Installation with Precise CLI

This section includes the following topics:

Installing the Precise Framework

The Precise Framework can be installed directly from the Precise download onto the Precise FocalPoint server. You can use the Precise CLI utility to install the following Framework components:

- Precise FocalPoint
- PMDB FocalPoint
- Alerts FocalPoint
- Report Manager FocalPoint
- Insight FocalPoint
- TPM FocalPoint

For information on manually installing the PMDB schemas, see the *Precise Installation Guide*.

How to install the Precise Framework

Install the Precise Framework by performing the following steps:

1. Prepare XML parameters file to specify the Framework installation parameters and log in to the server on which you have planned to install the Precise FocalPoint.
2. On this server, run the following command from the <*precise_root*> folder to install the CLI utility installation script:
   Windows <installation_DVD>
   \CLI\psin_framework_install.bat
   <full_path_to_XML_parameters_file>
   UNIX <installation_DVD>
   /CLI/psin_framework_install.sh
   <full_path_to_XML_parameters_file>
   After running the script, you may be required to perform manual post-installation tasks to complete the installation.
3. If an error occurs, fix the problem and rerun the installation scripts. (In the case of an error, there is no need to delete the installation files.) If a critical error occurs before the Precise FocalPoint is installed, an error message is displayed. At the end of CLI utility installation, a message appears "Installation complete - check logs for details". The relevant logs for installation are as follows:
   - <*precise_root*>/logs/psin_framework_install.out
   - <*precise_root*>/logs/infra.CLI.log

   If installation is successful, a message appears "Framework install setup process done."

> For Windows Server which has the User Account Control enabled, you must run this command using Administrator permissions: Click Start Menu, right-click Command Prompt, click "Run as administrator", click **Continue** button, to approve the operation. Run the command specified above.

About the Precise Framework parameter file

You need to prepare the Framework parameter file by creating an XML file with tags that represent the installation parameters and inserting the appropriate values.

The following is an example of a server parameters file:

```
<parameters>
    <parameter name="setup-process" value="framework"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="installation-cd-path" value="d:\"/>
    <parameter name="i3fp-server-machine-name" value="server1"/>
    <parameter name="dbms-type" value="mssql"/>
    <parameter name="dbms-instance" value="DATABASE1"/>
    <parameter name="dbms-database" value="PWV8"/>
    <parameter name="dbms-dba-user" value="pwv8"/>
    <parameter name="dbms-dba-clear-password" value="mypass"/>
    <parameter name="gui-port" value="20820"/>
    <parameter name="gui-shutdown-port" value="20821"/>
    <parameter name="server-machine-installation-folder-server1" value="d:\precise"/>
    <parameter name="server-machine-port-server1" value="20802"/>
</parameters>
```

The parameters file is an XML file containing a list of parameters for a Precise framework installation.

Table 1 Elements of the Precise framework parameter file

Element	Description
server-machine-installation-folder-*server-name*	Indicates the folder in which Precise installation files are stored. **Values**: String **Mandatory for Precise FocalPoint Server**: Yes **Mandatory for other servers**: Yes, unless you prefer to perform a manual installation.
server-machine-port-*server-name*	Port of the Precise Listener on the local server. **Values**: Numeric 1025–65535 **Mandatory**: Yes
setup-process	Marked always as framework. **Mandatory**: Yes
setup-mode	Must be in one of the following modes: • install (used to install Precise Framework) • edit (used to update Precise Framework) • uninstall (used to uninstall Precise Framework) **Mandatory**: Yes
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
i3fp-server-machine-name	Name of the Precise FocalPoint server. The name must be written in lowercase letters only. Can be a fully qualified name or IP address. **Values**: String **Mandatory**: Yes
gui-port	Port of the Graphics User Interface (GUI) server. **Values**: Numeric 1025–65535 (must not be identical to other ports specified) **Mandatory**: Yes
gui-shutdown-port	Local port for controlling the GUI. **Values**: Numeric 1025 -65535 (must not be identical to other ports specified) **Mandatory**: Yes

server-machine-service-unique-id-server-name	A unique name used in the installation of all Precise agents. This is used if you want to support more than one Precise installation system on the server (for example, in cluster applications). Relevant only for Windows servers. **Values**: Alphanumeric **Mandatory**: No
pw-server-machine-name	Name of the PMDB FocalPoint server. The name must be written in lowercase letters only. **Values**: String **Mandatory**: No, defaults to the Precise FocalPoint.
alerts-server-machine-name	Name of the Alerts FocalPoint server. The name must be written in lowercase letters only. **Values**: String **Mandatory:** No, defaults to the Precise PMDB FocalPoint.
foresight-server-machine-name	Name of the Report Manager FocalPoint server. The name must be written in lowercase letters only. **Values**: String **Mandatory**: No, defaults to the Precise PMDB FocalPoint.
insight-server-machine-name	Name of the Insight FocalPoint server. The name must be written in lowercase letters only. **Values**: String **Mandatory:** No, defaults to the Precise PMDB FocalPoint.

The Framework CLI supports installing the framework FocalPoint on different servers. If the servers are UNIX servers, the framework's servers will be automatically installed by the framework CLI (you need to supply user and password parameters for each UNIX server). If the servers are Windows servers and different servers are required for the framework FocalPoints, perform the steps described in the following procedure.

To install the framework FocalPoint on different Windows servers

1. Only install the Precise FocalPoint using the framework CLI command.
2. Install the other FocalPoints with the Add Server CLI command. See Installing Servers.
3. Install all required framework FocalPoints with the framework CLI command.

Installing the PMDB FocalPoint using an Oracle database

Additional parameters are needed for installing the PMDB FocalPoint on an Oracle database.

The following table lists the additional parameters needed for a PMDB installation using an Oracle database.

Table 2 Additional parameter file elements for the PMDB on an Oracle database

Element	Description
dbms-type	Marked always as oracle. **Values**: String **Mandatory**: Yes
dbms-server	Name of the Oracle database server. **Values**: String **Mandatory**: Yes
dbms-instance	Oracle instance name (SID). **Values**: String **Mandatory**: Yes

dbms-port	Oracle instance Listener port. **Values**: Integer **Mandatory**: Yes
dbms-dba-user	User name for the Oracle user with DBA privileges. Will only be used during installation. **Values**: String **Mandatory**: Yes, if manual-schema is set to false.
dbms-tablespace-large-name	Name of the large tablespace that will be used by PMDB. **Values**: String **Mandatory**: No **Default value**: PRECISE_PW_TAB_LARGE
dbms-tablespace-medium-name	Name of the medium tablespace that will be used by PMDB. **Values**: String **Mandatory**: No **Default value**: PRECISE_PW_TAB_MEDIUM
dbms-tablespace-small-name	Name of the small tablespace that will be used by PMDB. **Values**: String **Mandatory**: No **Default value**: PRECISE_PW_TAB_SMALL
dbms-tablespace-infral-name	Name of the infra tablespace that will be used by PMDB. **Values**: String **Mandatory**: No **Default value**: PRECISE_PW_TAB_INFRA
dbms-tablespace-sts-name	Name of the sts tablespace that will be used by PMDB. **Values**: String **Mandatory**: No **Default value**: PRECISE_PW_TAB_STS
dbms-tablespace-large-initial-size	Initial size for the large tablespace. **Values**: Integer **Mandatory**: No **Default value**: 64
dbms-tablespace-medium-initial-size	Initial size for the medium tablespace. **Values**: Integer **Mandatory**: No **Default value**: 64
dbms-tablespace-small-initial-size	Initial size for the small tablespace. **Values**: Integer **Mandatory**: No **Default value**: 64

dbms-tablespace-infra-initial-size	Initial size for the infra tablespace. **Values**: Integer **Mandatory**: No **Default value**: 64
dbms-tablespace-sts-initial-size	Initial size for the STS tablespace. **Values**: Integer **Mandatory**: No **Default value**: 32
dbms-tablespace-large-uniform-size	Uniform size for the large tablespace. **Values**: Integer **Mandatory**: No **Default value**: 2048
dbms-tablespace-medium-uniform-size	Uniform size for the medium tablespace. **Values**: Integer **Mandatory**: No **Default value**: 512
dbms-tablespace-small-uniform-size	Uniform size for the small tablespace. **Values**: Integer **Mandatory**: No **Default value**: 80
dbms-tablespace-infra-uniform-size	Uniform size for the infra tablespace. **Values**: Integer **Mandatory**: No **Default value**: 80
dbms-tablespace-sts-uniform-size	Uniform size for the STS tablespace. **Values**: Integer **Mandatory**: No **Default value**: 256
dbms-tablespace-large-extent-size	Extent size for the large tablespace. **Value**: Integer Mandatory: No **Default value**: 512
dbms-tablespace-medium-extent-size	Extent size for the medium tablespace. **Value**: Integer Mandatory: No **Default value**: 512
dbms-tablespace-small-extent-size	Extent size for the small tablespace. **Value**: Integer Mandatory: No **Default value**: 512
dbms-tablespace-infra-extent-size	Extent size for the infra tablespace. **Value**: Integer Mandatory: No **Default value**: 512

dbms-tablespace-sts-extent-size	Extent size for the sts tablespace. **Value**: Integer Mandatory: No **Default value**: 1024
dbms-ind-large-name	Name of the large index tablespace that will be used by PMDB. **Values**: String **Mandatory**: No **Default value**: PRECISE_PW_IND_LARGE
dbms-ind-medium-name	Name of the medium index tablespace that will be used by PMDB. **Values**: String **Mandatory**: No **Default value**: PRECISE_PW_IND_MEDIUM
dbms-ind-small-name	Name of the small index tablespace that will be used by PMDB. **Values**: String **Mandatory**: No **Default value**: PRECISE_PW_IND_SMALL
dbms-ind-large-initial-size	Initial size for the large index tablespace. **Values**: Integer **Mandatory**: No **Default value**: 64
dbms-ind-medium-initial-size	Initial size for the medium index tablespace. **Values**: Integer **Mandatory**: No **Default value**: 64
dbms-ind-small-initial-size	Initial size for the small index tablespace. **Values**: Integer **Mandatory**: No **Default value**: 64
dbms-ind-large-uniform-size	Uniform size for the large index tablespace. **Values**: Integer **Mandatory**: No **Default value**: 1024
dbms-ind-medium-uniform-size	Uniform size for the medium index tablespace. **Values**: Integer **Mandatory**: No **Default value**: 256
dbms-ind-small-uniform-size	Uniform size for the small index tablespace. **Values**: Integer **Mandatory**: No **Default value**: 80

dbms-ind-large-extent-size	Extent size for the large index tablespace. **Value**: Integer **Mandatory**: No **Default value**: 512
dbms-ind-medium-extent-size	Extent size for the medium tablespace. **Value**: Integer Mandatory: No **Default value**: 512
dbms-ind-small-extent-size	Extent size for the small tablespace. **Value**: Integer Mandatory: No **Default value**: 512
manual-schema	Indicates if the schema should be manually installed. **Values**: true, false **Mandatory**: No. **Default value**: false
is-partitioned	Indicates if the database contains partitioning. **Values**: true, false **Mandatory**: Yes, if manual-schema is true
dbms-version	Database version. **Values**: 9i, 10g, 11g **Mandatory**: Yes, if manual-schema is true
dbms-dba-encrypted-password	Password for the Oracle user with DBA privileges. Will only be used during installation. **Values**: Encrypted String **Mandatory**: Yes, if manual-schema is set to false. Alternatively the dbms-dba-clear-password can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
dbms-i3-user	User name for the Precise user who owns the PMDB schema. **Values**: String **Mandatory**: Yes
dbms-i3-encrypted-password	Password for the Precise user with PMDB privileges. **Values**: Encrypted String **Mandatory**: Yes Alternatively the dbms-i3-clear-password can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
dbms-tablespace-temp-name	Storage parameter name for the Precise for Oracle schema. Indicates Temporary tablespace name. **Values**: String **Mandatory**: No **Default value**: PRECISE_PMBD_TMP
dbms-tablespace-temp-file	Storage parameter for the Precise for Oracle schema. Indicates Temporary tablespace file. **Values**: String **Mandatory**: No **Default value**: PRECISE_PMBD_TMP

dbms-tablespaces-folder	Storage parameter for the Precise for Oracle schema. Indicates the folder in which Tablespace datafiles are stored. **Values**: String **Mandatory**: Yes
dbms-use-bigfile-for-tablespaces	Specify whether the tablespaces will be created as bigfiles. **Values**: true, false **Mandatory**: No **Default value**: true
dbms-service	Specify the name of oracle service in case you want to use oracle cluster. **Value**: String **Mandatory**: No

Installing the PMDB FocalPoint using an MS-SQL Server database

Additional parameters are needed for installing the PMDB FocalPoint on an MS-SQL Server database.

The following table lists the additional parameters needed for a PMDB installation using an MS-SQL Server database.

