and correct the rule that caused the consolidation results to be inaccurate.
Undeploy Configurable Consolidation Rules

You undeploy configurable consolidation rules from the Manage Consolidation Rules screen. Configurable consolidation rules are enabled only if the Ownership Management feature is enabled.

To undeploy custom consolidation rules:

1. Sign into Financial Consolidation and Close as a Service Administrator.
2. Select Application and then Consolidation.
3. Open Consolidation Process, then select Consolidated, and then select Configurable Consolidation.
4. For each customized consolidation rule, select the rule and then click Undeploy.
5. Rerun consolidation and check results.

   If data inaccuracies are not resolved, you can assume that configurable consolidation rules are not responsible for inaccurate results. You can now redeploy the rules. If inaccuracies are resolved, review the consolidation rules that you removed to identify and correct the rule that caused the consolidation results to be inaccurate.

Delete Custom Calculation Logic

Customizations to the predefined Financial Consolidation and Close rules (FCCS_10 to FCCS_60 for multicurrency applications and FCCS_110 to FCCS_160 for single currency applications) may cause consolidation to be inaccurate. You remove custom logic by editing the rule in Calculation Manager.

To remove customizations of predefined rules:

1. Sign into Financial Consolidation and Close as a Service Administrator.
2. Select Application and then Consolidation.
3. Open Consolidation Process, then select Local Currency, and then select After Opening Balance Carry Forward.
   
   Calculation Manager is displayed.
4. In Calculation Manager, expand Planning, then the application, then Consol, and then Rules.
5. For each rule:
   a. Right-click the rule, then select Open.
   b. Comment out or delete any custom rule definition.
   c. Click Save.
   d. Select Actions, and then Validate and Deploy.
6. Rerun consolidation and check results.

   If data inaccuracies are not resolved, you can assume that calculation logic is not responsible for inaccurate consolidation results. You can now reinstate the logic. If inaccuracies are resolved, review the calculation logic to identify and correct the logic that caused the consolidation results to be inaccurate.
Review and Remove Formulas

Review member formulas to optimize calculations and logic and to remove unnecessary formulas. You can review member formulas using the Simplified Dimension Editor or Oracle Smart View for Office.

Use the Edit Member Properties screen to review, edit, and remove formulas from a dimension. You can remove formulas only from custom dimensions; seeded formulas, for example, YTD on default (out of the box) dimensions cannot be removed.

To edit or remove formulas from custom dimensions using the simplified Dimension Editor:

1. Sign in to Financial Consolidation and Close as a Service Administrator.
2. On the Home page, click Application and then Overview.
3. Click Dimensions to open the Simplified Dimension Editor.
4. Click the name of the dimension that you want to work with.
5. Click Zoom in All Levels.
6. In the Console Formula column, find the formula that you want to edit or remove.
7. Edit or delete the formula as needed and then click Save to preserve your changes.
8. Click Save and then Cancel in Edit Member Properties.
9. Rerun consolidation and check results.
   If data inaccuracies are not resolved, you can assume that formulas are not responsible for inaccurate consolidation results. You can now redeploy the formulas.
   If inaccuracies are resolved, review the formulas that you deleted to identify and correct the formula that caused the consolidation results to be inaccurate.

Check Known Consolidation Issues

This section lists solutions for some common consolidation issues: retained earnings not rolling over for a period, Cumulative Translation Adjustment (CTA) not being calculated, opening balance and foreign exchange calculation inaccuracies, and custom member formulas being defined under Total Balance Sheet hierarchy.
Before contacting Oracle for help, verify that these issues are not causing you to see unexpected consolidated numbers.

**Issue 1: Retained Earnings not Rolling Over for Period 1**

FCCS_REC_OBFXCTA is a system member that stores the Opening Balance and FX calculation for Net Income/Owners Income members. Net Income/Owners Income parent member is referred in Opening Balance and FX calculations. The Net Income/Owners Income hierarchy must always be within Retained Earnings hierarchy.

