

Precise

Upgrade Guide

Version 10.1

IDERA

Copyright © 2019 Precise Software Solutions, Inc. All rights reserved.

Document release version 3.0

Precise™, Precise Software™, the Precise™ Logo, Precise i³™, Precise Indepth™, Precise Insight™, Precise Savvy™, SmarTune™, Performance Warehouse™, Application Service Dashboard™, Precise for Storage Tiering™, Precise for Storage Tiering Plus Apps™, Precise for Database & Storage™, Precise for Applications™, Precise for Storage™, Precise Insight Inquire™, Performance Management Database™, and PMDB™ are trademarks or registered trademarks of Precise Software Solutions, Inc. or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.

The product described in this document is distributed under licenses restricting its use, copying, distribution, decompilation and/or reverse engineering. No part of this document may be reproduced in any form by any means without prior written authorization of Precise Software Solutions, Inc. and its licensors, if any.

Certain third-party software may be distributed, embedded, or bundled with this product or recommended for use in connection with its installation and use. Such third-party software is separately licensed by its copyright holder. The list that includes the names of the copyright and license agreements can be found in the Release Notes document.

THE DOCUMENTATION IS PROVIDED "AS-IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID. PRECISE SOFTWARE SOLUTIONS, INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, PERFORMANCE, OR USE OF THIS DOCUMENTATION. THE INFORMATION CONTAINED IN THIS DOCUMENTATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

The Licensed Software and Documentation are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, "Rights in Commercial Computer Software or Commercial Computer Software Documentation", as applicable, and any successor regulations. Any use, modification, reproduction release, performance, display or disclosure of the Licensed Software and Documentation by the U.S. Government shall be solely in accordance with the terms of this Agreement.

Global Headquarters

Brookhollow Central III
2950 North Loop Freeway West, Suite 700
Houston, Texas 77092
Phone: +1-877-693-1886
Fax: +1-650-898-1666

Third-party legal notices

Third-party software may be recommended, distributed, embedded, or bundled with this Precise product. Such third-party software is licensed separately by its copyright holder. All third-party copyrights associated with this product are listed in the accompanying release notes.

Customer Support

For technical assistance, visit our customer portal at <http://www.idera.com/support/productsupport> where you can find an extensive knowledge base, product upgrades and our online community forums. You can also contact our Customer Support Team using our customer portal, or go to <http://www.idera.com/support/productsupport> for a list of our support access numbers in your country.

Contents

- Upgrading to 10.15
 - About the upgrade to Precise 10.15
 - Discovering any integrity issues5
 - Using the Precise Upgrade Verifier Utility7
 - Planning the upgrade7
 - Prerequisites for the upgrade7
 - Server upgrade order7
 - Implications of a phased upgrade to the latest version of Precise8
 - Downtime of the monitored technologies8
 - Downtime of the Precise product8
 - Upgrade planning checklist8
 - Performing the upgrade9
 - Applying the upgrade9
 - Applying the upgrade with the CLI utility9
- Upgrading using the CLI utility10
- Troubleshooting11
 - An error occurs when running the prepare stage on the Precise FocalPoint server... 11
 - When starting the upgrade, a message appears to uninstall Precise for Tuxedo 11

Upgrading to 10.1

This section includes the following topics:

- [About the upgrade to Precise 10.0](#)
- [Discovering any integrity issues](#)
- [Planning the upgrade](#)
- [Performing the upgrade](#)

NOTE This document describes the procedure when upgrading to Precise 10.1. You must first upgrade to version 10.0 before attempting to upgrade to the latest version.

Therefore, if you are upgrading from an earlier Precise installation, see the relevant *Upgrade Guide*, or if you are installing Precise 10.1 on a clean system, see instead the *Precise Installation Guide*.

About the upgrade to Precise 10.1

Upgrading to Precise 10.1 both upgrades the existing Precise Framework and agents and replaces the previously existing Precise system, while preserving the previously captured monitored data. As a result, the upgrade process involves downtime of the Precise product.

To ensure an efficient and successful upgrade process, verify that you read about and implement the preparations for the upgrade, as they appear in [Planning the upgrade](#).

Once all preparations have been completed, perform the upgrade, as detailed in [Performing the upgrade](#).

Discovering any integrity issues

NOTE The upgrade to version 10.1 can be done only from version 10.0.