Table 3 Additional parameter file elements for the PMDB on an MS-SQL Server database

Element	Description
manual-schema	Indicates if the schema should be manually installed. **Values**: true, false **Mandatory**: No. **Default value**: false
is-partitioned	Indicates if the database contains partitioning. **Values**: true, false **Mandatory**: Yes, if manual-schema is true
dbms-version	Database version. **Values**: 2005, 2008 **Mandatory**: Yes, if manual-schema is true
dbms-type	Marked always as SQL Server (mssql). **Mandatory**: Yes
dbms-instance	MS-SQL Server instance name. (Must always be uppercase). **Values**: String **Mandatory**: Yes
dbms-use-win-authentication	Indicates whether the PMBD will be connected using OS authentication. **Values**: Boolean **Mandatory**: No **Default value**: false All focals must be on the Windows server and the service must be configured to run with the user that has privileges on the PMDB. When using windows authentication, the CLI must be run by a user with permissions to connect to the SQL Server database.

dbms-database	Name of the MS-SQL Server database. **Values**: String **Mandatory**: Yes
dbms-dba-user	User name for the MS-SQL Server user with DBA privileges to install the schema. **Values**: String **Mandatory**: Not mandatory if dbms-use-win-authentication is true.
dbms-dba-encrypted-password	Password for the MS-SQL Server user with DBA privileges. **Values**: Encrypted String **Mandatory**: Not mandatory if dbms-use-win-authentication is true. **Editable**: No Alternatively the dbms-dba-clear-password can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
dbms-file-groups	All tables will be created under this file group. **Values**: String **Mandatory**: No
dbms-collation	New database will be created using this collation. **Values**: String **Mandatory**: No **Default value**: SQL_Latin1_General_CP1_CS_AS
dbms-data-growth	New database data file auto growth size in MB. **Values**: Integer **Mandatory**: No **Default value**: 512
dbms-data-size	New database data file size in MB. **Values**: Integer **Mandatory**: No **Default value**: 1024
dbms-data-path	Folder under the database server where the data file will be created. **Values**: String **Mandatory**: Yes, if the dbms-database parameter value is a database which does not exist.
dbms-log-path	Folder under the database server where the database log file will be created. **Values**: String **Mandatory**: Yes, if the dbms-database parameter value is a database which does not exist.
dbms-log-size	New database log file size in MB. **Values**: Integer **Mandatory**: No **Default value**: 512

dbms-log-growth	New database log file auto growth size in percent. **Values**: Integer **Mandatory**: No **Default value**: 10

Installing additional parameters to servers where FocalPoints are installed

The following table lists the additional parameters needed for server installation, wherever FocalPoints are installed. These are required only if when installing the Framework FocalPoint on servers other than the Precise FocalPoint. In such cases specify the parameters below for each server and replace server-name (italic) with the real server name.

Table 4 Additional parameter file elements for server installation

Element	Description
server-machine-port-*server-name*	Port of the Precise Listener on the server. **Values**: Numeric 1025 -65535 **Mandatory**: Yes
server-machine-installation-folder-*server-name*	Indicates the folder in which Precise installation files are stored. **Values**: String **Mandatory**: Yes, unless you prefer to perform a manual server installation.
server-machine-use-communication-relay-*server-name*	Indicates whether this server should use relay communication. Select this option if the server resides behind a firewall. **Values**: (true/false) **Mandatory for other servers**: No
server-machine-flavor-*server-name*	Type of server. Must be in one of the following servers: • Windows • Unix **Mandatory**: Yes, unless you prefer to perform a manual server installation.
server-machine-install-user-*server-name*	User name required to install the Precise Listener on the server. Will only be used during installation. **Values**: String **Mandatory for other servers**: Yes, unless you prefer to perform a manual server installation.
server-machine-install-encrypted-pass word-*server-name*	Password for the user, required for using Precise Listener services on the server. **Values**: Encrypted String **Mandatory**: Yes, unless you prefer to perform a manual server installation. Alternatively the server-machine-install-clear-password-server-name can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
server-machine-service-authentication- mode-*server-name*	Server authentication mode. Precise services are using LocalSystem account. to specify other user account specify "user", and use: • server-machine-service-authentication-user-server-name and • server-machine-service-authentication-encrypted-password-server-name to specify the authentication details **Values**: String **Mandatory**: No
server-machine-service-authentication- user-server-name	User account name for Precise services on the server. **Mandatory**: Only if server-machine-service-authentication-mode-server-name is set to "user". **Values**: String

server-machine-service-authentication- encrypted-password-server-name	Password for the user specified in server-machine-service-authentication-user-server-name. **Values**: Encrypted String **Mandatory**: Only if server-machine-service-authentication-mode-server-name is set to "user". Alternatively the server-machine-service-authentication-clear-password-server-name can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
server-machine-service-authentication- domain-server-name	Domain of user specified in server-machine-service-authentication-user-server-name. **Values**: String **Mandatory**: Only if server-machine-service-authentication-mode-server-name is set to "user".
server-machine-bind-listener-address-server-name	Indicates whether the Precise Listener on this server should bind the specified server name or all the addresses on the given port. **Values**: true/false **Mandatory**: No

Installing Precise FocalPoints

Installing a Precise FocalPoint on a server

When using the CLI for installation, you must explicitly install the FocalPoint. This is unlike the GUI-based installation, in which FocalPoints are automatically installed with the first instance relevant. To install a Precise FocalPoint, the you should create an installation parameters file and run the Precise CLI utility installation script on the main Precise FocalPoint.

To install a Precise FocalPoint on a server

1. Build a parameter XML file to be used as input for the installation scripts.
2. Run the following command from the < *precise_root* > folder on the main Precise FocalPoint.

Windows
```
infra\bin\psin_cli.bat
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <path_to_parameters_file>
```

UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <path_to_parameters_file>
```

About the Precise FocalPoint parameter file

You need to prepare the Precise FocalPoint parameter file by creating an XML file with tags that represent the installation parameters and inserting the appropriate values.

The following is an example of a Precise FocalPoint parameters file that installs the Oracle FocalPoint on server1:

```
<parameters>
    <parameter name="setup-process" value="focal-OR"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="focal-server-machine-name" value="server1"/>
    <parameter name="installation-cd-path" value="\\filesvr\Precise i3\ installation"/>
</parameters>
```

The following table lists the needed parameters for a Precise FocalPoint installation. The parameter format is:

```
<parameters>
    <parameter name="..." value="..."/> ...
</parameters>
```

Table 5 Parameter file elements for a Precise FocalPoint installation

Element	Description

setup-process	Indicates the name of the setup process **Values**: String; focal-<PRODUCT CODE>, for example: focal-JE, focal-OR. For more information, see Product Codes. **Mandatory**: Yes **Editable**: No
setup-mode	Must be in one of the following modes: • install (to install) • edit (to update) • uninstall (to uninstall) **Mandatory**: Yes **Editable**: Yes
focal-server-machine-name	Name of the server where the Precise FocalPoint will be installed. The name must be written in lowercase letters only. Can be a fully qualified name or IP address. **Values**: String **Mandatory**: Yes **Editable**: No
installation-cd-path	Indicates the absolute path to the folder where the Precise v9.6 download was downloaded to. **Values**: String **Mandatory**: Yes **Editable**: Yes

Installing Servers

The first stage in a server installation using the CLI utility requires installing and registering the server in Precise. The server is registered in the Precise database, a Precise Listener is started on the server, and communication between the Precise FocalPoint and the Precise Listener is enabled.

To promote efficiency, servers can also be installed automatically. For more information, see Auto deployment.

Before installing a server using the CLI utility, verify the following issues:

- The Precise communication port is open in both directions (between the Precise FocalPoint server and the target server).
- CLI can handle installation packages. For more information, see Installation packages. To install the servers with the CLI utility:

1. Run the following command on the main Precise FocalPoint server:
   Windows infra\bin\psin_cli.bat
   -i3-user <user_name>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action list-required-files-for-new-server
   -bits <new server bits (32/64)>
   -os <os _type>
   UNIX ./infra/bin/psin_cli.sh
   -i3-user <user_name>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action list-required-files-for-new-server
   -bits <new server bits (32/64)>
   -os <os_type>
   The CLI creates an XML file containing the list of required installation packages for the server.
   Table 6 Server Installation

Element	Description
i3-user	See Authenticate to CLI Utility.
i3-encrypted-password	See Authenticate to CLI Utility.
action	Always list-required-files-for-new-server. **Mandatory**: Yes

bits	The OS bits in the new added server. **Values**:32 or 64 **Mandatory**: Yes
os	The added server OS. **Values**: See Operating System Type and Flavor. **Mandatory**: Yes

2. On the new server create the installation folder and create new sub folder under it: distribution.
3. Copy the files specified the XML file created in Step 1 to the new server in the <*precise_root*>/distribution
4. Login to the server using the Precise user
   CD <*precise_root*>
5. Run the following command:
   Windows distribution\psin_ba_WIN.exe -s
   Linux ./distribution/psin_ba_Linux --noexec
   UNIX ./distribution/psin_ba_<*os_type*> -s
   For more information, see Operating System Type and Flavor.
   Note the -s argument
6. For each of the other files you've copied, run the following command:
   Windows infra\bin\psin_file_new.exe -manual -extract distribution\<*the_file_name*> -event install
   UNIX ./infra/bin/psin_file_new -manual -extract distribution/<*the_file_name*> -event install
7. Create an XML file containing the relevant installation parameters. Place the file in <*precise_root*> folder on the target server. You can also set up this file in advance.
   By default, installing an non-secured local server using the CLI is not enabled. To enable a non-secured CLI server installation, set the Precise registry parameter:
   registry\products\infrastructure\setup\settings\enable-local-server-cli to true, and restart Precise FocalPoint.
8. Run the following command to execute the CLI utility installation script from the <*precise_root*> folder on the target server:
   Windows infra\bin\psin_cli.bat
   -i3-user <user_name>
   {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
   -action setup-server -parametersfile <server_installation_parameters_file_name>
   UNIX ./infra/bin/psin_cli.sh
   -i3-user <user_name>
   {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
   -action setup-server
   -parametersfile <server_installation_parameters_file_name>

For Windows Server 2008, you must run this command using Administrator permissions: Click **Start Menu**, right-click **Command Prompt**, click **Run as administrator**, click **Continue**, to approve the operation. Run the command specified above.

Table 7 CLI utility installation script

Element	Description
i3-user	See Authenticate to CLI Utility.
i3-encrypted-password	See Authenticate to CLI Utility.
action	always setup-server **Mandatory**: Yes
parametersfile	path to parameters file **Mandatory**: Yes

About the server parameter file

You need to prepare the Server parameter file by creating an XML file with tags that represent the installation parameters and inserting the appropriate values.

The following is an example of a server parameter file:

```
<parameters>
    <parameter name="setup-mode" value="install"/>
    <parameter name="setup-process" value="server" />
    <parameter name="installation-cd-path" value="d:\" />
    <parameter name="handle-server-machine-name" value="poolserver5" />
    <parameter name="server-machine-port-poolserver5" value="3002" />
    <parameter name="server-machine-flavor-poolserver5" value="Windows" />
    <parameter name="i3fp-server-machine-name" value="focalmachine" />
    <parameter name="focalmachine-server-machine-port" value="20702" />
</parameters>
```

The following table describes the elements of the parameter file.

Table 8 Elements of the servers parameter file for product Collectors

Element	Description
setup-mode	Setup mode that is used. **Values**: install, edit, uninstall **Mandatory**: Yes
setup-process	Setup process. **Value**: always server. **Mandatory**: Yes
handle-server-machine-name	Name of the local server. Can be a fully qualified name or IP address. The server name must be recognized by the Precise FocalPoint server, for example, it should be registered in DNS. **Values**: String **Mandatory**: Yes
server-machine-port-*server-name*	Port of the Precise Listener on the local server. **Values**: Numeric 1025–65535 **Mandatory**: Yes
i3fp-server-machine-name	Name of the Precise FocalPoint server. Can be fully qualified name or IP address. The Precise FocalPoint server name must be recognized by the newly added server, for example, it should be registered in DNS. **Values**: String **Mandatory**: Yes
server-machine-port-*i3fp-server-name*	Port of the Precise FocalPoint Listener. Replace i3fp-server-name with the name of Precise FocalPoint as shown in Precise GUI. **Values**: Numeric 1025–65535 **Mandatory**: Yes
server-machine-use-communication-relay *-server-name*	The Communication Relay provides a solution to a firewall restrictions problem. For more details see the *Precise Installation Guide*. **Value**: (true/false) **Mandatory**: No.
environment-name	Related application name. **Values**: String **Mandatory**: Yes, in case of federation installation.
server-machine-service-authentication-user-*server-name*	User account name for Precise services on the server. **Values**: String **Mandatory**: Only if server-machine-service-authentication-mode-*server-name* is set to "user".
server-machine-service-authentication-encrypted-password-*server-name*	Password for the user specified in server-machine-service-authentication-user-server-name. **Values**: Encrypted String **Mandatory**: Only if server-machine-service-authentication-mode-*server-name* is set to "user". Alternatively the server-machine-service-authentication-clear-password-server-name can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.

server-machine-service-authentication-domain-*server-name*	Domain of user specified in server-machine-service-authentication-user-*server-name*. **Values**: String **Mandatory**: Only if server-machine-service-authentication-mode-server-name is set to "user".
server-machine-service-unique-id-*server-name*	A unique services suffix used in the installation of all Precise agents allows installation of several Precise installations folders on the same server. Relevant only for Windows servers. **Values**: String **Mandatory**: No
server-machine-service-authentication-mode-*server-name*	Server authentication mode. Precise services are using LocalSystem account. to specify other user account specify "user", and use: server-machine-service-authentication-user-server-name and server-machine-service-authentication-encrypted-password-server-name to specify the authentication details: **Values**: user or localsystem **Mandatory**: No
server-machine-secured-protocol-*server-name*	The secured installation is using an existing security protocols and methods such as blowfish and SSH to ensure that the communication encryption keys are safely copied to the target server. **Value**: true, false **Mandatory**: No
server-machine-security-clear-password-*server-name*	Security password. **Value**: String **Mandatory**: Only on secured remote Manual installation.
server-machine-install-user-*server-name*	User name required to install the Precise Listener on the server. Will only be used during installation. **Value**: String **Mandatory**: Only on secured remote automatic installation.
server-machine-install-encrypted-password-*server-name*	Password for the user, required for using Precise Listener services on the server. **Values**: Encrypted String **Mandatory**: Yes, unless you prefer to perform a manual server installation. Alternatively the server-machine-install-clear-password-server-name can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
server-machine-installation-folder-*server-name*	Indicates the folder in which Precise installation files are stored. **Values**: String **Mandatory**: Yes, unless you prefer to perform a manual server installation.
server-machine-flavor-*server-name*	Type of server. Must be in one of the following servers: Windows, UNIX **Values**: String **Mandatory**: Yes

server-machine-use-jre-*server-name*	Indicates whether a Java-based Listener will be installed on the server or not. A Java-based Listener is required for ShortTimeSlice support. **Values**: true, false. **Default**: true for servers whose OS supports JRE 1.6. You should use false if the server's OS does not support JRE 1.6 or to reduce the memory footprint of the Precise Listener. **Mandatory**: No
server-machine-bind-listener-address-*server-name*	Indicates whether the Precise Listener on this server should bind the specific server name or bind all the addresses on the given port. **Values**: true, false **Mandatory**: No
server-machine-ssl-*server-name*	Indicates whether this Listener will function as an SSL Listener. An SSL Listener is necessary to communicate with remote monitored instances. **Values**: true, false **Default**: false **Mandatory**: No For more information, see J2EE remote instance monitoring.
server-machine-ssl-port-*server-name*	Indicates the SSL port this Listener will listen too. **Values**: Integer **Default**: 443 **Mandatory**: No For more information, see J2EE remote instance monitoring.
server-machine-consumer-*server-name*	Indicates whether this Listener will function as a consumer that will pull data from SSL Listeners. **Values**: true, false **Default**: false **Mandatory**: No For more information, see J2EE remote instance monitoring.
server-machine-consume-target-*server-name*	Indicates a target server that contains an SSL Listener. By setting this parameter, the installed server will consume remote data only from the specified target server. If this parameter is not specified and the server-machine-consumer-server-name is set to true, the installed server will consume data from all servers that contain SSL Listeners. This parameter should only be set if the server-machine-consumer-server-name is set to true and you want to pull data from a specific SSL Listener. The target server specified in this parameter must be defined as an SSL Listener. Values: String (server name). **Mandatory**: No For more information, see J2EE remote instance monitoring.

Installing secured servers with the Precise CLI utility

The server installation CLI described above, assumes it can use non-secured protocols such as telnet, and can transfer the communication encryption key as clear text over the network. If this is a problem, you can install the server using a secure CLI. The secured installation uses existing security protocols and methods such as blowfish and SSH to ensure that the communication encryption keys are safely copied to the target server. It's possible that the secured server installation might require more manual action items than non-secure server CLI installation. You can use one of the following methods to perform secured server installation:

- Remote Automatic mode
- Local mode

Remote Automatic mode

This mode may be used only if the target server is a UNIX server that runs SSH (secured shell).

1. Prepare the server parameters file and save it to the <*precise_root*> folder on the main Precise FocalPoint.
   For more information, see Table 8. Mandatory parameters for this installation method are:
   ```
   server-machine-secured-protocol-server-name true server-machine-install-encrypted-password-server-name
   server-machine-installation-folder-server-name
   server-machine-flavor-server-name
   server-machine-install-user-server-name
   ```
   You must not supply:
   ```
   server-machine-security-clear-password-server-name
   ```
2. On the main Precise FocalPoint, run the following command from <*precise_root*> folder:
   Windows infra\bin\psin_cli.bat
   -i3-user <user_name>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <server_parameters_file_path>
   UNIX ./infra/bin/psin_cli.sh
   -i3-user <user_name>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <server_parameters_file_path>

> Precise supports most of the common SSH for UNIX. If you are unable to install using the automatic mode, try the Local mode below.

Local mode

Use this mode for Windows server or when your server does not have SSH installed.

1. Prepare server parameters file. For more information, see Table 8.
   Mandatory parameters for this installation are:
   ```
   server-machine-secured-protocol-server-name true
   ```
2. On the main Precise FocalPoint server, run the following command from the <*precise_root*> folder:
   Windows infra\bin\psin_cli.bat
   -i3-user <user_name>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action secure-crypt-keys
   -ba-secure-clear-password <*security_password*>
   UNIX ./infra/bin/psin_cli.sh
   -i3-user <user_name>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action secure-crypt-keys
   -ba-secure-clear-password <*security_password*>
   The command will generate a key file on the Precise FocalPoint server, under the products/i3fp/security/keys/ folder.
   Table 9 Local mode

Element	Descriptions
i3-user	See Authenticate to CLI Utility.
i3-encrypted-password	See Authenticate to CLI Utility.
action	always secure-crypt-keys **Mandatory**: Yes
ba-secure-encrypted-password	Password used to encrypt the communication key, up to 8 characters. **Mandatory**: Yes Alternatively the i3clear-password can be used, allowing you to specify a clear password instead of an encrypted string.

3. Copy and extract the server packages on the target server as specified in Installing Servers.

4. Copy key file from: `products/i3fp/security/keys/keys/xml` on the main Precise FocalPoint to the target server, to the `./infra` folder.
5. On the target server, run the following command from the <*precise_root* **> folder:**
   Windows infra\bin\psin_infra.exe
   -manual-extricate-crypt <*security_password*>
   UNIX ./infra/bin/psin_infra
   -manual-extricate-crypt <*security_password*>
   The command will extricate the security keys on the target server.
6. On the target server, run the following command from the <*precise_root*> folder. For more information, see Installing Servers.
   Windows infra\bin\psin_cli.bat
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup-server
   -parametersfile <server_parameters_file_path>
   UNIX ./infra/bin/psin_cli.sh
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup-server
   -parametersfile <server_parameters_file_path>

Updating services Authentication using the Precise CLI Utility

To update the user authentication of your Precise Windows services, fill in the following authentication parameters and then run the server setup installation in edit mode.

```
server-machine-service-authentication-mode-server-name
server-machine-service-authentication-domain-server-name
server-machine-service-authentication-user-server-name
server-machine-service-authentication-encrypted-password-server-name
```

For parameter details, see Table 10.

Installing a Tier with the Precise CLI utility

Once you installed the Precise framework, you can install the Tiers that comprise your Precise suite.

- Installing Precise for Oracle with the Precise CLI utility
- Installing Precise for Storage with the Precise CLI utility
- Installing Precise for J2EE with the Precise CLI utility
- Installing Precise for Web with the Precise CLI utility
- Installing Precise for Microsoft .NET with the Precise CLI utility
- Installing Precise for SQL Server with the Precise CLI utility
- Installing Precise for SAP with the Precise CLI utility
- Installing Precise for Sybase with the Precise CLI utility
- Installing Precise for Sybase Replication Server with the Precise CLI utility
- Installing Precise for DB2 with the Precise CLI utility
- Installing a Tuxedo instance with the Precise CLI utility
- Installing an Oracle Applications instance with the Precise CLI utility
- Installing Other Tier Collectors with the Precise CLI utility
- Installing an OS instance with the Precise CLI utility
- Installing Precise for vCenter Server with the Precise CLI utility

Installing Precise for Oracle with the Precise CLI utility

Before installing an Oracle instance with the Precise CLI utility, verify the following issues:

- The Precise for Oracle FocalPoint was installed.
- The Precise Listener on the target server on which the Precise for Oracle agent is to be installed was installed.

To install Precise for Oracle with the Precise CLI utility

1. Create the Precise for Oracle parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. For more information, see Ab out the Precise for Oracle parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI installation script.
   Windows infra\bin\psin_cli.bat
   -i3-user <user_name>
   {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
   -action setup
   -parametersfile <precise_for_oracle_installation_parameters_file_name>
   UNIX ./infra/bin/psin_cli.sh
   -i3-user <user_name>
   {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
   -action setup
   -parametersfile <precise_for_oracle_installation_parameters_file_name>

About the Precise for Oracle parameter file

You need to prepare the Precise for Oracle parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following is an example of a Precise for Oracle parameters file:

```
<parameters>
    <parameter name="setup-process" value="apptier-OR"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="collector-server-machine-name" value="server5"/>
    <parameter name="instance-name" value="ORCL"/>
    <parameter name="oracle-home" value="C:\oracle\product\10.1.0\Db_1"/>
    <parameter name="oracle-version" value="100"/>
    <parameter name="oracle-port" value="1521"/>
    <parameter name="oracle-dba-user" value="system"/>
    <parameter name="oracle-dba-clear-password" value="dba"/>
    <parameter name="oracle-connect-as" value="SYSDBA"/>
    <parameter name="oracle-create-new-user" value="true"/>
    <parameter name="oracle-i3-user" value="I3_OR_1234"/>
    <parameter name="oracle-i3-clear-password" value="mypassword"/>
    <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the updated elements of the parameter file. Element names marked with an asterisk (*) can be updated after installation.

Table 10 Elements of the Precise for Oracle parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-OR **Mandatory**: Yes
setup-mode*	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the Precise for Oracle Collector will be installed. **Values**: String **Mandatory**: Yes
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
instance-name	Oracle instance name (SID). **Values**: String **Mandatory**: Yes
oracle-home*	Full path of Oracle home. **Values**: String **Mandatory**: Yes

oracle-version	Oracle instance version **Values**: 100, 110, 120, 180 The values represent the following versions: 100 = Version 10 110 = Version 11 120 = Version 12 180 = Version 18 **Mandatory**: Yes
oracle-port*	Oracle instance Listener port. **Values**: Numeric **Mandatory**: Yes
oracle-dba-user	User name for Oracle user with DBA privileges. Will only be used during installation. **Values**: String **Mandatory**: Yes
oracle-dba-encrypted-password	Password for Oracle user with DBA privileges. Will only be used during installation. **Values**: Encrypted String **Mandatory**: Yes Alternatively the oracle-dba-clear-password can be used, allowing you to specify a clear password instead of an encrypted string. See Encrypt command.
oracle-connect-as	Connection option for Oracle user with DBA privileges. When using a manual schema, this must be specified as Normal. **Values**: SYSDBA, Normal **Mandatory**: Yes
network-ports	Oracle listener ports. Specify all the ports you want the Insight Savvy for Network to sample. At least one port must be specified. **Values**: port=x||port=y (for example: port=1111||port=2222) **Mandatory**: Yes if Install-network is 'true'.
oracle-create-new-user	Indicates whether the oracle-i3-user is an existing user or the installation should create a new user. **Values**: (true/false) **Mandatory**: Yes If an Oracle DB schema has been installed manually before the current collector installation, then this parameter should appear explicitly in the parameters file and its value must be "false".
oracle-i3-user	User name of the Oracle user who owns the Precise for Oracle schema. **Values**: String **Mandatory**: Yes
oracle-i3-encrypted-password	Password of the Oracle user who owns the Precise for Oracle schema. **Values**: Encrypted String See Encrypt command on page 148. **Mandatory**: Yes Alternatively the oracle-i3-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
oracle-sap-system-name	The SAP system name. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.