Ensure that the Net Income/Owners Income hierarchy is within the Retained Earnings hierarchy

**Similar Issues:** other seeded system members that should not be moved from their original position include the following:

**Account:**

- FCCS_Total Balance Sheet XXX (Balance sheet top member), FCCS_Balance (valid only if balance calculation is valid)
- FCCS_Total Assets, FCCS_Total Liabilities, FCCS_Total Equity (for balance calculation only)
- FCCS_Retained Earnings, FCCS_Retained Earnings Prior, FCCS_Net Income, FCCS_Owners Income, FCCS_REC OBFXCTA
- FCCS_CTA (valid only when Balance Sheet under CTA is enabled)
- FCCS_CICTA, FCCS_Total Other Comprehensive Income, FCCS_OR OBFXCICTA

**Movement:**

FCCS_ClosingBalance, FCCS_Total OpeningBalance, FCCS_OpeningBalance, FCCS_Mvmts_Subtotal, and members under FCCS_Mvmts_FX_Total.

**Issue 2: CTA is not Calculated (Multicurrency Applications)**

CTA is calculated as sum of foreign exchange to CTA values for historical accounts under balance Sheet top member (FCCS_Total Balance Sheet - Traditional Approach, FCCS_Total Balance Sheet Net Asset Approach). Historical accounts outside top balance sheet members are ignored for CTA calculation.

- Check if historical accounts (accounts with Exchange Rate Type property set to Historical, Historical Rate Override, Historical Amount Override) have FX to CTA movement member data in FCCS_Mvmts_FX_to_CTA.
- If data is not present in FCCS_Mvmts_FX_to_CTA for historical accounts, check if historical accounts are outside balance sheet top member hierarchy.
- Verify that all the historical accounts are within the balance sheet top member hierarchy.

**Issue 3: OB and FX for Revenue and Expense Accounts Outside FCCS_Net Income, FCCS_Owners Income, and FCCS_Total Other Comprehensive Income Hierarchy**

Revenue and expense accounts outside FCCS_Net Income, FCCS_Owners Income, and FCCS_Total Other Comprehensive Income hierarchy are not considered for
opening Balance or FX calculations and leads to out of balance issues. This is a known issue; which Oracle is working on fixing.

**Workaround:** Move revenue and expense accounts under FCCS_Net Income, FCCS_Owners Income, or FCCS_Total Other Comprehensive Income hierarchy.

**Issue 4: OB and FX for Equity, Liability, and Asset Accounts Under FCCS_Net Income or FCCS_Owners Income**

OB and FX should not be calculated for equity, liability and asset accounts under FCCS_Net Income or FCCS_Owners Income. However, if OB and FX for equity, liability, and asset accounts are in FCCS_Net Income or FCCS_Owners Income hierarchy, OB and FX are currently calculated for these accounts, leading to out of balance issues. This is a known issue; which Oracle is working on fixing.

**Workaround:** Move equity, liability, and asset accounts outside the FCCS_Net Income or FCCS_Owners Income hierarchy.

**Issue 5: OB and FX for Accounts Outside FCCS_Balance Sheet Hierarchy**

Although Financial Consolidation and Close should calculate OB and FX also for all financial accounts outside FCCS_Balance sheet, it does so only for accounts under FCCS_Balance Sheet resulting in customers not getting the expected results. This is a known issue; which Oracle is working on fixing.

**Workaround:** Move all the financial accounts under the FCCS_Balance Sheet hierarchy.

**Issue 6: Member Formula Defined Under Total Balance Sheet Hierarchy for Custom Accounts**

For custom accounts, member formulas defined under Total Balance Sheet hierarchy cause unexpected results or calculations.

**Corrective Actions:**

- Remove formulas defined under Total Balance Sheet hierarchy
- Refresh the database
- Run consolidation or translation for the impacted period or year
- Verify that the issue is resolved

Get Help from Oracle

If the corrective steps suggested in the preceding sections failed to resolve inaccuracies in consolidation results, seek help from Oracle.

Before creating a service request, turn on consolidation log files, restart Financial Consolidation and Close, run consolidation, and then use the Provide Feedback utility to gather the information that Oracle needs to identify and fix your problem. See Enable Consolidation Rules Logs and Submit Feedback to Oracle for instructions.

To seek Help from Oracle:

1. Create a Provide Feedback submission, which includes screenshots of the consolidation results.
Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.

2. Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following additional information:
   - An explanation of the expected consolidation results and how it differs from the actual result.
   - If the consolidation results were accurate previously, but is not now, the date, time, and timezone when results were accurate.
   - Snapshot of the environment, if available, from the last time when the consolidation numbers were accurate.
   - Changes that you made since the last time consolidation results were accurate.
   - Whether you are in the production phase (as opposed to implementation or testing).
   - Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

Handling Data Loss in an Environment

If you are faced with data loss in an environment, seek immediate help from Oracle.

To prevent data loss, do not combine operations to move, delete, and rename members in one transaction. Perform these operations separately.

Consider upgrading the Essbase if appropriate. Upgrading the Essbase allows you to use Hybrid BSO cubes for your application and reduces the possibility of data loss. See About Essbase in EPM Cloud in Getting Started with Oracle Enterprise Performance Management Cloud for Administrators for detailed information.

If the preceding suggestions do not work, contact Oracle for help.

- Create a Provide Feedback submission that identifies the actions, if any, that you performed in the environment. Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.
- Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following:
  - Detailed steps to reproduce the issue.
  - The last known date and time when the missing data was present in the environment.
  - Application changes, if any, that you made after the last time the data was present.
  - A snapshot of the environment, if available, from the last time data was present in the environment.
Resolving Order Processing Issues

This section lists troubleshooting tips for issues related to processing Oracle Enterprise Performance Management Cloud orders.

Generally, order processing issues revolve around the notification email that Oracle sends on fulfilling your order to provision an EPM Cloud subscription.

To resolve Order processing issues, create a service request and provide the following information. See Submitting a Service Request.

- The sales order number. This number is available in your communications with Oracle.
- Detailed description of the issue. For example, "Acme Corporation has not received a confirmation email with URLs of the environments purchased with sales order 12345678".

Resolving IP Whitelisting Functional Issues

Connections from environments that has been configured for IP whitelisting may fail with the Your access is forbidden error.

Generally, this error is caused by an error in configuring IP whitelisting. If you are faced with this error, get help from Oracle:

Create a service request describing the issue. See Submitting a Service Request. The service request must contain the following:

- A screenshot of the firewall configuration in My Services.
- The IP addresses from which you are connecting to Oracle Enterprise Performance Management Cloud.
- Whether you are in the production phase (as opposed to implementation or testing).
- Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.

Requesting a Temporary Loaner Environment

Oracle Enterprise Performance Management Cloud customers or partners can request a temporary loaner environment for familiarizing themselves with EPM Cloud or for developing a proof of concept for an active deal. Loaner environments can be used for up to three months.

Loaner environments are made available after Oracle SVP-level review and approval and is made solely at the discretion of Oracle.
To request a loaner environment, create a service request. See Submitting a Service Request.

**Note:**
Create the service request against the appropriate Service Type; for example, PBCS or FCCS. Be sure to select either **Application** or **Application Setup and Migration** as the Problem Type to ensure that the service request is routed correctly to product support. Do not select **Hosting Services** as problem type.

The service request must contain the following information:

- Required number of loaner environments.
- Business justification for the request.
- Start date of the loan period.
- Duration of the loan period.
- Preferred geographical region of the data center (example, North America, Europe, Asia).
- Email addresses of the users who are to be created and assigned the role of Identity Domain Administrator of the loaner environment. These users can then add other users and assign them predefined roles as needed.

**Responding to Customer Diagnostic Alerts**

Oracle Enterprise Performance Management Cloud uses a diagnostic alert (an email addressed to Service Administrators of an environment) to communicate issues that impact the uptime, performance, or usage of an environment, which requires customer action.

Generally, a diagnostic alert indicates that Oracle’s automated diagnostics system detected an issue specific to your environment that requires your intervention. This section details what to do if you receive an email titled **Diagnostic Alert**.

1. On getting a diagnostic alert, create a Provide Feedback submission. Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission.

2. Create a service request using the subject **Enterprise Performance Management (EPM) Cloud Diagnostic Alert**. Be sure to reference the Provide Feedback reference number in the service request. See Submitting a Service Request.

