

# Perceptive Reflect

Installation and Setup Guide

Version: 2.3.x



**perceptive**software

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## About Perceptive Reflect

This guide provides instructions for installing and configuring Perceptive Reflect, version 2.3, a web-based process-mining tool that allows you to extract historical execution data from your applications, and reconstruct and analyze the underlying business process.

### About installing Perceptive Reflect

You can install Reflect on any server that meets the technical specifications for this product. Refer to the *Perceptive Reflect Technical Specifications* for system requirements.

There are two versions of Reflect: the Standard version and the Enterprise version. The type of license you use during installation determines whether you are running the Standard version or the Enterprise version of Reflect. The Standard version requires you to authenticate users through ImageNow. With the Enterprise version, you can authenticate users through an ImageNow Server or you can use it as a standalone application that does not integrate with an ImageNow server.

You must complete the following steps to install Reflect using ImageNow user authentication:

- Prepare for the installation
- Download Reflect
- Install Reflect
- License Reflect
- Set up Reflect for ImageNow user authentication
- Configure access rights

You must complete the following steps to install Reflect using local user authentication:

- Prepare for the installation
- Download Reflect
- Install Reflect
- License Reflect
- Set up Reflect for local user authentication
- Configure access rights

You must complete the following steps to upgrade Reflect to a new version:

- Uninstall Reflect
- Download Reflect
- Install Reflect
- License Reflect: some upgrades require a new license

## Prepare for the installation

Before beginning this installation, verify the following information:

- Your system must meet the requirements in the *Perceptive Reflect Technical Specifications* for the version you are installing.
- To install Reflect, you must have system administrator privileges in your Windows environment.
- Reflect runs a web server on port 80. Check to make sure that this port is available. If port 80 is in use and Reflect needs to run on another port, run the installation, and then refer to the "Options in config.txt" section of this document before proceeding with the license and user setup.
- If you are installing Reflect on a remote server, verify TCP/IP connectivity to the server.
- If you are authenticating users against an ImageNow server, verify the connectivity to the server.

## Download Perceptive Reflect

To download Reflect installation files, complete the following steps.

1. From the Perceptive Software website at [www.perceptivesoftware.com](http://www.perceptivesoftware.com), click **Customer Portal**, enter your user name and password, and then click **Product Downloads**.
2. In the **Product Downloads** page, download the appropriate installer file to a temporary directory on your computer.

To locate product documentation, complete the following steps.

1. Go to the Perceptive Software website at [www.perceptivesoftware.com](http://www.perceptivesoftware.com), click **Customer Portal**, enter your user name and password, and then click **Product Documentation**.
2. Locate the documentation for Perceptive Reflect. You can view, print or save a PDF version of the documentation.

## Upgrade from a previous version

If you have an earlier version of Reflect installed on your computer, installing a newer version of the product overwrites the existing version. However, your existing data and license files are preserved. Follow the instructions in the "Install Perceptive Reflect" section.

We recommend that you first uninstall the existing version of Reflect before you install a new release. When you uninstall the product, you remove the application files but not the data files. Follow the instructions in the "Uninstall Perceptive Reflect" section.

**Note** Some upgrades require that you request a new license. Follow the instructions in the "License Reflect" section of this document.

## Install Perceptive Reflect

After you downloaded the executable file, you can execute the installation process using the following procedure. Perform the following steps on the machine where you want to install Reflect.

1. In Windows Explorer, navigate to where you downloaded the installer file, right-click the executable you downloaded and select **Run as Administrator**.
2. In the **Perceptive Reflect 2.3 Setup** wizard, click **Install** to start the installation process.

The installation process might take several minutes to copy the files and install the Perceptive Reflect service.

3. When the installation is complete, verify that **Open Reflect** is checked in the installation window, and then click **Finish**.

If this is the first time you install Reflect, a browser window opens at the Server Configuration Login window to start the licensing process. Otherwise, the browser opens at the normal Log In window where you can log in to use Reflect.

**Note** Starting the Reflect server may take some time. If the browser window that opens reports that the page is unavailable, please wait 20 to 30 seconds and refresh the page.

## Open the Reflect Server Setup

After the initial installation, if you check Open Reflect, a browser opens at the Server Configuration Login page. If you have not checked this option, or if you want to perform the configuration process at another moment, complete the following steps.

1. From the Windows **Start** menu, select **Perceptive Reflect > All Programs > Configure Perceptive Reflect**.
2. In the **Server Configuration Login** page, enter the following information as part of the configuration.
  1. In **Username**, **serveradmin** is automatically entered in the field.
  2. In **Password**, type your password (the default password is **EnSiUkOyN**).
3. Click **Log in**.