oracle-sap-default-application-server	The Application server name used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
oracle-sap-system-number	The SAP system number. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
oracle-sap-user	The SAP system user name. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
oracle-sap-encrypted-password	The SAP system encrypted password. **Values**: Encrypted String **Mandatory**: Yes, if install-sap-inter-point is true. See Encrypt command. Alternatively the sap-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
oracle-sap-client-id	The client ID used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
install-alert-customized	**Value**: (true/false) **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.
oracle-tablespace-name	Storage parameter for the Precise for Oracle schema. Indicates Tablespace name. **Values**: String **Mandatory**: No
oracle-tablespace-file	Storage parameter for the Precise for Oracle schema. Indicates Tablespace datafile. **Values**: String **Mandatory**: No
oracle-tablespace-temp-name	Storage parameter for the Precise for Oracle schema. Indicates Temporary tablespace name. **Values**: String **Mandatory**: No
oracle-tablespace-temp-file	Storage parameter for the Precise for Oracle schema. Indicates Temporary tablespace file. **Values**: String **Mandatory**: No
install-psoft-extension*	Installs the PeopleSoft extension **Values**: true, false **Mandatory**: No

install-sap-inter-point	Indicates whether you want to install a SAP Interpoint. **Values**: true, false **Mandatory**: No
oracle-history-size*	Oracle session information period (in hours). **Values**: 1, 2, 4, 8, 12, 24, 28 **Mandatory**: No
oracle-collapse-statements*	Collapses statements with different constants in their text into single statements with bind variables. **Values**: true, false **Mandatory**: No
install-storage-type*	Install Precise for Storage. **Values**: empty - for no Precise for Storage ORXP - for HP crosspoint storage **Mandatory**: No
oracle-tablespaces-folder	Storage parameter for the Precise for Oracle schema. Indicates the folder in which datafiles are stored. **Values**: String **Mandatory**: No
install-network*	Associates Oracle activity with network statistics. **Values**: true, false **Mandatory**: No
oracle-cluster-name	Oracle instance cluster name **Values**: string **Mandatory**: No
oracle-connection-pool-server	Server name used in the connection pool for the Oracle instance. In case this parameter is not supplied, the collector-server-machine-name is used. The Precise Oracle FocalPoint creates JDBC connections to the Oracle instance. Use this parameter in case you want the Oracle FocalPoint to connect to the instance using a server name different than the server name specified in collector-server-machine-name parameter. **Value**: String **Mandatory**: No

Installing Precise for Storage with the Precise CLI utility

Installing Storage Tier Collectors on a server enables you to sample Storage instances on the server. Before installing Storage Tier Collector with the CLI utility, verify the following

- The Precise for Oracle FocalPoint or Precise for SQL Server FocalPoint is installed.
- The Precise Listener has been installed on the server where Precise for Storage agent is to be installed.

To install Precise for Storage with the Precise CLI utility

1. Create the Precise for Storage parameter file and save it to the <precise_root> folder on the main Precise FocalPoint. You can also set up this file in advance. For more information, see About the Precise for Storage parameter file.
2. Run the following command from the <precise_root> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script.

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
 {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
 -action setup
-parametersfile <precise_for_storage_installation_parameters_file_name>
```

UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_storage_installation_parameters_file_name>
```

About the Precise for Storage parameter file

You need to prepare the Precise for Storage parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following is an example of a Precise for Storage parameters file:

```
<parameters>
    <parameter name="setup-process" value="apptier-SM"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="collector-server-machine-name" value="sun3"/>
    <parameter name="storage-type" value="EMC"/>
    <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the updated elements of the parameter file.

Table 11 Elements of the Precise for Storage parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-SM Mandatory: Yes
setup-mode	Setup mode **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the Precise for Storage Collector will be installed. **Values**: String **Mandatory**: Yes
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
emc-database-file	EMC Solution Enabler Database file location. **Values**: String **Mandatory**: No
emc-gatekeeper-enabled	Enable remote gatekeeper. **Values**: true or false **Mandatory**: No
emc-gatekeeper-ip	Remote gatekeeper server IP. **Values**: String **Mandatory**: Yes, if emc-gatekeeper-enabled is true.
emc-gatekeeper-port	Remote gatekeeper server port. **Values**: Numeric **Mandatory**: Yes, if emc-gatekeeper-enabled is true.

emc-asm-enabled	Enable Oracle ASM support for the EMC Storage agent. **Values**: true or false **Mandatory**: No
emc-asm-instance	ASM instance name. **Values**: String **Mandatory**: Yes, if emc-asm-enabled is true.
emc-asm-port	ASM instance port. **Values**: String **Mandatory**: Yes, if emc-asm-enabled is true.
emc-asm-home	ASM instance home. **Values**: String **Mandatory**: No
emc-asm-user	User name of an Oracle ASM user with DBA privileges. **Values**: String **Mandatory**: Yes, if emc-asm-enabled is true.
emc-asm-encrypted-password	Password of an Oracle ASM user with DBA privileges. **Values**: Encrypted string **Mandatory**: Yes, if emc-asm-enabled is true. See Encrypt command on page 148. Alternatively the emc-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.

Installing Precise for J2EE with the Precise CLI utility

Installing J2EE Tier Collectors on a server enables you to sample a J2EE instance on the server. Before installing a J2EE Tier Collector with the Precise CLI utility, verify the following issues:

- The Precise Listener has been installed on the server where Precise for J2EE agent is to be installed. To install Precise for J2EE with the Precise CLI utility

1. Create the Precise for J2EE parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also set up this file in advance. See About the Precise for J2EE parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script.

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_j2ee_installation_parameters_file_name>
```

UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_j2ee_installation_parameters_file_name>
```

About the Precise for J2EE parameter file

You need to prepare the Precise for J2EE parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following is an example of a Precise for J2EE parameters file:

```
<parameters>
    <parameter name="setup-process" value="apptier-JE"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="instance-identifier" value="J2EE-Application"/>
    <parameter name="collector-server-machine-name" value="sun3"/>
    <parameter name="j2ee-type" value="JES"/>
    <parameter name="j2ee-version" value="3"/>
    <parameter name="j2ee-java-home" value="" />
    <parameter name="is-cluster" value="false"/>
    <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the updated elements of the parameter file.

Table 12 Elements of the Precise for J2EE parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-JE **Mandatory**: Yes
setup-mode	Setup mode **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the Precise for J2EE Collector will be installed. **Values**: String **Mandatory**: Yes
instance-name	J2EE instance name. **Values**: String **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.
instance-identifier	Used to create the instance name. **Values**: String **Mandatory**: Yes
is-cluster	Indicates that this instance is part of a cluster. **Values**: (true/false). **Mandatory**: Yes
show-historical-data	Indicates if historical data from the deleted instance is shown (true) or deleted (false) **Values**: true/false **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.
j2ee-type	J2EE application server type. **Values**: WebLogic, WebSphere, JBoss, JEUS, JES, JRun, Tomcat, Resin, Oracle, SAP, Other **Mandatory**: Yes

j2ee-version	J2EE application server version. **Values**: For WebLogic: 7.0, 8.1, 8.1 (Portal), 9.0, 9.1, 9.2, 9.2 (Portal), 10.0, 10.0 (Portal), 10.3, 10.3(Portal) For WebSphere: 5.0, 5.1, 5.1 (Portal), 6.0, 6.1 For JBoss: 3.2, 4.0 For JEUS: 4.2, 5.0 For JES: 2, 3 For JRun: 4.x For Tomcat: 4.x, 5.0, 5.5 For Resin: 2.1, 3.x For Oracle 9i AS: 1.0.2.2.2 (Release 1) 9.0.2.x (OC4Jstandalone) 9.0.2.x (Enterprise Edition) 9.0.3.0.0 (OC4J standalone) 9.0.3.0.0 (Enterprise Edition) 9.0.4 11.5.8 (Oracle Applications-Forms Listener Servlet Mode) 10.1.2 10.1.3 For Other: Other For SAP: 6.4 **Mandatory**: Yes
j2ee-java-home	J2EE application server java home. **Value**: String **Mandatory**: Yes (can be empty)
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true in case you want to have customized alerts metrics for this instance.
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
install-network*	Associates J2EE activity with network statistics. **Values**: true, false **Mandatory**: No

network-ports	Network ports used by the J2EE instance, specify at least one port. **Values**: port=x||port=y (for example: port=1111||port=2222) **Mandatory**: Yes if install-network is set to true.
j2ee-weblogic-started-by-node-manager	Indicates whether this is a managed WebLogic. **Values**: true/false **Mandatory**: Yes, if j2ee-type is WebLogic.

Installing Precise for Web with the Precise CLI utility

Installing Web Tier Collectors on a server enables you to sample a Web instance on the server. Before installing a Web Tier Collector with the Precise CLI utility, verify the following issues:

- The Precise for Web FocalPoint is installed and running.
- The Precise Listener on the target server on which the Precise for Web agent is to be installed, was installed. To install Precise for Web with the Precise CLI utility

1. Create the Precise for Web parameter file and save it to the *<precise_root>* folder on the main Precise FocalPoint. You can also set up this file in advance. See About the Precise for Web parameter file (Precise CLI utility).
2. Run the following command from the *<precise_root>* folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_web_installation_parameters_file_name>
```

UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_web_installation_parameters_file_name>
```

About the Precise for Web parameter file (Precise CLI utility)

You need to prepare the Precise for Web parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

Example:

```
<parameters>
   <parameter name="setup-process" value="apptier-WW"/>
   <parameter name="collector-server-machine-name" value="server1"/>
   <parameter name="web-type" value="IIS"/>
   <parameter name="instance-identifier" value="WEB1" />
   <parameter name="is-cluster" value="false" />
   <parameter name="web-real-name" value="Default Web Site" />
   <parameter name="web-server-version" value="6.x" />
   <parameter name="web-application-used" value="Web" />
   <parameter name="install-filters" value="true" />
   <parameter name="install-instrumentation" value="true" />
   <parameter name="install-dynamic-instrumentation" value="true" />
   <parameter name="web-collect-extended-information" value="false" />
   <parameter name="web-ports" value="port=80;ip=server1;ssl=true"/>
   <parameter name="web-iis-instance-number" value="1"/>
   <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

Table 13 Elements of the Precise for Web parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-WW **Mandatory**: Yes

setup-mode	Setup Mode **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server of the Collector. **Values**: String **Mandatory**: Yes
instance-name	The unique name of the Web server instance as identified on the Web server. This unique name helps to distinguish between several instances. **Values**: String **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.
instance-identifier	Used to create the instance name. **Values**: String **Mandatory**: Yes
is-cluster	Indicates that this instance is part of a cluster. **Values**: (true/false). Can only be set to true for WebLogic and WebSphere. **Mandatory**: Yes
show-historical-data	Indicates if historical data from the deleted instance is shown (true) or deleted (false) **Values**: true/false **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.
web-type	Indicates type of server where the Web server instance is running. **Values**: IIS, Apache, iPlanet, WebLogic, WebSphere, Tomcat, Sun ONE, SAP WAS J2EE, Oracle AS, Other J2EE, Other. **Mandatory**: Yes
web-configuration-file	The full path for a Web server configuration file. **Values**: String **Mandatory**: Yes for Web Servers - Apache, iPlanet, WebLogic, Sun ONE, WebSphere, Tomcat, Oracle AS. **Mandatory**: Web Servers - IIS, Other, Other J2EE, SAP WAS J2EE should all be specified as empty parameter.
web-apache-configuration-file	The full path for an Apache HTTP Web server configuration file. **Values**: String **Mandatory**: Yes, only for Oracle AS servers.
web-server-version	The Web server version. **Values**: String For IIS: Mandatory: Yes Versions: 5.x, 6.x For Other, Other J2EE, SAP WAS J2EE. Mandatory: No For Apache: Mandatory: Yes. Versions: 1.3.x, 2.0.x, 2.2.x For WebLogic: Mandatory: Yes. Versions: 8.x, 9.x, 10.x For WebSphere: Mandatory: Yes. Versions: 6.0, 6.1-6.x, 7.x For Tomcat: Mandatory: Yes. Versions: 5.x, 6.x For iPlanet: Mandatory: Yes Version: 6.x For Sun ONE: Mandatory: Yes Version: 6.1 For Oracle AS: Mandatory: Yes. Version: "9.0.4.0.1 - 10.1.3" (Notice the additional spaces)

web-real-name	The IIS Web site name. **Values**: String **Mandatory**: Yes, only for IIS servers.
web-iis-instance-number	The IIS Web site number. **Values**: String **Mandatory**: Yes, only for IIS servers.
web-application-used	The application served by this Web server site. **Values**: Web PeopleSoft **Mandatory**: Yes
web-application-used-version	The application version served by this Web server site. **Values**: String For PeopleSoft: **Mandatory**: Yes **Values**: • If the monitored web server is WebSphere: "8.1 - 8.49" • If the monitored web server is WebLogic 8.x, 9.x or 10.x: "8.44 - 8.49" • If the monitored web server is Oracle Application Server: "8.44 - 8.49" • If the monitored web server is "Other J2EE": "8.1 - 8.49" For Web: **Values**: Do not enter a value.
install-filters*	Indicates whether to install a filter on the Web server to collect server-side performance information. **Values**: true, false **Mandatory**: Yes Dependent on Web server type (some types do not support this, some force this installation).
install-dynamic-instrumentation*	Indicates whether to perform dynamic instrumentation. **Values**: true, false **Mandatory**: Yes, only if "install-instrumentation" is true. Dependent on Web server type (some types do not support this, some force this installation).
web-ports*	The ports to be used by the Web Tier Collectors. Use two pipelines "||" as a separator between the ports. Specify at least one port. **Values**: port=port number;ip=[ip value|ALL];host-header=host headers;ssl=[true|false] (for example: port=3333;ip=ALL;host-header=srv2;ssl=true||port=4444;ip=ALL;host-header=srv1;ssl=true). **Mandatory**: Yes, if install-network is true and is-cluster is false.
web-server-bits	Web server bits. **Values**: 32, 64 **Mandatory**: Yes for Web Servers - Apache, iPlanet.
web-server-root	The root of the Web site root. **Mandatory**: Yes, only for an Other Web server type.

web-ssl-client-certification-path	Full path to the client certificate file. **Values**: String **Mandatory**: Yes if "web-ssl-use-client-certification" is true.
web-server-i3-user-name	Web sever client name. **Values**: String **Mandatory**: Yes if "web-server-uses-authentication" is true.
web-server-i3-password (encrypted)	Web server encrypted password. **Values**: String **Mandatory**: Yes if "web-server-uses-authentication" is true Alternatively the web-server-i3-clear-password can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
web-server-domain	Web server domain. **Values**: String **Mandatory**: Yes if "web-server-uses-authentication" is true.
web-server-method	Web server method. **Values**: Basic, Digest, NTLM **Mandatory**: Yes if "web-server-uses-authentication" is true.
web-ssl-client-certification-password (encrypted)	Encrypted password for the client certificate. **Values**: String **Mandatory**: No Alternatively the web-ssl-client-certification-clear-password can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
web-ssl-client-certification-key-path	Full path to the client certificate private key file **Values**: String **Mandatory**: No
web-server-uses-authentication	Is the web server requires client authentication to establish a connection. **Values**: true\false **Mandatory**: No
apptier-name	Name of the Tier for the added instance. **Values**: String **Mandatory**: No
environment-name	Name of the application for the added instance. **Values**: String **Mandatory**: Yes, for a federation installation
install-alert-customized	**Value**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.
web-site-name	Site name, sometimes called context root. **Values**: String **Mandatory**: No

web-use-special-ssl-configuration	The only way to connect to the web server is using a secured connection (SSL). **Values**: true\false **Mandatory**: No
web-special-ssl-ciphers	Cipher list. **Values**: Specify the ciphers to be used Comma separated. **Mandatory**: No
web-ssl-use-client-certification	Specifies whether the web server requires the client certificate to have a certificate to establish a connection. **Values**: true\false **Mandatory**: No
install-network	Indicates whether to correlate the data collected by the Web server filter with the data collected by the Insight Savvy for Network. **Values**: true, false **Mandatory**: No

Installing Precise for Microsoft .NET with the Precise CLI utility

Installing Microsoft .NET Collectors on a server enables you to sample Microsoft .NET instances on the server. A Microsoft .NET Tier Collector can be installed only on servers running Microsoft .NET instances.

Before installing a Microsoft .NET Tier Collector with the Precise CLI utility, verify the following issues:

- The Precise Listener on the target server on which the Precise for Microsoft .NET agent is to be installed, was installed.

To install Precise for Microsoft .NET with the Precise CLI utility

1. Create the Precise for Microsoft .NET parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. For more information, see About the Precise for Microsoft .NET parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

   Windows infra\bin\psin_cli.bat
   -i3-user <user_name>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <precise_for_microsoft _.net_installation_parameters_file_name>

   UNIX ./infra/bin/psin_cli.sh
   -i3-user <user_name>
   {-i3-encrypted-password <*encrypted_password*>| -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <precise_for_microsoft_.net_installation_parameters_file_name>

About the Precise for Microsoft .NET parameter file

You need to prepare the Precise for Microsoft .NET parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following table describes the updated elements of the Microsoft .NET parameter file. Parameters file example:

```
<root>
    <parameter name="setup-process" value="apptier-DN"/>
    <parameter name="collector-server-machine-name" value="serverwin1004"/>
    <parameter name="instance-name" value="MyInstance"/>
    <parameter name="type" value="web" />
    <parameter name="application-name" value="IIS5" />
    <parameter name="process-name" value="aspnet_wp.exe" />
    <parameter name="installation-cd-path" value="d:\"/>
</root>
```

Table 14 Elements of the Precise for Microsoft .NET parameter file

Element	Description

installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-DN. **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the Precise for Microsoft .NET Collector will be installed. **Values**: String **Mandatory**: Yes
instance-name	The unique alphanumeric string used by Precise for Microsoft .NET and Insight to identify the monitored application instance. **Values**: String using English characters. **Mandatory**: Yes
type	Indicates the type of the Microsoft .NET instance. Available types are as follows: • **web**. Select this option when monitoring an ASP.NET application. • **general**. Select this option when monitoring other Microsoft .NET processes. **Mandatory**: Yes
application-name	If this instance is an ASP Microsoft .NET instance, the value for this field depends on the Internet Information Server (IIS) type: IIS6 or IIS7. For a regular Microsoft .NET instance the field should be left empty. **Values**: IIS6, IIS7, or empty **Mandatory**: Yes, for ASP Microsoft .NET instances. For all other instances, this must remain empty.
process-name*	Indicates the name of the .NET process executable file. For a regular Microsoft .NET instance, the field should include the path and name of the Microsoft .NET executable file. For an ASP Microsoft .NET instance, the value for this field depends on the type of Internet Information Server (IIS) as follows: • For IIS 6: w3wp.exe process-name can only be updated after installation if the instance type is general. **Values**: String **Mandatory**: Yes
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation.
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.

application-pool	Specifies the application pool(s) to be monitored by this instance. Use "*" to specify multiple application pools for monitoring. **Values**: String **Mandatory**: No

Installing Precise for SQL Server with the Precise CLI utility

Installing SQL Server Tier Collectors on a server enables you to sample SQL Server instances on the server. An SQL Server Tier Collector can be installed on Windows servers running SQL Server instances, or it can be installed on any Windows server and the SQL Server instances can be sampled remotely.

Before installing a SQL Server Tier Collector with the Precise CLI utility, verify the following issues:

- The Precise for SQL Server FocalPoint was installed.
- The Precise Listener on the target server on which the SQL Server Tier Collector is to be installed, was installed.

To install Precise for SQL Server with the Precise CLI utility

1. Create the Precise for SQL Server parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also set up this file in advance. See About the Precise for SQL Server parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

   Windows
   ```
   infra\bin\psin_cli.bat
   -i3-user <user_name>
   {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
   -action setup
   -parametersfile <precise_for_sql_server_installation_parameters_file_name>
   ```
   UNIX
   ```
   ./infra/bin/psin_cli.sh
   -i3-user <user_name>
   {-i3-encrypted-password <encrypted_password>| -i3-clear-password <clear_password>}
   -action setup
   -parametersfile <precise_for_sql_server_installation_parameters_file_name>
   ```

About the Precise for SQL Server parameter file

You need to prepare the Precise for SQL Server parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values in them.

The following is an example of a SQL Server instance parameters file:

```
<parameters>
    <parameter name="installation-cd-path" value="d:\"/>
    <parameter name="setup-process" value="apptier-SQ" />
    <parameter name="setup-mode" value="install" />
    <parameter name="collector-server-machine-name" value="server1" />
    <parameter name="instance-name" value="SERVER1" />
    <parameter name="sqlserver-authentication" value="sql" />
    <parameter name="sqlserver-i3-user" value="sa" />
    <parameter name="sqlserver-i3-clear-password" value="" />
</parameters>
```

The following table describes the updated elements of the parameter file. Field names marked with an asterisk (*) can be updated after installation.

Table 15 Elements of the Precise for SQL Server parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-SQ **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes

instance-name	SQL Server instance name. (Must always be uppercase). **Values**: String **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the Precise for SQL Server Collector will be installed. **Values**: String **Mandatory**: Yes
os-user	Specifies the Windows user that the SQL Server Collector should use. **Values**: String **Mandatory**: Only if the instance does not reside on the same server as the collector, or when the PMDB uses Windows authentication.
os-domain	Specifies the Windows user's domain that the SQL Server Collector should use. **Values**: String **Mandatory**: Only if the instance does not reside on the same server as the collector, or when the PMDB uses Windows authentication.
os-encrypted-password	Specifies the Windows password that the SQL Server Collector should use. **Values**: Encrypted String. For more information, see Encrypt command. **Mandatory**: Only if the instance does not reside on the same server as the collector, or when the PMDB uses Windows authentication. Alternatively the os-clear-password parameter can be used, allowing you to specify a clear password instead of an encrypted string.
sqlserver-authentication*	Specifies how the Collector will connect to the SQL Server instance. (Windows authentication/SQL authentication). **Values**: sql, nt **Mandatory**: Yes
sqlserver-i3-user*	User name. **Values**: String **Mandatory**: Only mandatory if authentication is 'sql'.
sqlserver-i3-encrypted-password*	Password for SQL Server. **Values**: Encrypted String. **Mandatory**: Only mandatory if authentication is 'sql'. For more information, see Encrypt command. Alternatively the sqlserver-i3-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
install-storage-type*	Install Precise for Storage. **Values**: empty - for no Precise for Storage SQWIN - for Windows storage **Mandatory**: No
install-psoft-extension*	Installs the PeopleSoft extension. **Values**: true, false **Mandatory**: No
sqlserver-sap-system-name	The SAP system name. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
sqlserver-sap-default-application-server	The Application server name used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true. You can only specify one default-app-server and app-rout-string.

sqlserver-sap-system-number	The SAP system number. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
sqlserver-sap-user	The SAP system user name. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
sqlserver-sap-encrypted-password	The SAP system encrypted password. **Values**: Encrypted String **Mandatory**: Yes, if install-sap-inter-point is true. For more information, see Encrypt command. Alternatively the sqlserver-sap-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
sqlserver-sap-client-id	The client ID used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
install-sap-inter-point	Indicates whether you want to install SAP Interpoint **Values**: true, false **Mandatory**: No
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
os-user	Specifies the Windows user that the collector should use. **Values**: String **Mandatory**: Must be specified if the PMBD uses Windows authentication.
os-domain	Specifies the Windows user's domain that the collector should use. **Values**: String **Mandatory**: Must be specified if the PMBD uses the Windows authentication.
os-encrypted-password	Specifies the Windows password that the Collector should use. **Values**: Encrypted String. For more information, see Encrypt command. Alternatively the os-clear-password parameter can be used, allowing you to specify a clear password instead of an encrypted string. **Mandatory**: Must be specified if the PMBD uses Windows authentication.
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.

Installing Precise for SAP with the Precise CLI utility

Installing SAP Collectors on a server enables you to sample a remote SAP system.

Before installing the SAP Tier Collector with the Precise CLI utility, verify the following issue:

- Precise for SAP FocalPoint was installed.

To install Precise for SAP with the Precise CLI utility

1. Create the Precise for SAP parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also set up this file in advance. For more information, see About Precise for SAP parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
 {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
 -action setup
 -parametersfile <precise_for_sap_installation_parameters_file_name>
```

UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_sap_installation_parameters_file_name>
```

About Precise for SAP parameter file

You need to prepare the Precise for SAP parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following table describes the updated elements of the parameter file. Element names marked with an asterisk (*), in this table, can be updated after installation.

Example:

```
<parameters>
    <parameter name="setup-process" value="apptier-SP"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="instance-name" value="H47_TEST2" />
    <parameter name="sap-system" value="H47" />
    <parameter name="default-app-server" value="poolhp3" />
    <parameter name="app-server-exist" value="true" />
    <parameter name="app-rout-string-exist" value="false" />
    <parameter name="app-rout-string" value="" />
    <parameter name="db-system-number" value="00" />
    <parameter name="sap-user" value="adm" />
    <parameter name="sap-clear-password" value="precise" />
    <parameter name="client-id" value="000" />
    <parameter name="environment-name" value="Default" />
    <parameter name="app-servers" value="host=poolhp3;routing-str=;port=00;name=poolhp3_H47_00" />
    <parameter name="clients" value="lang=E;number=000||lang=E;number=001||lang=E;number=066||lang=E;number=100" />
    <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

Table 16 Elements of the Precise for SAP parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-SP **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
instance-name	The unique name for the instance. This unique name helps to distinguish between several instances. **Values**: String **Mandatory**: Yes
sap-clients	The SAP clients numbers and language that the SAP Collector should monitor. Use two pipelines "||" as a separator between the clients names. lang=E;number=000||lang=E;number=001||lang=E;number=066||lang=E;number=100 **Value**: String **Mandatory**: No If not specified, all clients detected will be monitored.

sap-system	The SAP system name. **Values**: String **Mandatory**: Yes
default-app-server*	The Application server name used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes, if app-rout-string is not provided.
app-rout-string*	The Application server route string used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes, if default-app-server is not provided.
sap-connection-type	The connection type to use when connecting to SAP **Values**: String (CustomApplicationServer/LogonGroup) **Mandatory**: No **Default value**: CustomApplicationServer
sap-logon-group	Group/Server to use when connecting to SAP **Values** : String **Mandatory**: Yes, if sap-connection-type is LogonGroup
db-system-number*	The SAP system number. **Values**: String **Mandatory**: Yes
sap-user*	The SAP system user name. **Values**: String **Mandatory**: Yes
sap-encrypted-password*	The SAP system encrypted password. **Values**: Encrypted String **Mandatory**: Yes. For more information, see Encrypt command. Alternatively the sap-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
client-id*	The client ID used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes
app-servers*	The Application servers that the SAP Collectors should monitor. Use two pipelines "||" as a separator between the Application server names. **Format**: name=application-server-name;host=host-name; routing-str=routing-string;port=port-number **Values**: String **Mandatory**: No If not specified, all application servers detected will be monitored.
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No

environment-name	Name of an existing application. **Values**: String **Mandatory**: Yes

Installing Precise for Sybase with the Precise CLI utility

Installing the Sybase Tier Collector on a server enables you to sample a Sybase instance on the server. A Sybase Tier Collector can be installed on Windows servers running Sybase instances, or it can be installed on any Windows server and sample the Sybase instance remotely.