**Managing Other Functional Issues**

If you face a functional issue that is not explored in this guide, contact Oracle for assistance. Follow these steps:

- Create a Provide Feedback submission. Be sure to allow Oracle to access the maintenance snapshot of the environment by consenting to application snapshot submission. See Creating a Provide Feedback Submission.
• Create a service request that identifies the Provide Feedback reference number. See Submitting a Service Request. The service request must contain the following additional information:
  – Detailed steps to reproduce the issue.
  – If the issue was not occurring previously, the date, time, and timezone when issue was not occurring.
  – Snapshot of the environment, if available, from the last time when issue was not occurring.
  – Application changes that you made since the last time issue was not occurring.
  – Whether you are in the production phase (as opposed to implementation or testing).
  – Whether this issue is stopping you from performing critical business operations; for example, preventing you from closing the current financial cycle or creating urgent reports for management.
EPM Cloud Release Change Management Process

This appendix explores the Oracle Enterprise Performance Management Cloud release change management process (monthly updates, weekly patches, one-off patches, upgrade delays, and emergency patches).

In This Section:

• Understanding Oracle's Change Management Process
• Resolving Regression Bugs in Test Environments
• Resolving Regression or Blocking Bugs in Production Environments
• Requesting Upgrade Delay for Production Environments
• Requesting a Rollback of Production Environments
• How Oracle Communicates the Update Schedule

Understanding Oracle's Change Management Process

Each Oracle Enterprise Performance Management Cloud subscription comprises two environments. If you have a four-stage process involving an environment each for development, test, acceptance, and production, which requires two additional environments, you must purchase a new subscription.

Oracle is responsible for change management process involved in updating the software and configuration of all environments. Any issue caused as the result of this process is defined as a regression.

You, and not Oracle, are responsible for the change management of custom artifacts such as dimensions, forms and reports in all environments. Migration of artifacts from one environment to another is a self-service operation.

Oracle delivers software and configuration updates through one of the following:

• Monthly update: Contains a set of features and bug fixes for all instances of all services. The monthly update is applied to the test environments on the first Friday of the month and to production environments on the third Friday of the month.

• Weekly patch: Includes bug fixes, mainly for fixing regression bugs found in test environments. Applied to all test environments on the second Friday of the month.

• One-off patch: Contains fixes for regression bugs, customer blocking bugs, or new features. One-off patches are applied to specific test environments on request. Customers whose environments are updated with a one-off patch test the updated environments and provide approval to apply the patch to production environments. Subsequently, Oracle applies the one-off patch to their production environments.
Emergency patch: Contains one bug fix that needs to be applied immediately to an environment. This patch can be applied to test, production, or both as required.

Resolving Regression Bugs in Test Environments

Regression bugs found in test environments are fixed using a weekly patch or an emergency patch, which is applied to all test environments. Additionally, Oracle delays the update of production environments for all impacted customers to allow time to test the bug fix in test environments. If the regression issue is widespread, Oracle delays the update of production environments for all customers by cancelling the monthly update of production environments.

Resolving Regression or Blocking Bugs in Production Environments

Depending on the severity of the issue, Oracle may initially patch some or all environments.

Regression or blocking bugs found in production environments are fixed using a one-off patch on the test environment of the customer who reported the issue. After customer testing and approval, Oracle applies the patch to the production environment.

If the regression issue is widespread, Oracle will apply an emergency patch containing the fix to all test environments. After three business days, Oracle applies the fix to all production environments.

Oracle may apply the emergency patch to all test and production environments at the same time if the issue hinders the normal functioning of environments.

If a fix is not immediately available, for services other than Narrative Reporting, Oracle may revert the production environment to the state it was in before the monthly update. Reverting environments involves cleaning the environment, applying the last monthly update, and then reloading the backup from the previous month. Additionally, Oracle will provide a loaner test environment to customers who request for an additional test environment.

Understanding Change Migration Procedures

Monthly Update Migration flow is as follows:

- Tested and approved monthly update from Oracle Development to customer test environments
  
  If no regression is found, Oracle updates all production environments. Subsequently, customers may migrate applications from test to production.

  If Oracle development confirms a customer reported issue as a regression, Oracle applies a one-off patch to test environment.

- One-off patch
  - Oracle Development confirms a customer reported issue as a regression.
  - Oracle Development creates a one-off patch and sends it to Quality Engineering for testing.
– After testing the one-off patch, Quality Engineering certifies it by signing off.
– One-off patch is applied to test environments.
– One-off patch is applied to production environment after the customer approves the fix. Environments are brought back to the mainline patch once the regression is fixed in a monthly patch.

