

# PEDS Server

## Installation Guide

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## About installing PEDS Server

The PEDS Server automatically distributes and performs updates to Perceptive Content Client. PEDS 2.0 is compatible with PEDS Management Console 1.3 and PEDS Deployment Client 1.3. The following sections contain the steps for installing the PEDS Server. For steps for installing PEDS Management Console and PEDS Deployment Client 1.3, please see the *PEDS Installation Guild 1.3*. For information about configuring PEDS, see the *Perceptive Enterprise Deployment Suite Getting Started Guide* that is available for download in Product Documentation on the Customer Portal. For product technical specifications and system requirements, refer to the *Technical Specifications* document.

**Notes** You can install the PEDS Client on a user's machine without installing any particular Perceptive Content Client. After the PEDS Client installation, the PEDS Client goes to the PEDS Server, downloads and performs an initial installation of the Perceptive Content Client.

## Install PEDS Server

To install PEDS Server, complete the following procedures in the order listed.

- Download the files
- Deploy PEDS Server
- Deploy PEDS Server on Tomcat 10.1.x
- Configure the PEDServer.ini file
- Install PEDS Client
- Install PEDS Management Console

### Download the necessary files

To obtain product installation files, contact the Hyland Software Technical Support group at (440) 788-5600. For a list of Technical Support numbers, go to [hyland.com/pswtscontact](http://hyland.com/pswtscontact).

### Deploy the PEDS Server

To deploy the downloaded PEDS Server installation files in your environment, complete the following steps.

1. Stop Apache Tomcat.
2. Rename `pedserver-[versionnumber].war` to `pedserver.war`.
3. Move the **pedserver.war** file to `${TOMCAT_HOME}/webapps` directory.
4. Start Apache Tomcat, which will automatically unzip and deploy the **pedserver.war** file.

**Note** You can use other procedures to deploy a WAR file to Apache Tomcat.

### Deploy the PEDS Server on Tomcat 10.1.x

1. Stop the Apache Tomcat server.
2. Locate the **pedserver\_jakartaee9-xxx.war**. For Tomcat 10.1.x, the required .war file contains `_jakartaee9` in the file name. This file can be renamed to **pedserver.war** to match earlier installation steps.

## Configure the PEDServer.ini file

To configure the PEDS environment, complete the following steps.

1. Navigate to the **pedserver/WEB-INF/etc** directory.
2. Using a text editor, open the **PEDServer.ini** file and make any necessary changes.

**Note** For information on PEDServer.ini file settings, refer to Appendix B: PEDServer.ini file settings.

3. Save and close the **PEDServer.ini** file.
4. Restart Apache Tomcat.

## Configure Tomcat and the PEDS Server for SSL/TLS

To configure Tomcat and the PEDS Server for SSL/TLS, refer to the [SSL/TLS Configuration HOW-TO](#) provided by Apache.

# Appendix A: Troubleshooting PEDS Server

Use the information in this appendix to troubleshoot issues that you might encounter when using PEDS.

## Updates are not downloading to client machines

If updates are not downloading to client machines, you can use a web browser to navigate to the following URLs to determine if the PEDS Server is providing the expected data. You can also navigate to these sites for troubleshooting information.

- To see the entire catalog of files that the server reads from the monitored update directory, enter:

```
http://someserver.com/pedserver/Application
```

- To see the deployment plan that is provided to client machines when they check for updates, enter:

```
http://someserver.com/pedserver/Application/<AppID>/DeploymentPlan
```

Where <AppID> is the application identifier, for example PEDClientServiceWin32 or ImageNow6Win32.

- To see the server configuration, enter:

```
http://someserver.com/pedserver/Configuration
```

## Missing shortcut

For PEDS to be able to check for updates upon launching the application, the PEDS client installer replaces the shortcut to the application's executable with a shortcut to the PEDLauncher executable. In the event that this shortcut is missing, you can manually create a new shortcut using the following instructions.

## Recreate a missing shortcut

Configuration settings appear in the <appSettings> section of PEDLauncher.exe configuration file. The configuration file is the name of the updater appended with .config. For example, PEDLauncher.exe has a configuration file named PEDLauncher.exe.config, and PEDLauncher2.exe has a configuration file named PEDLauncher2.exe.config.