Before installing the Sybase Tier Collector with the Precise CLI utility, verify the following issues:

- Precise for Sybase FocalPoint was installed.
- The Precise Listener was installed on the target server on which the Sybase Tier Collector is to be installed.
- The Precise Listener and all FocalPoints installed on the target server are running and accessible on the network. To install Precise for Sybase with the Precise CLI utility

1. Create the Precise for Sybase parameter file and save it to the *<precise_root>* folder on the main Precise FocalPoint. You can also create this file in advance. See About the Precise for Sybase parameter file.
2. Run the following command from the Precise root folder on the main Precise FocalPoint. This executes the Precise CLI utility installation script.

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_sybase_installation_parameters_file_name>
```

UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password>| -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_sybase_installation_parameters_file_name>
```

About the Precise for Sybase parameter file

When you install Precise for Sybase with the Precise CLI utility, you must first create an XML file that contains all relevant installation parameters and their respective values. This file is referenced by the Precise CLI utility installation script during the installation process.

The following is an example of an Precise for Sybase parameters file:

```
<parameters>
   <parameter name="setup-process" value="apptier-SY"/>
   <parameter name="setup-mode" value="install"/>
   <parameter name="apptier-name" value="Sybase"/>
   <parameter name="environment-name" value="Default"/>
   <parameter name="collector-server-machine-name" value="pifa102"/>
   <parameter name="instance-server-machine-name" value="sun12"/>
   <parameter name="sybase-instance-name" value="sun12_12_0"/>
   <parameter name="sybase-port" value="5100"/>
   <parameter name="sybase-i3-user" value="sa"/>
   <parameter name="sybase-i3-encrypted-password" value="IE"/>
   <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The identity of a Sybase instance is determined by a concatenation of the instance-server-machine-name tag and the sybase-instance-name tag.

The following table describes the updated elements of the parameter file. Field names marked with an asterisk (*) can be updated after installation.

Table 17 Elements of the Precise for Sybase parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-SY **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes

instance-server-machine-name	Name of the server that the Sybase instance is installed on. **Values**: String **Mandatory**: Yes
sybase-instance-name	Name of the Sybase instance. **Values**: String **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the Precise for Sybase Collector will be installed. **Values**: String **Mandatory**: Yes
sybase-port*	The number of the port that the Sybase instance is listening on. **Values**: Integer **Mandatory**: Yes
sybase-i3-user	The name of the user. **Values**: String **Mandatory**: Yes
sybase-i3-encrypted-password	The password for the user name. **Values**: Encrypted String. **Mandatory**: Yes. For more information, see Encrypt command. Alternatively the sybase-i3-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.

Installing Precise for Sybase Replication Server with the Precise CLI utility

Installing the Sybase Replication Server Tier Collector on a server, enables you to sample a Sybase Replication Server instance on the server.

Sybase Replication Server Tier Collector can be installed on Windows servers running Sybase Replication Server instances, or it can be installed on any Windows server and sample the Sybase Replication Server instance remotely.

Before installing the Sybase Replication Server Tier Collector with the Precise CLI utility, verify the following issues:

- Precise for Sybase FocalPoint was installed.
- The Precise Listener was installed on the target server on which the Sybase Replication Server Tier Collector is to be installed.
- The Precise Listener and all FocalPoints installed on the target server are running and accessible on the network. To install Precise for Sybase Replication Server with the Precise CLI utility

1. Create the Precise for Sybase Replication Server parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also create this file in advance. For more information, see About the Precise for Sybase Replication Server parameter file.
2. With the user that you created when defining the Precise server, run the following command from the <*precise_root*> folder on the main Precise FocalPoint. This executes the Precise CLI utility installation script.
   Windows infra\bin\psin_cli.bat
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <name_of_the_sybase_replication_server_parameters_file>

UNIX ./infra/bin/psin_cli.sh
-i3-user <*user_name*>
{-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
-action setup
-parametersfile <name_of_the_sybase_replication_server_parameters_file>

About the Precise for Sybase Replication Server parameter file

When you install Precise for Sybase Replication Server with the Precise CLI utility, you must first create an XML file that contains all relevant installation parameters and their respective values. This file is referenced by the Precise CLI utility installation script during the installation process.

The following is an example of a Precise for Sybase Replication Server parameters file:

```
<root>
    <parameter name="setup-process" value="apptier-RS"/>
    <parameter name="sybase-replication-server-instance-name" value="POOLSUN1_1501_REP"/>
    <parameter name="instance-server-machine-name" value="poolsun1"/>
    <parameter name="collector-server-machine-name" value="pifa100"/>
    <parameter name="sybase-replication-server-port" value="5006"/>
    <parameter name="sybase-replication-server-i3-user" value="sa"/>
    <parameter name="sybase-replication-server-i3-encrypted-password" value="IE"/>
    <parameter name="sybase-replication-server-sql-ini-path" value="C:\\sybase\\ini\\sql.ini"/>
    <parameter name="sybase-replication-server-rssd-instance" value="I4SQLV65_1502"/>
    <parameter name="sybase-replication-server-rssd-database" value="POOLSUN1_1501_REP_RSSD"/>
    <parameter name="sybase-replication-server-rssd-host" value="i4sqlv65"/>
    <parameter name="sybase-replication-server-rssd-port" value="5001"/>
    <parameter name="sybase-replication-server-rssd-i3-user" value="sa"/>
    <parameter name="sybase-replication-server-rssd-encrypted-password" value="IE"/>
    <parameter name="installation-cd-path" value="d:\"/>
</root>
```

The identity of a Sybase Replication Server instance is determined by a concatenation of the instance-server-machine-name tag and the sybase-replication-server-instance-name tag.

The following table describes the updated elements of the parameter file. Field names marked with an asterisk (*) can be updated after installation.

Table 18 Elements of the Sybase Replication Server parameter file

Element	Description
collector-server-machine-name	Name of the server on which the Sybase Replication Server Collector will be installed. **Values**: String **Mandatory**: Yes
instance-server-machine-name	Name of the server that the Sybase Replication Server instance is installed on. **Values**: String **Mandatory**: Yes
setup-mode	**Values**: install, edit, uninstall **Mandatory**: Yes
setup-process	always apptier-RS **Mandatory**: Yes
installation-cd-path	Indicates the absolute path to the folder where the Precise v9.6 download was downloaded to. **Values**: String **Mandatory**: Yes
sybase-replication-server-instance-name	Name of the Sybase Replication Server instance. **Values**: String **Mandatory**: Yes
sybase-replication-server-port*	The number of the port that the Sybase Replication Server instance is listening on. **Values**: Integer **Mandatory**: Yes

sybase-replication-server-i3-user	The name of the user. **Values**: String **Mandatory**: Yes
sybase-replication-server-i3-encrypted-password	The password for the user name. **Values**: Encrypted String. **Mandatory**: Yes. For more information, see Encrypt command. Alternatively the sybase-replication-server-i3-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
sybase-replication-server-sql-ini-path	The path to Sybase Replication Server instance sql.ini file **Values**: String **Mandatory**: Yes
sybase-replication-server-rssd-instance	Name of the Sybase Replication Server ASE instance. **Values**: String **Mandatory**: Yes
sybase-replication-server-rssd-database	Name of the Sybase Replication Server ASE database. **Values**:String **Mandatory**: Yes
sybase-replication-server-rssd-host	Name of the Sybase Replication Server ASE host **Values**: String **Mandatory**: Yes
sybase-replication-server-rssd-port*	Port of the Sybase Replication Server ASE **Values**: Integer **Mandatory**: Yes
sybase-replication-server-rssd-i3-user	The name of the Sybase Replication Server ASE user **Values**: String **Mandatory**: Yes
sybase-replication-server-rssd-encrypted-password	The password of the user of Sybase Replication Server ASE **Values**: Encrypted String. **Mandatory**: Yes. For more information, see Encrypt command. Alternatively the sybase-replication-server-rssd-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.
os-user	Specifies the Windows user that the collector should use. **Values**: String **Mandatory**: Must be specified if the PMBD uses Windows authentication.

os-domain	Specifies the Windows user's domain that the collector should use. **Values**: String **Mandatory**: Must be specified if the PMBD uses the Windows authentication.
os-encrypted-password	Specifies the Windows password that the Collector should use. **Values**: Encrypted String. For more information, see Encrypt command. Alternatively the os-clear-password parameter can be used, allowing you to specify a clear password instead of an encrypted string. **Mandatory**: Must be specified if the PMBD uses Windows authentication.

Installing Precise for DB2 with the Precise CLI utility

Installing DB2 Tier Collectors on a server enables you to monitor DB2 instances on the server. A DB2 Tier Collector should be installed for each DB2 instance on the server that will be monitored. Before installing a DB2 Tier Collector with the Precise CLI utility, verify the following issues:

- The Precise for DB2 FocalPoint was installed.
- The Listener on the target server on which the Precise for DB2 agent is to be installed was installed. To install Precise for DB2 with the Precise CLI utility

1. Create the Precise for DB2 parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also set up this file in advance. For more information, see About the Precise for DB2 parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI installation script:

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_db2_installation_parameters_file_name>
```
UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <precise_for_db2_installation_parameters_file_name>
```

About the Precise for DB2 parameter file

You need to prepare the Precise for DB2 parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following is an example of a Precise for DB2 parameters file:

```
<parameters>
    <parameter name="setup-process" value="apptier-UD"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="collector-server-machine-name" value="sun3"/>
    <parameter name="db2-instance" value="db2inst1" />
    <parameter name="db2-database" value="SAMPLE" />
    <parameter name="db2-user" value="db2inst1" />
    <parameter name="db2-clear-password" value="db2inst1" />
    <parameter name="db2-port" value="60000" />
    <parameter name="db2-partition" value="0" />
    <parameter name="db2-tablespace" value="APM_DB2" />
    <parameter name="db2-tablespace-container" value="APM_DB2" />
    <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the elements of the Precise for DB2 parameter file. Element names marked with an asterisk (*) can be updated after installation.

Table 19 Elements of the Precise for DB2 parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. **Values**: apptier-UD **Mandatory**: Yes

setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the Precise for DB2 Collector will be installed. **Values**: String **Mandatory**: Yes
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation.
db2-instance	DB2 instance name. **Values**: String **Mandatory**: Yes
db2-database	DB2 database name. **Values**: String **Mandatory**: Yes
db2-partition	DB2 partition number. **Values**: Numeric **Mandatory**: Yes
db2-dba-user	User name for DB2 user with DBA privileges. Will only be used during installation. **Values**: String **Mandatory**: Yes
db2-encrypted-password	Password for DB2 user with DBA privileges. Will only be used during installation. **Values**: Encrypted String **Mandatory**: Yes. For more information, see Encrypt command on page 148. Alternatively the db2-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
db2-port*	DB2 instance Listener port. **Values**: Numeric **Mandatory**: Yes
db2-tablespace	Storage parameter for the Precise for DB2 schema. Indicates Tablespace name. **Values**: String **Mandatory**: Yes
db2-tablespace-container	Tablespace container. **Values**: String **Mandatory**: Yes
install-storage	Install Precise for Storage for Precise file systems and logical volumes. **Values**: true, false **Mandatory**: No, default is false.
symmetric-api-path	EMC path. **Value**: String **Mandatory**:Yes if install storage is true

install-sap-inter-point	Indicates whether you want to install sap interpoint. **Values**: true, false **Mandatory**: No
db2-sap-system-name	The SAP system name. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
db2-sap-default-application-server	The Application server name used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
db2-sap-system-number	The SAP system number. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
db2-sap-user	The SAP system user name. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
db2-sap-encrypted-password	The SAP system encrypted password. **Values**: Encrypted String **Mandatory**: Yes, if install-sap-inter-point is true. For more information, see Encrypt command. Alternatively the db2-sap-clear-password can be used, allowing you to specify a clear password instead of an encrypted string.
db2-sap-client-id	The client ID used to create the first connection with the SAP system. **Values**: String **Mandatory**: Yes, if install-sap-inter-point is true.
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
install-alert-customized	**Value**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.