• Upgrade delay
A customer, citing a justification for the request, may seek a delay in updating a production environment. See "Requesting Upgrade Delay for Production Environments" for details.

• Emergency patch
Deployment of emergency patches requires the approval of a Vice President in Oracle Enterprise Performance Management Cloud Development.
– Oracle Development confirms a customer reported issue as a regression or blocker issue.
– Oracle Development creates an emergency patch and sends it to Quality Engineering for testing.
– After testing the patch, Quality Engineering certifies it by signing off.
– Emergency patch is applied to test environment, production environment, or both as appropriate.

Requesting Upgrade Delay for Production Environments

A customer, citing a justification for the request, may seek a delay in updating a production environment. You can seek to delay the upgrade of production environments in the following scenarios:

• You identified a regressive bug in the test environment. In this scenario, Oracle will fix the bug and then upgrade your environment without further delay. No customer approval is necessary for upgrading to the mainline.

• You are in the critical phase of your implementation project. In this scenario, Oracle will postpone the upgrade to the date that you agreed upon when requesting the delay. If you do not make an additional upgrade delay request, Oracle automatically upgrades the environment on the date that you agreed upon when requesting the delay.

• You want to skip this month's update because you do not have the time to test the monthly update. In this scenario, Oracle automatically upgrades the environment in the next monthly update cycle.

• You want to skip this month or few months' update because of quarter close or year end close. In this scenario, Oracle automatically upgrades the environment on the date or monthly cycle that was agreed upon.

Generally, customers migrating from on-premises to Oracle Enterprise Performance Management Cloud use the upgrade delay process. After they are comfortable with the upgrade cadence, they upgrade to the main line and then do not request upgrade delays.
Repercussions of an Update Delay

Downside of an update delay includes the following:

• An environment that has not been updated in a monthly cycle requires a longer time to upgrade to the main line.

• After the production environment is brought to the mainline, you will incur more time to test (you will, essentially, be testing features and changes from multiple monthly updates).

• Security updates and bug fixes are applied to environments only when it is upgraded to the mainline

How to Request an Upgrade Delay

To request an upgrade delay, file a service request and provide the following information:

• URL of the environment for which upgrade is to be delayed.

• Reason (for example, regressive bug information, critical phase of implementation project, test environment not tested, quarter or year end close) why upgrade delay is being requested.

• If the upgrade delay is not because of a regressive bug, month when Oracle can merge the environment back to the mainline.

• Formal request in the following format:

  I, <Your name>, request Oracle to delay the upgrade of the environment <URL of the environment>

Requesting a Rollback of Production Environments

Except for Narrative Reporting environments, if a fix for a critical issue in an updated production environment is not immediately available, Oracle may revert the production environment to the state it was in before the monthly update. Reverting environments involves cleaning the environment, applying the last monthly update, and then reloading the backup from the previous month. Additionally, Oracle will provide a loaner test environment to customers who request an additional test environment.

How to Request a Rollback

To request a rollback, file a service request and provide the following information:

• URL of the production environment that needs to be rolled back

• Detailed information on the regressive bug that necessitates the rollback

• Information (date, time, and timezone) on when the environment will be free to be rolled back.
• Formal request in the following format:

  I, <Your name>, request Oracle to roll back the environment <URL of the environment> to <previous version>

  where <previous version> is the preceding Oracle Enterprise Performance Management Cloud version, for example Update 19.11.

How Oracle Communicates the Update Schedule

Generally, Oracle releases monthly updates on the first Friday of the month to all test environments. Oracle applies the update to test environments during the next daily maintenance after the release of the update.

Typically, production environments are patched on the third Friday of the month. See Understanding Updates to an Environment and Viewing Readiness Information in Getting Started with Oracle Enterprise Performance Management Cloud for Administrators.

The Enterprise Performance Management page of Oracle Cloud Readiness provides easy access to documents describing the new features included in the monthly update. It also identifies the update schedule for test and production environments. Additionally, Oracle notifies all Service Administrators of upcoming updates through an email, which is sent on the last Friday of the month (one week before the Test environment is updated).

Note:

Monthly update notifications will still be sent to the Service Administrators of the environments for which upgrade has been put on hold.