1. In **Windows Explorer**, locate the **PEDLauncher.exe** file.

2. Right-click **PEDLauncher.exe** and choose **Create shortcut**.
3. Right-click the newly created shortcut and choose **Properties**.
4. Edit the **Target** field by appending the appropriate **-A** and **-L** parameters to the end. Refer to the following table for descriptions of these parameters. For example, the Target for launching Perceptive Content Client would look like the following example.

```
C:\Program Files\ImageNow\bin\PEDLauncher.exe" -A ImageNow6Win32 -L "C:\Program Files\ImageNow\bin\ImageNow.exe
```

Parameter	Argument
-A	The ID for the target application.
-L	The path to the target executable.

Rename and relocate the shortcut as desired.

## Appendix B: PEDServer.ini file settings

The following table provides definitions and sample data for the PEDS settings in the PEDServer.ini configuration file. This table displays the INI file settings organized under the group headings, for example Logging and General. Each setting offers two or more options, which appear in the table along with a description of each setting and its options. Use this table as a guide when customizing the PEDServer.ini file.

Group	Setting	Options	Description
Logging	debug.level.file	0 through 6	<p>Specifies the level the servlet uses to log errors for troubleshooting.</p> <p>Set minimal logging unless you are debugging an issue. If you increase the logging, make sure that you set the logging level back down after you finish debugging. Failure to do so can greatly affect performance and hard disk space.</p> <p>The higher the number, the more verbose the logging.</p> <p>0 = Error 1 = Info 3 = Debug 6 = Trace 9 = Timing The default is 0.</p>
	log.directory	Text strings	<p>Specifies the location where the system writes the log files. Relative paths are relative to the location of the .ini file.</p> <p>The default is ../..log.</p>

Group	Setting	Options	Description
	log.prefix	Text strings	Specifies the name of the log file in the following naming convention: <log.directory>\<log.prefix>_current date.log The default <log prefix> is PEDServer.
General	parent.server.url	Any valid URL	Specifies the URL of the PEDS parent server where the configuration and file monitor updates are downloaded from. <b>Note</b> If the parent.server.url uses SSL/TLS, refer to Appendix C: Setting up SSL/TLS for PEDS Server. For more information on parent and child servers, see the Perceptive Enterprise Deployment Suite Getting Started Guide.
	update.directory	Text strings	Specifies the location where the servlet stores the update packages. The administrator must have read and write privileges for this directory. Relative paths are relative to the location of the INI file. The default is: ../../deployment
	directory.package.polling.interval	Any positive integer	The interval time span in minutes when the servlet (parent or child) searches for new update packages in the update directory. The default is 60.
	url.package.polling.interval	Any positive integer	The interval time span in minutes when the child servlet searches the parent servlet for new update packages to download. The default is 60.
	url.config.polling.interval	Any positive integer	The interval time span in minutes when the child servlet checks the parent servlet for changes in the configuration settings file. The default is 15.
	versions.retained	Any integer -1 0	Specifies the number of previous versions retained in the update directory on the servlet. -1 retains all previous versions. 0 retains only the current version. The default is -1.
	receive.config.settings	TRUE FALSE	Determines whether the child servlet receives configuration information from the parent server. The default is TRUE.

Group	Setting	Options	Description
SendSettings	parent.server.url	Any valid URL	The URL to set the children servers' configuration settings to. If this section property is not included under the SendSettings section, it is not changed on the child server.
	debug.level.file	0 through 6	<p>Specifies the level the servlet uses to log errors for troubleshooting.</p> <p>Set minimal logging unless you are debugging an issue. If you increase the logging, make sure that you set the logging level back down after you finish debugging. Failure to do so can greatly affect performance and hard disk space.</p> <p>The higher the number, the more verbose the logging.</p> <p>0 = Error 1 = Info 3 = Debug 6 = Trace 9 = Timing</p> <p>The default is 0.</p>
	directory.package.polling.interval	Any positive integer	The value to set the children servers' configuration settings to. If this section property is not included under the SendSettings section it is not changed on the child server.
	parent.reporting.server.url	Text strings	The value to set the children servers' configuration settings to. If this section property is not included under the SendSettings section, it is not changed on the child server.
	versions.retained	Any positive integer	<p>Specifies the number of previous versions retained in the update directory on the servlet.</p> <p>-1 retains all previous versions. 0 retains only the current version.</p> <p>The default is -1.</p>
	url.config.polling.interval	Any positive integer	<p>The interval time span in minutes when the child servlet checks the parent servlet for changes in the configuration settings file.</p> <p>The default is 15.</p>
	url.package.polling.interval	Any positive integer	The value to set the children servers' configuration settings to. If this section property is not included under the SendSettings section, it is not changed on the child server.