Installing a Tuxedo instance with the Precise CLI utility

Installing Tuxedo Collectors on a server enables you to sample Tuxedo instances on the server. A Tuxedo Tier Collector can be installed only on servers running Tuxedo instances.

Before installing a Tuxedo Tier Collector with the Precise CLI utility, verify the following issues:

- The Insight FocalPoint is installed.
- The Precise Listener on the target server on which the Tuxedo Collector is to be installed, was installed. To install Tuxedo instance with the Precise CLI utility

1. Create the Tuxedo instance parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also set up this file in advance. For more information, see About Tuxedo Collector parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

   Windows infra\bin\psin_cli.bat
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <insight_savvy_for_tuxedo_ installation_parameters_file_name>

   UNIX ./infra/bin/psin_cli.sh
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}

```
-action setup
-parametersfile <insight_savvy_for_tuxedo_ installation_parameters_file_name>
```

About Tuxedo Collector parameter file

You need to prepare the Insight Savvy for Tuxedo parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following is an example of a Tuxedo instance parameters file:

```
<parameters>
    <parameter name="setup-process" value="apptier-TU"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="apptier-name" value="Tuxedo"/>
    <parameter name="environment-name" value="Default"/>
    <parameter name="collector-server-machine-name" value="pifa102"/>
    <parameter name="tuxedo-domain" value="tux_aix1"/>
    <parameter name="instance-name" value="myInstance"/>
    <parameter name="tuxedo-directory" value="/Oracle2/Tuxedo/65"/>
    <parameter name="tuxedo-config-file" value="/Oracle2/Tuxedo/65/apps/ simapp/tuxconfig"/>
    <parameter name="tuxedo-version" value="65"/>
    <parameter name="install-network" value="true"/>
    <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the updated elements of the parameter file. Element names marked with an asterisk (*) in this table can be updated after installation.

Table 20 Elements of the Tuxedo Collector parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. Always apptier-TU **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the Tuxedo Collector will be installed. **Values**: String **Mandatory**: Yes
instance-name (component identifier field)	Name of the Tuxedo instance that will be installed. **Values**: String **Mandatory**: Yes
show-historical-data	Indicates if historical data from the deleted instance is shown (true) or deleted (false) **Values**: true/false **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.
tuxedo-domain	Name of the Tuxedo domain where the Tuxedo Tier will be installed. **Values**: String **Mandatory**: Yes
tuxedo-directory*	The installation home folder for the Tuxedo information system. **Values**: String **Mandatory**: Yes

tuxedo-config-file*	The full binary path of the configuration file for the Tuxedo information system that is planned to be monitored. **Values**: String **Mandatory**: Yes
tuxedo-version*	The BEA Tuxedo version. Precise supports BEA Tuxedo 6.4 to 9.0. **Values**: String (XY[_64]). XY are the two digits for the version number. Add "_64" for 64-bits domains. For example: for BEA Tuxedo version 7.1 32-bits use "71"; for 9.0 64-bits use "90_64" **Mandatory**: Yes
install-network*	Associates a Tuxedo activity with network statistics. **Values**: true, false **Mandatory**: No
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.

Installing a WebSphere MQ instance with the Precise CLI utility

Installing WebSphere MQ Collectors on a server enables you to sample WebSphere MQ instances on the server. A WebSphere MQ Tier Collector can be installed only on servers running WebSphere MQ instances.

Before installing a WebSphere MQ Tier Collector with the Precise CLI utility, verify the following issues:

- The Insight FocalPoint is installed.
- The Precise Listener on the target server on which the WebSphere MQ Tier Collector is to be installed, was installed.

To install the WebSphere MQ instance with the Precise CLI utility

1. Create the WebSphere MQ instance parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also set up this file in advance. For more information, see About WebSphere MQ instance parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

   Windows infra\bin\psin_cli.bat
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <insight_savvy_for_websphere_mq_ installation_parameters_file_name>

   UNIX ./infra/bin/psin_cli.sh
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <insight_savvy_for_websphere_mq_ installation_parameters_file_name>

About WebSphere MQ instance parameter file

You need to prepare the WebSphere MQ instance parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following is an example of a WebSphere MQ instance parameters file:

```
<parameters>
    <parameter name="setup-process" value="apptier-MQ" />
    <parameter name="instance-name" value="mqTest" />
    <parameter name="collector-server-machine-name" value="server1" />
    <parameter name="mq-queue-manager-name" value="mqTest" />
    <parameter name="mq-home-directory" value="D:\Program Files\IBM\WebSphere MQ" />
    <parameter name="mq-library" value="D:\Program Files\IBM\WebSphere MQ\Exits" />
    <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the updated elements of the parameter file. Element names marked with an asterisk (*), in this table, can be updated after installation.

Table 21 Elements of the WebSphere MQ instance parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. Always apptier-MQ **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server the MQ Tier will be installed on. **Values**: String **Mandatory**: Yes
show-historical-data	Indicates if historical data from the deleted instance is shown (true) or deleted (false) **Values**: true/false **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.
instance-name	A unique name of the WebSphere MQ instance. This unique name helps to distinguish between several instances. Use the name of the corresponding Queue Manager. **Values**: String **Mandatory**: Yes
mq-queue-manager-name	The Queue Manager that the WebSphere MQ Tier Collector will sample. **Values**: String **Mandatory**: Yes
mq-home-directory*	The full folder path of the WebSphere MQ software component configuration, to be used with this instance. **Values**: String **Mandatory**: Yes
mq-library*	The full folder path of the library where WebSphere MQ software components keep the API exits. **Values**: String **Mandatory**: Yes
install-network*	Associates WebSphere MQ activity with network statistics. **Values**: true, false **Mandatory**: No, default is false

network-ports*	WebSphere MQ listener ports. Use two pipelines "||" as a separator between the ports. Specify all the ports you want the Insight Savvy for Network to sample. At least one port must be specified. **Values**: port=x||port=y (for example: port=1111||port=2222) **Mandatory**: Yes if `install-network` is "true".
apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.

Installing an Oracle Applications instance with the Precise CLI utility

Installing Oracle Applications Collectors on a server enables you to sample Oracle Applications instances on the server.

Before installing an Oracle Applications Tier Collector with the Precise CLI utility, verify the following issues:

- The Precise for Oracle FocalPoint and Precise for Oracle Collector are installed and running.
- The Precise Listener on the target server on which the Oracle Applications Tier Collector is to be installed, was installed.
- If Insight is to monitor the instance and the listener mode is Forms Servlet Mode, then the Precise for J2EE Collector must be installed to monitor the Oracle Applications forms JVM.

To install Oracle Applications Tier Collector with the Precise CLI utility

1. Create the Oracle Applications Tier Collector parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also set up this file in advance. For more information, see About Oracle Applications Tier Collector parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

   Windows
   ```
   infra\bin\psin_cli.bat
    -i3-user <user_name>
   {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
   -action setup
   -parametersfile <insight_savvy_for_oracle_applications_installation_ parameters_file_name>
   ```

   UNIX
   ```
   ./infra/bin/psin_cli.sh
   -i3-user <user_name>
   {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
   -action setup
   -parametersfile <insight_savvy_for_oracle_applications_installation_ parameters_file_name>
   ```

About Oracle Applications Tier Collector parameter file

You need to prepare the Oracle Applications Tier Collector parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following is an example of an Oracle Applications Tier Collector parameters file:

```
<parameters>
   <parameter name="setup-process" value="apptier-OA"/>
   <parameter name="setup-mode" value="install"/>
   <parameter name="collector-server-machine-name" value="sun3"/>
   <parameter name="instance-server-machine-name" value="sun4"/>
   <parameter name="instance-name" value="OA1"/>
   <parameter name="oracle-instance-name" value="ORCL"/>
   <parameter name="oa-form-mode" value="forms_listener"/>
   <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the elements of the parameter file. Element names marked with an asterisk (*), in this table, can be updated after installation.

Table 22 Elements of the Oracle Applications Tier Collector parameter file

Element	Description

installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. Always apptier-OA **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the related Oracle instance server machine. **Values**: String **Mandatory**: Yes
instance-server-machine-name	Name of the server of the OA instance. **Values**: String **Mandatory**: Yes
oa-real-instance-name	Name of the real Oracle Applications instance. **Values**: String **Mandatory**: No
oa-rac-instances*	Names of the Oracle Applications RAC instances. Use two pipelines "||" as a separator between the instances. Specify only additional oracle instances. Do not specify the oracle instance specified in "oracle-instance-name". (For example: name=ORA817; server=sun3||name=OR920;server=sun5) **Mandatory**: No
instance-name	A unique name of the Oracle Applications instance. This unique name helps to distinguish between several instances. **Values**: String **Mandatory**: Yes
oracle-instance-name	The Oracle database SID name. This instance must be monitored by the Precise for Oracle Collector. **Values**: String **Mandatory**: Yes
oa-form-mode*	The Oracle Applications forms server component work mode: • **Listener mode**. Oracle Applications uses a Forms Listener process to handle incoming client connections; Insight uses the Savvy for Network to collect Oracle Applications information in this mode. • **Forms Listener Servlet mode**. Oracle Applications uses a Forms Listener Servlet (running within a Java process) to handle incoming client connections. Insight uses the Precise for J2EE Collector to collect Oracle Applications information in this mode. **Values**: `forms_servlet`, `forms_listener` **Mandatory**: Yes
j2ee-instance-name	The J2EE instance that should collect the Oracle Applications forms data. **Values**: String **Mandatory**: Yes, only if the listener is `forms_servlet`.
install-insight*	Indicates whether to use Insight to collect Oracle Applications data. **Values**: true, false **Mandatory**: No, default is false.

apptier-name	Name of the Tier. **Values**: String **Mandatory**: No
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
network-ports	OA listener ports. Use two pipelines "||" as a separator between the ports. **Values**: port=x||port=y (for example: port=1111||port=2222) **Mandatory**: No
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.

Installing Other Tier Collectors with the Precise CLI utility

Installing Other Tier Collectors on a server enables you to sample any Tier which provides service over TCP/IP in your application. You can monitor an application that is running with an Insight Savvy for Network locally. When you want to monitor an application remotely, the Insight Savvy for Network should be installed on the remote server.

Before installing an Other Tier Collector with the Precise CLI utility, verify the following issues:

- The Insight FocalPoint was installed.
- The Precise Listener on the server(s) on which the Insight Savvy for Network Collector is to be installed, was installed.

To install Other Tier Collectors with the Precise CLI utility

1. Create the Other Tier Collectors parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint. You can also set up this file in advance. For more information, see About Other Tier Collectors parameter file.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
 {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
 -action setup
 -parametersfile <insight_savvy_for_other_ installation_parameters_file_name>
```

UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <insight_savvy_for_other_ installation_parameters_file_name>
```

About Other Tier Collectors parameter file

You need to prepare the Insight Savvy for Other parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

Example:

```
<parameters>
  <parameter name="setup-process" value="apptier-OT" />
  <parameter name="instance-name" value="Other_Instance" />
  <parameter name="instance-server-machine-name" value="server1" />
  <parameter name="other-protocol-type" value="normal"/>
  <parameter name="other-apptier-type" value="FE" />
  <parameter name="other-monitor-method" value="local" />
  <parameter name="other-monitor-ports" value="static" />
  <parameter name="other-static-ports" value="from=50;to=90||from=100;to=120" />
  <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the elements of the parameter file. Element names marked with an asterisk (*) can be updated after installation.