**Note** The **serveradmin** user is the user for configuring the Reflect Server. This is a different user than the default **admin** user in Reflect. This **admin** user can perform user management tasks within Reflect.

## License Perceptive Reflect

This procedure divides the steps to license Reflect into two sections: requesting the license and installing the license. If you already have a Reflect license, skip the "Request the license" section and proceed to "Install the license."

### Request the license

To request the license, complete the following steps.

1. Open the **Reflect Server Setup** page.
2. In **Installation code**, select the code in the field and copy it. You need this code to request a license.
3. Send the installation code to your Perceptive Software representative.

## Install the license

To install the license, complete the following steps:

1. When you receive the license file, store the license file in a directory for future use.
2. Open the license file and copy the license text.
3. Open the **Reflect Server Setup** page.
4. In the **License** box, paste the entire contents of the license file.  
**Note** Do not modify the file.
5. Click **Install license**.
6. After you install the license, in the **Currently installed license** box, verify that the **License status** shows "valid."
7. If you want to configure Reflect, continue to the steps described in the "Set up Reflect" sections. If you do not want to configure Reflect, click **Logout & Back to Reflect**.

## Set up Perceptive Reflect with local user authentication

Reflect can authenticate its users either locally (users are stored in the Reflect database) or the authentication can be delegated to an ImageNow server.

If you use Reflect with user authentication from ImageNow, refer to the "Set up Perceptive Reflect for ImageNow user authentication" section.

If you use Reflect with local user authentication, you can optionally configure the e-mail settings in the Server Configuration and then change the administrator password, which is a required action.

## Configure SMTP Server

Configure the e-mail settings if you want to enable password recovery through e-mail. Complete the following steps to configure the SMTP server settings.

1. Open the **Reflect Server Setup** page.
2. In the **Reflect Server Setup** page, click the **Email (SMTP)** tab.
3. Check **Mail Service enabled** and fill in the **Host address**, **Username** and **Password** fields.
4. Check **Use SSL** if you use a secure connection.
5. Click **Logout & Back to Reflect**.

## Change the default administrator account password

Reflect is installed with an administrator account, which has a default username and password. The administrator account password must be changed on first time use.

**Note** This administrator account (**admin**) is different from the server administration account (**serveradmin**), which is used in the **Server Configuration** login.

To change the password, complete of the following steps:

1. In the **Login to Perceptive Reflect** dialog box, enter the username and password. The username is **admin** and the password is **PerceptiveReflect**. A message displays that the password is expired.
2. Close this message and click **Change or recover password**.

3. In the **Change or recover password** dialog box, enter your username and password. The username is **admin** and the old password is **PerceptiveReflect**. In **New password** and **New password (confirm)**, type a new password for the **admin** account.
4. Click **Change**. You return to the **Login to Perceptive Reflect** page.

## Set up Perceptive Reflect for ImageNow user authentication

Complete the following procedures to configure Reflect if you connect to an ImageNow server and the user authentication is delegated to the ImageNow server. These procedures enable you to configure the connection to an ImageNow server. To reconfigure the ImageNow server version, the Reflect webserver port or the storage location, refer to the "Options in config.txt" section.

1. Open the **Reflect Server Setup** page.
2. In the **Reflect Server Setup** page, go to the **ImageNow Integration** tab.
3. Check the ImageNow version in the **ImageNow server version** field. If the version does not match the actual version of the ImageNow server you are connecting to, you must change the version in the server configuration file. Refer to the "Options in config.txt" section.
4. Type the **Host** and the **Port** of the ImageNow server.
5. Type the **Username** and the **Password** of the ImageNow user that will be designated as an administrator in Reflect.

**Note** The user must have the ImageNow privilege 'Workflow Manager.'

## Connect to Perceptive Reflect

Reflect is installed as a Windows Service, the service starts automatically. By default, Reflect uses the LocalService user account and the standard HTTP port (80). Use the Windows Service Manager to start, stop, and restart the Perceptive Reflect service.

1. From the Windows **Start** menu, select **Start > Programs > Perceptive Software > Perceptive Reflect > Open Perceptive Reflect**.
2. In the **Login to Perceptive Reflect** dialog box, in the **User name** field, type a valid user account name. In the **Password** field, type the password associated with that user account.

**Note** Check **Remember username** if you want the username field prefilled with your current login name.

3. Click **Log in**.

## Configure access rights

How you configure the access rights of users depends on the method of user authentication that is used, local user authentication or authentication through an ImageNow server.

### Users for local user authentication

Any user with the User Administrator permission can manage users, groups and access rights.

**Note** The **admin** user is the default administrator, which is created in the installation process. You can create other users that have the User Administrator permission.