The version Upgrade Verifier Utility is a standalone that should be run prior to the upgrade to Precise 10.1. The utility will check, fix (when possible) and report on integrity issues in the Precise infrastructure. By running and following its recommendations, it will reduce the chances for integrity issues when performing the upgrade to the latest version.

The utility performs the following:

- Verifies that Precise FocalPoint is up
- Connects to Performance Warehouse & all Oracle instances connection pools and warns in case of problem
- Removes all 'dangling' lines from INFRA DB:
 - Checks that an AppTier is connected to environment
 - Checks that an instance is connected to AppTier
 - Checks that an instance is connected to server
 - Checks that an installation is connected to server
 - Checks that an installation-instance connection is valid
 - Checks that an instance dependency connection is valid
 - Checks that an instance SLA is connected to instance
 - Checks that downtime calendar is connected to downtime rule

- Warns about 'dangling' instances - ones without a server or without an apptier
- Warns in case any Precise Listener is down
- Warns in case invalid registry file (such as 'Copy of', or not matching file name to XML) is located
- Check that all framework FocalPoints are on the same server
- Checks for unsupported instances
- Checks there are no pending action items
- Checks for sufficient disk space
 - On Precise FocalPoint machine: 3GB required disk space
 - On any other Precise listener: 1GB required disk space
- Check for de-supported instances:
 - WEB SAP ABAP instance
 - Instances monitored using Web Client Collector
 - Microsoft .Net SQL Server monitoring
 - Oracle version is 9 and below
- Check for de-supported installation:
 - Web static instrumentation
- Monitor view permissions using AppTier, instance or technology scopes are no longer supported. Instead, upgrade the role to use environment scope.
- Proxy relay can't be used during the upgrade process.
- Backs up all action items
- Checks for antiviruses that may cause for locked files errors
- Checks patches that are required for pre/post upgrade
- Checks if the PMDB tablespace folder specified in the registry exists (only for Oracle based PMDB)
- Checks if <hsqldb-upgraded> tag exists in pools.xml. If it does, remove it
- Checks for uninstalled ddml files under <Precise root>/products/dbms/files/tables_definition/ and renames any relevant file to *.uninstall
- Checking .NET version on Windows servers
- Checking for missing column (TPTN_SHORTST_RESPONSE_TIME_MIN) in tablesPW_TPTN_TRAN_STATS_B and PW_TPTN_USERS_STATS_B and adding it if necessary
- Checking for federation dependency
- Checking for Custom Alerts in federation

This utility should be executed and its recommendations should be handled prior to starting the upgrade to version 10.1.

Trying to upgrade prior to successful completion of this utility will fail.

Using the Precise Upgrade Verifier Utility

1. Download the utility.
2. Place **UpgradeTo10xxVerifier-<latest date>.zip** in the Precise root directory on the MAIN Precise FocalPoint server.
3. Extract/unzip the **UpgradeTo10xxVerifier-<latest date>.zip** file into the Precise root directory or extract the files, then move them to the Precise root directory.
4. Execute the verifier:

Windows (Rename UpgradeTo10xxVerifier.bat.txt to UpgradeTo10xxVerifier.bat)
UpgradeTo10xxVerifier.bat

UNIX (Make sure the UpgradeTo10xxVerifier.sh has 'execute' permissions)
./UpgradeTo10xxVerifier.sh

NOTE Log file with the output of the utility will be written to: <Precise root>\logs\infra.pre_upgrade_sanity.out.

Planning the upgrade

The upgrade process should be planned in advance, to ensure both the full benefit from your current system and adherence to your schedules and needs.

To ensure a quick and efficient upgrade, it is necessary to consider the following criteria before beginning the procedure:

- [Prerequisites for the upgrade](#)
- [The order of the servers upgrade](#)
- [Downtime of the monitored technologies](#)
- [Downtime of the Precise product](#)
- [Upgrade planning checklist](#)

Prerequisites for the upgrade

Before planning the upgrade process, verify that:

- All minimum requirements were met as per the *Precise Minimum Requirements for Installation guide*.
- The Precise installation that is going to be upgraded is fully upgraded to the required previous version. If it still has agents that were not yet upgraded to the correct version, complete the upgrade to that version prior to starting to upgrade to the latest version.
- There is free disk space on the servers that have Precise installed, as follows:
 - 0.5GB on each server with Precise Agents
 - 2.5 GB on the Precise Framework server
- There is 0.5GB free disk space on the client server that the upgrade will be executed from.
- Ensure that the processes running from the precise directory be excluded from anti-virus checks so that locked file errors are eliminated.