Table 23 Elements of the Other Tier Collectors parameter file

Element	Description

installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. Always apptier-OT **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
instance-name (component identifier field)	The unique name of the Tier that the Insight Savvy for Other Tier will monitor (ex. AS400_DB). **Values**: String **Mandatory**: Yes
other-apptier-type*	Indicates the position and role of the Tier in your application. The options are as follows: • **FE (Front-end)**. The first connection or input side in your application. • **AP (Application Server)**. The middle Tier in your application. It is responsible for the business logic. • **DB (Database)**. The back-end Tier in your application. **Values**: String **Mandatory**: Yes
other-protocol-type*	The network protocol for the monitored application. Two protocol types are supported: • **ica (Citrix)**. The monitored application is a Citrix Presentation server application. • **normal (Other)**. The monitored application uses any other protocol. **Values**: String **Mandatory**: Yes
other-monitor-method	The location from where the server is monitored. Two location types are available: • **local (Locally)**. Check this option if you want the Insight Savvy for Network to monitor TCP traffic on a local Listener port. • **remote (Remotely)**. Check this option if you want the Insight Savvy for Network to monitor all TCP traffic to a remote server port. Remote monitoring is usually used to monitor services on the computers the file is installed on, that cannot be monitored locally (for example: mainframe or unsupported operating systems running TCP applications). **Values**: local, remote **Mandatory**: Yes
other-monitor-ports*	Other monitor ports. **Values**: static (if monitoring fixed ports), dynamic (if monitoring dynamic ports) **Mandatory**: Yes
instance-server-machine-name	The name of the server where you will install the Other Tier. The server name or IP address will be valid if you previously defined this server as a Precise server. **Values**: String. **Mandatory**: Yes
other-remote-servers*	The names of the servers where you want to monitor the remote Tier. These are names whose ports will be monitored separated by two pipelines "||". **Format**: remote-server=server-name||remote-server=server-name **Values**: String. **Mandatory**: Yes, only if `other-monitor-method="remote"`. Otherwise, this must be empty without the value attribute: <parameter name="other-remote-servers" />

other-static-ports*	The TCP/IP fixed port or ports listened to by the monitored application. Use two pipelines "||" as a separator between the port ranges as follows: from=80;to=90||from=100;to=120. Do not define if the dynamic `other-dynamic-ports-include-programs` or `other-dynamic-ports-exclude-programs` fields are present. **Values**: String **Mandatory**: No.
other-dynamic-ports-include-programs*	The dynamic ports to be monitored; they are listened to by the monitored application. These are names of programs whose ports will be monitored. The program name will be matched against the first 9 characters of the names in the list separated by two pipelines "||". **Format**: program=program-name||program=program-name. Do not define if the `other-static-ports` field is present. **Values**: String. **Mandatory**: No. Up to three values can be defined.
other-dynamic-ports-exclude-programs*	The dynamic ports, listened to by the monitored application, that should NOT to be monitored. These are names of programs whose ports will NOT be monitored. The program name will be matched against the first 9 characters of the names in the list separated by two pipelines "||". **Format**: program=program-name||program=program-name. Do not define if the `other-static-ports` field is present. **Values**: String. **Mandatory**: No. Up to three values can be defined.
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation.
show-historical-data	Indicates if historical data from the deleted instance is shown (true) or deleted (false). **Values**: true/false **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.

Installing an OS instance with the Precise CLI utility

Installing OS Collectors on a server enables you to sample OS instances on the server.

Before installing an OS Tier Collector with the Precise CLI utility, verify the following issues:

- The Insight FocalPoint is installed.
- The Precise Listener on the target server on which the OS Collector is to be installed, was installed. To install OS Collectors with the Precise CLI utility

1. Create the OS Collectors parameter file and save it to the <*precise_root*> folder on the main Precise FocalPoint.
2. Run the following command from the <*precise_root*> folder on the main Precise FocalPoint to execute the Precise CLI utility installation script. Use the Precise user that was created when the Precise server was defined.

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
 {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
 -action setup
 -parametersfile <insight_savvy_for_os_installation_parameters_file_name>
```
UNIX
```
./infra/bin/psin_cli.sh
 -i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action setup
-parametersfile <insight_savvy_for_os_installation_parameters_file_name>
```

About OS Collectors parameter file (Precise CLI utility)

You need to prepare the Insight Savvy for OS parameter file by creating an XML file with elements that represent the installation parameters and inserting the appropriate values.

The following is an example of an Insight Savvy for OS parameters file:

```
<parameters>
    <parameter name="setup-process" value="apptier-OS"/>
    <parameter name="setup-mode" value="install"/>
    <parameter name="collector-server-machine-name" value="pifa102"/>
    <parameter name="instance-name" value="pifa102"/>
    <parameter name="installation-cd-path" value="d:\"/>
</parameters>
```

The following table describes the updated elements of the parameter file.

Table 24 Elements of the OS Collectors parameter file

Element	Description
installation-cd-path	Indicates the absolute path to the folder where the Precise download was downloaded to. **Values**: String **Mandatory**: Yes
setup-process	Setup process. always apptier-OS **Mandatory**: Yes
setup-mode	Setup mode. **Values**: install, edit, uninstall **Mandatory**: Yes
collector-server-machine-name	Name of the server on which the OS Collector will be installed. **Values**: String **Mandatory**: Yes
instance-name	Name of the server on which the OS Collector will be installed. **Values**: String **Mandatory**: Yes
environment-name	Name of the application. **Values**: String **Mandatory**: Yes, for a federation installation
install-alert-customized	**Values**: true/false **Mandatory**: No Set to true to in case you want to have customized alerts metrics for this instance.
show-historical-data	Indicates if historical data from the deleted instance is shown (true) or deleted (false) **Values**: true/false **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.

Installing Precise for vCenter Server with the Precise CLI utility

The installation of Precise for vCenter Server can be performed using AdminPoint and by using the Precise CLI utility. For information on installing Precise for vCenter Server using AdminPoint, see Installing the Precise for vCenter Server.

Before installing Precise for vCenter Server with the Precise CLI utility, verify the following issue:

- The server on which you install Precise for vCenter Server must contain a Precise Listener

To install Precise for vCenter Server

1. Prepare XML parameters file to specify the Precise for vCenter Server installation parameters.
2. Prepare the log in details for the server with VMware vCenter Server.
3. On the FocalPoint, run the following command from the *<precise_root>* folder to install the CLI utility installation script:

   Windows infra\bin\psin_cli.bat
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <precise_for_vcenter_server_installation_parameters_file_name>

   UNIX ./infra/bin/psin_cli.sh
   -i3-user <*user_name*>
   {-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
   -action setup
   -parametersfile <precise_for_vcenter_server_installation_parameters_file_name>

About the Precise for vCenter Server parameter file

You need to prepare the Precise for vCenter Server parameter file by creating an XML file with tags that represent the installation parameters and inserting the appropriate values.

The following is an example of a server parameters file:

```
<parameters>
    <parameter name="setup-process" value="apptier-VC" />
    <parameter name="setup-mode" value="install" />
    <parameter name="collector-server-machine-name" value="inf-fw-10" />
    <parameter name="instance-server-machine-name" value="phy-vmtest-db1" />
    <parameter name="vmware-center-user" value="VCuser" />
    <parameter name="vmware-center-clear-password" value="VCpassword" />
    <parameter name="vmware-center-exclude-servers" value="server=vm*|server=inf-fw-20" />
    <parameter name="vmware-center-port" value="443" />
    <parameter name="vmware-center-use-ssl-configuration" value="true" />
    <parameter name="vmware-center-ssl-use-certificate" value="true" />
</parameters>
```

The parameters file is an XML file containing a list of parameters for a Precise for vCenter Server installation.

Table 25 Elements of the Precise for vCenter Server parameter file

Element	Description
setup-process	Name of the setup process. Always apptier-VC **Mandatory**: Yes
setup-mode	Must be in one of the following modes: • install (used to install Precise for vCenter Server) • edit (used to update Precise for vCenter Server) • uninstall (used to uninstall Precise for vCenter Server) **Mandatory**: Yes
collector-server-machine-name	Name of the server where Precise is located. The name must be written in lowercase letters only. **Values**: String **Mandatory**: Yes
instance-server-machine-name	Name of the server where the vCenter Server is located. The name must be written in lowercase letters only. **Values**: String **Mandatory**: Yes
vmware-center-user	Name of the user who has permissions for the vCenter Server. **Values**: String **Mandatory**: Yes
vmware-center-encrypt-password	Password of the user who has permissions for the vCenter Server. **Values**: Encrypted string **Mandatory**: Yes. Alternatively the vmware-center-clear-password can be used, allowing you to specify a clear password instead of an encrypted string. For more information, see Encrypt command.
vmware-center-exclude-servers	Names of the servers that are excluded from the VCenter Server. **Values**: String separated by |. For example server=vm*|server=inf-fw-20 **Mandatory**: No
vmware-center-port	Port of the vCenter Server instance. **Values**: Numeric **Mandatory**: Yes

vmware-center-use-ssl-configuration	Indicates if SSL configuration is used. **Values**: (true/false). The default setting is true. **Mandatory**: No
vmware-center-ssl-use-certificate	Indicates if an SSL server certificate needs to be used. **Values**: (true/false). The default setting is false. **Mandatory**: No.
show-historical-data	Indicates if historical data from the deleted instance is shown (true) or deleted (false) **Values**: true/false **Mandatory**: No. This parameter is only relevant when the setup-mode is uninstall.

Extricate command

Extricate CLI allows you to fetch installation related parameters. For example, if you have installed an Oracle instance in Precise, you can run extricate CLI to find all Oracle instance installation parameters. You can then use these parameters for informative purpose, and/or use the parameters to edit and modify the instance settings using CLI edit mode. For more information, see Edit & uninstall.

To use extricate CLI you should identify the related installation. This includes the following:

- For Framework installation - supply the Precise FocalPoint server name parameter and setup-process=framework
- For Precise FocalPoint installation - supply the Precise FocalPoint product code and server name parameters and setup-process=focal-<PRODUCT_CODE> (see Product Codes.)
- For instance installation - supply the instance name, and instance/collector server name parameters and setup-process=apptier-<TECHNOLOGY_CODE> (see Technology Codes.)

Windows
infra\bin\psin_cli.bat
-i3-user <*user_name*>
{-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
-action extricate
[-parametersfile <path_to_input_parameters_file>] [-parameter <name=value>]
[-output-file <file>]

UNIX
./infra/bin/psin_cli.sh
-i3-user <*user_name*>
{-i3-encrypted-password <*encrypted_password*> | -i3-clear-password <*clear_password*>}
-action extricate
[-parametersfile <path_to_input_parameters_file>] [-parameter <name=value>]
[-output-file <file>]

For example:

```
infra\bin\psin_cli.bat
-i3-user admin
-i3-clear-password admin
-action extricate
-parameter setup-process=apptier-OR
-parameter collector-server-machine-name=poolsun5
-parameter instance-name=ORCL
```

The output will be done to an XML parameters file which is created by the CLI.

Table 26 Elements of the Extricate command parameters file

Element	Description
i3-user	See Authenticate to CLI Utility.
i3-encrypted-password	See Authenticate to CLI Utility.
action	Values: always extricate **Mandatory**: Yes
parameter	Specify parameters to identify the related installation. **Mandatory**: Yes

parameters-file	Specify the parameters to identify the related installation. The parameters can be specified in the command line as arguments and in a parameters file in the following format: <parameters> <parameter name="..." value="..."/> </parameters>
output-file	Path to a file that will be created. The file will contain the installation related parameters that are extracted. **Values**: String **Mandatory**: No. If this is omitted, the CLI utilities will set the path for the output file and will notify you of its location.

Edit & uninstall

Using CLI you can install, edit, and uninstall components in Precise. Editing an installation allows you to modify its settings. For example - change Precise password used for Oracle instance, or change instrumentation folders for Web instance.

To edit an installation

Use the Extricate command. For more information, see Extricate command.

Update the related parameters in the parameters file. Run CLI setup using parameter setup-mode=edit. For more information, see Installation with Precise CLI.

To uninstall an installation

Prepare an input XML file with the required parameters to identify the installation. For more information, see Extricate command.

Run CLI setup using parameter setup-mode=uninstall. For more information, see Installation with Precise CLI.

Installing a new instance while keeping historical data from an old instance

There are cases in which you want to install a new instance and use the historical data from an old instance (this might be required in case you have moved or renamed your instance). To do so, use the old instance ID for the new installed instance. The following procedure describes how to do this.

> Data related to deleted instances may be deleted permanently by the PMDB maintenance process. If you intend to use the deleted instance's data, you should check that it is not deleted by the PMDB. You can see if the check box of the purge parameter in the PMDB Maintenance (Weekly) process is not marked.

> Old instance data is kept as part of the related FocalPoint schema. This means that the instance historical performance data is only kept while the FocalPoint is installed. If you uninstall the related FocalPoint, you no longer can recover the instance historical performance data.

To install a new instance using an uninstalled instance ID

> Trying to install an instance, while using an ID that was not deleted will cause an error (You will also get this error when you try to install an instance with an ID of an unmonitored instance). Therefore, if the old instance is not yet uninstalled, uninstall it now without historical data using the GUI or CLI.

1. From the <*precise_root*> folder on the main Precise FocalPoint, run the following query command to retrieve the instance ID:

Windows
```
infra\bin\psin_cli.bat
 -i3-user <user_name>
 {-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
 -action get-instance-id
 -technology <technology_code>
-instance <instance_name>
-server <server_name>
```

UNIX
```
./infra/bin/psin_cli.sh
-i3-user <user_name>
{-i3-encrypted-password <encrypted_password> | -i3-clear-password <clear_password>}
-action get-instance-id
-technology <technology_code>
-instance <instance_name>
-server <server_name>
```

Table 27 Elements of the Retrieve instance ID query command

Element	Description
i3-user	See Authenticate to CLI Utility.

i3-encrypted-password	See Authenticate to CLI Utility.
action	always get-instance-id **Mandatory**: Yes
technology	**Values**: Technology code. For more information, see Technology Codes. **Mandatory**: Yes
instance	The instance name. **Values**: String **Mandatory**: Yes
server	The instance server name. **Values**: String **Mandatory**: Yes

2. If there are several instances with the same name, the CLI utility will provide the latest instance ID in the output. A non-deleted instance will appear as installed.
3. Create CLI parameters file to install the new instance. Add the `recovered-instance-id` parameter to the parameters file with the instance ID that was detected and run the CLI to install the new instance. For more information, see Installing a Tier with the Precise CLI utility.