Group	Setting	Options	Description
Reporting	parent.reporting.server.url	Any valid URL	The URL of the servlet that acts as a parent for reporting purposes. Child servlets periodically upload report data to their parent.  <b>Note</b> If the parent.reporting.server.url uses SSL/TLS, refer to Appendix C: Setting up SSL/TLS for PEDS Server.
	database.directory	Any valid directory	The location where the reporting database files are stored. Relative paths are relative to the location of the INI file.  The default is <code>../db</code>
	database.connection.pool.size	Any positive integer	The maximum number of database connections that can be open at once.  The default is 20 connections.
	database.cleanup.interval	Any positive integer	The time, in minutes, to scan for and purge old data from the database.  The default is 60 minutes.
	event.retention.time	Any positive integer	The time, in days, to retain event data in the database. Events older than this setting are purged from the database.  The default is 90 days.
	inactive.node.retention.time	Any positive integer	The time, in days, to retain information about a machine's last update check. A node is purged if the last check for updates is older than this setting.  The default is 180 days.
	database.upload.interval	Any positive integer	The time, in seconds, that report data is uploaded to the parent-reporting server.  The default is 60 seconds.
	database.upload.batch.size	Any positive integer	The maximum number of records that are uploaded to the parent-reporting server.  The default is 200 records.

## Appendix C: Setting up SSL/TLS for PEDS Server

### Import and Trust the SSL/TLS Certificate

To import and trust an SSL/TLS certificate for PEDS Server, complete the following steps.

**Note** A password is required to modify the Java cacerts truststore. The default password is `changeit`.

1. On the PEDS Server machine, navigate to the `lib\security` folder of the Java JRE installation.

2. Import and trust the SSL/TLS Certificate using the following command.

```
keytool -keystore cacerts -importcert -alias companyca -file CompanyRootCA.cer
```

3. Ensure the certificate has been imported, and is trusted, using the following command.

```
keytool -list -keystore cacerts
```

## Appendix D: Setting up SSL/TLS for PEDS Client

### Configure the MMC Certificates Snap-in

The Microsoft Management Console (MMC) Certificates snap-in can add, import, and export certificates. To configure the MMC Certificates snap-in, complete the following steps.

1. To open the MMC console, click **Start > Run**.
2. In the **Run** dialog box, type `mmc`, and then click **OK**.
3. Click **File > Add/Remove Snap-in**.
4. In the **Add/Remove Snap-in** dialog box, click **Add**.
5. In the **Add Standalone Snap-in** dialog box, click **Certificates > Add**.
6. In the **Certificates Snap-in** dialog box, select **Computer Account**, and then click **Next**.
7. In the **Select Computer** dialog box, select **Local computer**, and then click **Finish**.
8. In the **Add Standalone Snap-in** dialog box, click **Close**.
9. In the **Add/Remove Snap-in** dialog box, click **OK**.

### Import and Trust the SSL/TLS Certificate

**Prerequisite:** Before you complete the following steps, you must perform the steps in the **Configure the MMC Certificates Snap-in** section.

1. In the left pane, in the **Console Root** tree, click **Certificates (Local Computer) > Trusted Root Certification Authorities**.
2. Right-click anywhere in the right pane, and click **All Tasks > Import**.
3. In the **Certificate Import Wizard** welcome page, click **Next**.
4. In the **File to Import** page, browse to the certificate you just created, and click **Next**.
5. In the **Certificate Store** page, verify **Place all certificates in the following store** is selected, and click **Next**.
6. In the **Completing the Certificate Import Wizard** page, click **Finish**.

The certificate should now be trusted by the local computer account.