Server upgrade order

Your existing Precise installation typically spans many servers. Because the upgrade is performed per server, you should plan in advance the order in which you will upgrade all servers comprising your existing Precise installation.

If you are not able to upgrade all servers at once, but will upgrade a few servers at a time, take note of the implications described in [Implications of a phased upgrade to the latest version of Precise](#).

The order of the server upgrade is:

- First all FocalPoint servers need to be upgraded.
- Then all other servers can be upgraded.

When starting the upgrade, you must select all the FocalPoints servers. You can add additional servers for the upgrade later (once the FocalPoints servers are upgraded), or as part of the FocalPoint upgrade (in this case the server upgrade will start once the FocalPoint servers are completely upgraded).

Implications of a phased upgrade to the latest version of Precise

If you are not upgrading all servers at once, but are upgrading a few servers at a time, the following limitations will apply to your Precise system functionality:

- After an upgrade has started, a server that has not fully completed the upgrade cannot have instances installed, edited, or uninstalled.
- For installed Web and J2EE Clusters, new instances will not be installed until the cluster's servers are upgraded.
- If you have created a Template Listener as part of your server's image, new Template Listener installations will fail after the upgrade. You must recreate the Template Listener once the framework upgrade has been completed.

Downtime of the monitored technologies

The upgrade process does not require any downtime of the monitored technologies.

Downtime of the Precise product

The upgrade process involves downtime of the Precise product itself as described below.

FocalPoints

When upgrading the servers with the Precise FocalPoints, your installed Precise performance monitoring system will not be in operation. Once the Precise Framework upgrade is complete, Precise will resume all performance monitoring previously provided by previous versions.

The time required for upgrading a server with the Precise FocalPoints may vary depending on the strength of the server with the FocalPoint, the strength of the server where you are using AdminPoint to apply the upgrade, the file transfer speed, the amount of Precise technologies monitored by Precise, and the time it takes to perform post-application action items. In general, upgrading a server with a Precise FocalPoint is estimated at one hour.

Upgrading a server with a FocalPoint will be fastest when application of the upgrade is performed using AdminPoint on the Main node server with the Precise FocalPoint, and the upgrade is located on storage providing good response time to that server.

If you have a federated Precise deployment, then when upgrading the servers with the FocalPoint of the Main node, your entire Precise federated deployment will not be operable for performance monitoring. When upgrading another node's servers with a FocalPoint, only that node will not be operable for performance monitoring.

Non-FocalPoint agents

Precise agents will not collect performance data while they are being upgraded. The time it takes to upgrade a server running Precise agents varies depending on the technology type and the amount of Precise agents on that server, as well as the factors described above regarding upgrading the server with the Precise FocalPoints. In general, upgrading a Precise agent's server is estimated at 20 minutes.

Upgrade planning checklist

The following checklist can be used to verify that you are ready to start performing the upgrade to the current version of Precise:

- <https://idera.secure.force.com/precise/> was reviewed for a newer version of this document. If there is a newer version, download it and use it instead of this one.
- Minimum requirements for installation were all met prior to upgrading to the latest version.
- The upgrade order of the Precise installation was planned according to [The order of the servers upgrade](#).
- Planning according to [Planning the upgrade](#) was completed.
- <http://www.idera.com/support/productsupport> was reviewed for product upgrades.
- Downtime has been coordinated for the Precise product.

Performing the upgrade

The upgrade is performed by downloading the latest version of Precise, applying the upgrade on the desired server(s), and performing additional actions that appear in AdminPoint before and after application.

To upgrade to the latest version of Precise

1. Verify that all planning and preparations as listed in [Planning the upgrade](#) have been completed.
2. Download the latest version of Precise from the Precise Customer Support Portal at <https://idera.secure.force.com/precise/>.
3. Complete the upgrade procedure on the desired server(s). See [Applying the upgrade](#).
OR
Complete the upgrade procedure on the desired server(s) using the Precise CLI utility. See [Applying the upgrade with the CLI utility](#).
4. Verify that your Precise system is working properly. If you experience any problems, see <https://idera.secure.force.com/precise/> or contact Precise Customer Support.