## Users for ImageNow user authentication

The user that is specified in the Reflect Server Setup automatically has User Administrator permission and can therefore manage users, groups and access rights. Any user that successfully logs is added to the ImageNow User group automatically.

### Notes

- You must configure the ImageNow User group to set the correct access rights for these users.
- Only users that have the Workflow Manager privilege in ImageNow are able to log into Reflect.

For more information on user management, refer to the *Perceptive Reflect Getting Started Guide*.

## View active users

The server administrator can check the status of users to determine who is currently logged into the system. You may need to check usage for a variety of reasons including the need to reboot the system or the opportunity to install a product upgrade.

1. Open the **Reflect Server Setup** dialog box
2. Select the **Active visits** tab to view a list of current users.

## Uninstall Perceptive Reflect

To uninstall the product, complete the following step.

- From the Windows **Start** menu, select **Start > Programs > Perceptive Software > Perceptive Reflect > Uninstall Perceptive Reflect**.

The directory that contains the program, `[drive:]\Program Files\Perceptive Software\Perceptive Reflect`, is emptied. The directory that contains your data, `[drive:]\reflect-storage`, is not deleted in the uninstall process. If you delete this directory, you remove all your data (imported datasets, mined models, and graphics) as well as your installed license.

**Warning** Do not remove the data directory if you uninstall the software with the intent of upgrading Reflect to a newer release.

**Note** If you have a license key that was created for this deployment, you can use this key to reinstall Perceptive Reflect.

## Configuration options

This section provides several advanced configuration options. To complete the following tasks, you must be an administrator on the machine where Reflect is installed.

### Provide network access

If you want to make Reflect available over the network, you must open port 80 in the Windows Firewall. The details of this procedure vary depending on your version of Windows. The following steps explain how to open port 80 in a Windows 2008 Server R2 environment. For more information about your specific steps, consult your Windows documentation.

1. Click **Start**, point to **Administrative Tools**, and then click **Windows Firewall with Advanced Security**.
2. Click **Inbound Rules** and, in the **Actions** pane, select **New Rule**.
3. In the **Rule Type** dialog box, select **Port** and click **Next**.
4. Select **TCP**, enter port **80**, and click **Next**.
5. Select **Allow the connection** and click **Next**.
6. Check **Doman, Public, and Private** and click **Next**.
7. Enter **Perceptive Reflect** in the **Name** field and click **Finish**.
8. Close the window.

### Options in config.txt

The server configuration file contains a number of options that can be configured. The server configuration file, config.txt, is located in *[drive:]\Program Files\Perceptive Software\Perceptive Reflect*. You can open the file in a text editor.

### ImageNow authentication

The imagenow.version parameter defines the ImageNow version of the server against which Reflect authenticates. This applies to users who must authenticate through ImageNow Server. This option does not apply to local authentication.

1. Open the configuration file.
2. After the parameter, type the version of ImageNow (for instance 6.7) that you are using:

```
imagenow.version = 6.7
```

3. Save the file.
4. Restart the Perceptive Reflect service.

## Change the port

Perceptive Reflect listens on port 80 by default. If there is a port conflict, you need to resolve this issue before you can successfully start the service. To check the port, complete the following steps.

1. From the command prompt, enter:

```
netstat -ano | findstr /RC:"80.*LISTENING"
```

2. Verify that the listening port is set to 80.

To change the port, complete the following steps.

1. Open the configuration file.
2. To change the default port where Reflect listens, replace the **port** number setting, as shown in the following example:

```
port = 8081
```

3. Save the file.
4. Restart the Perceptive Reflect service.

## Change the storage location

Reflect stores all data files in [*drive:*]\reflect-storage by default. The following steps explain how to change the storage option.

1. Open the configuration file.
2. Assign the **storage** setting with the new path, as shown in the following example:

```
storage = [D:]\reflect-newstorage
```

3. Save the file.
4. Stop the Perceptive Reflect service.
5. Move or copy the old storage directory (**[*drive:*]\reflect-storage**) to the new directory.
6. Restart the Perceptive Reflect service.

## Change settings for JVM memory

Reflect runs in a Java Virtual Machine (JVM). At startup, you need to specify the maximum amount of memory that JVM requires. By default, Reflect uses eighty percent of available RAM memory as the maximum amount for the Java Virtual Machine. The following steps explain how to change the amount of memory.

**Note** Reflect never uses a limit lower than 512 MB. On a 32-bit platform, Reflect uses a maximum of 1250 MB because of JVM limitations. There is no limit on a 64-bit platform.

1. Open the configuration file.
2. Change the **mem** setting, which is the maximum number of megabytes for JVM memory,

```
mem = 1250
```

3. Remove the hash sign (#) in front of the **mem** setting.
4. Save the file.
5. Restart the Perceptive Reflect service.

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