Applying the upgrade

To apply the upgrade on Precise servers

1. Go to **AdminPoint>Management>Updates** and select **Apply Upgrades**. The Upgrade Installation wizard opens.
2. In the “Select Upgrades” screen, click **Add Upgrade** and enter the `\Upgrade to v10.x.x\Upgrade.zip` file path from the folder you unzipped the download to, or click the browse button and select the path, then click **OK**. The upgrade will appear in the “Available Upgrades” table.
3. Select the V10xx_UPGRADE from the Available Upgrades table and, using the arrows between the tables, move it to the Upgrades to apply table.

NOTE Once this step has been successfully completed, the upgrade is saved in the Available Upgrades table. If, after this step has been successfully completed, the application process is restarted or repeated for any reason, skip this step.

4. Click **Next**. The Select servers screen will appear. This screen displays all the servers to be upgraded.

NOTE By default, all displayed servers will be selected to be upgraded. According to your preparation, as mentioned in [Server upgrade order](#), you can choose to exclude servers which you do not want to upgrade at this point by clearing their selection.

5. Click **Next**. The upgrade preparation will begin. If there are pre-action items screen (depends on your installation configuration) to be performed, they will appear on your screen. Perform the action items and mark them as done.

NOTE At this point, while the Precise FocalPoint is being restarted, an empty screen may appear.

6. Once all pre-action items are completed, or if no pre-action items are required, the upgrade will continue automatically. The Applying upgrade screen will appear, displaying a progress bar for the upgrade.
7. After the upgrade application is complete, additional steps appear on screen. It is recommended, but not mandatory, to perform each action item shown on screen before progressing to the next step.
8. Click **Next**. The “Finish” screen appears, announcing that the application is complete.

Applying the upgrade with the CLI utility

The upgrade can also be applied with the CLI utility. Before applying the upgrade using the CLI utility, verify that you follow the planning and preparations mentioned above. To apply the upgrade with the CLI utility, see [Upgrading using the CLI utility](#).

NOTE All steps in [Performing the upgrade](#), except for those involving AdminPoint, are also relevant when applying the upgrade with the CLI utility.

Upgrading using the CLI utility

To apply the upgrade

- Run the CLI i3-upgrade-load command to load the upgrade.zip file:

Windows	infra\bin\psin_cli.bat -action i3- upgrade-load -i3-user admin -i3-clear-password admin -zip-file <i>Precise DVD\Upgrade to v10.1\Upgrade.zip</i>
UNIX	./infra/bin/psin_cli.sh -action i3- upgrade-load -i3-user admin -i3-clear-password admin -zip-file <i>Precise DVD\Upgrade to v10.1\Upgrade.zip</i>
- Run the CLI i3- upgrade-prepare command to prepare the upgrade:

Windows	infra\bin\psin_cli.bat -action i3- upgrade-prepare -i3-user admin -i3-clear-password admin {-servers "<servers>" -all-servers true} - upgrades-ids V1010_UPGRADE
UNIX	./infra/bin/psin_cli.sh -action i3- upgrade-prepare -i3-user admin -i3-clear-password admin {-servers "<servers>" -all-servers true} - upgrades-ids V1010_UPGRADE
- Run the CLI i3- upgrade-install command to apply the upgrade:

Windows	infra\bin\psin_cli.bat -action i3- upgrade-install -i3-user admin -i3-clear-password admin {-servers "<servers>" -all-servers true} - upgrades-ids V1010_UPGRADE
UNIX	./infra/bin/psin_cli.sh -action i3- upgrade-install -i3-user admin -i3-clear-password admin {-servers "<servers>" -all-servers true} - upgrades-ids V1010_UPGRADE
- Perform the post- upgrade action items that appear.

Troubleshooting

This section describes a number of problems and solutions on how to solve problems that occur during the upgrade of Precise.

An error occurs when running the prepare stage on the Precise FocalPoint server

When an error occurs during the prepare stage on the Precise FocalPoint, you may be asked to reopen the user interface. Using the “regular” URL will result in an error. Therefore, use `<precise-url>/admin`.

When starting the upgrade, a message appears to uninstall Precise for Tuxedo

This message indicates the environments in which Precise for Tuxedo is found. Precise for Tuxedo is no longer supported and therefore it needs to be uninstalled should you decide to perform an upgrade.