



Automating Polaris Client Deployment

Polaris v.5.5

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Automating Polaris Client Deployment

You can ease Polaris client upgrades with the Polaris Client Deployment tool, a separately licensed fee-based feature. Using the server-side Polaris Client Deployment console, administrators can deliver (“push”) Polaris client software upgrades to a specified set of workstations. You save significant time and effort at installation and upgrade, minimizing or eliminating downtime while you get the latest from Polaris.

You can also have the upgrade initiated from the client in a passive deployment (“pull”). Once client software is assigned to be deployed from the designated upgrade server, the client application performs a version check at startup, and if it is out of version, prompts the user to upgrade. Depending on how the administrator has set the client installation requirements, the user can either choose to upgrade or be required to upgrade. Once the upgrade is initiated, the assigned Polaris client is installed. The logged-in user does not require administrator rights to install the Polaris client, because it is installed under an account that has the appropriate rights. If the user chooses not to upgrade when prompted, the client can function in offline mode. This client-initiated option ensures that client upgrades that were not deployed successfully from the console via the push method will be installed when the client is started by the end-user.

With either deployment mode, the Polaris Client Deployment tool reports unsuccessful client installations and allows you to retry the deployment for those that have failed.

Requirements

Automatic client deployment requires these components:

Polaris Client Deployment Tool Console

- **Computer and processor** - 1 gigahertz (Ghz) or faster x86- or x64-bit processor with SSE2 instruction set
- **Memory (RAM)** - 512 megabyte (MB) RAM (32 bit); 512 megabytes (MB) RAM (64 bit)
- **Hard Disk** - 100.0 megabytes (MB) available
- **Display** - 1024 x 768 resolution or greater
- **Operating system** - Windows 7, Windows 8, Windows Server 2008 R2, or Windows Server 2012
- **.NET 4.0 or 4.5**
- **Server connectivity** via assigned SQL port (1443/1434) and http port 80 to the deployment server

Polaris Client Deployment Tool Console Service

- **Computer and processor** - 1 gigahertz (Ghz) or faster x64-bit processor with SSE2 instruction set
- **Memory (RAM)** - 1 gigabyte (GB) RAM; plus 500 megabytes (MB) for each 100 clients that will be part of the deployment environment
- **Hard Disk** - 100.0 megabytes (MB) available, plus 135.0 megabytes (MB) for each client deployment package

- **Display** - 1024 x 768 resolution or greater
- **Operating system** - Windows Server 2008 R2 or Windows Server 2012 R2 or Windows Server 2016
- **Browser** - Microsoft Internet Explorer 11, Edge, or Chrome
- **.NET 4.5 or later**
- **WinRM (Windows Remote Management) 3.0 or later** (included in Windows Management 3.0 framework, downloadable from <http://www.microsoft.com/en-us/download/details.aspx?id=34595>)
- **Network card** - 1 gigabit (Gb) or faster
- **PowerShell 3.0 or later** (included in Windows Management 3.0 framework, downloadable from <http://www.microsoft.com/en-us/download/details.aspx?id=34595>)
- **SQL Server 2012 Express or later**
- **IIS 7.5 or later**
- **MSI database editor such as Orca**
- **Additional requirements and considerations** - Requires server connectivity via assigned SQL port (1443/1434) and http port 80 to the deployment server. SQL Server must be a named instance called PolarisDeploy. DNS must have a host record called **PolarisUpdates** that points to the server running the deployment web server (see "Preparing for Automatic Deployment" on page 3).
- **Additional requirements and considerations** - Requires server connectivity via assigned SQL port (1443/1434) and http port 80 to the deployment server. SQL Server must be a named instance called PolarisDeploy. DNS must have a host record called **PolarisUpdates** that points to the server running the deployment web server (see "Preparing for Automatic Deployment" on page 3).

Workstations Receiving Updates

Operating system - Windows 7 (SP1), Windows 8/8.1, Windows 10

WinRM (Windows Remote Management) 2.0 or later (received via Windows updates during installation)

PowerShell 2.0 or later (received via Windows updates during installation)

Additional requirements and considerations - Requires server connectivity via http port 80 and assigned TCP ports of WinRM (default is 5985, 5986) to the deployment server

Preparing for Automatic Deployment

The following overview assumes that the Polaris Client Deployment Service has been installed. If it has not been installed, see "Appendix: Installing the Polaris Client Deployment Service" on page 24 for instructions on how to install the server-side service components.

1. Create a network share to place the client files and deployment related files. See "Creating a File Structure" below.
2. Create the files needed in the client deployment, and put them into the appropriate folders. See "Copy and Transform MST Files" on page 5.
3. Create a DNS (CN) alias record called **PolarisUpdates** to point to the deployment server (the server where the Polaris Client Deployment Service is running). See "Create the DNS Record PolarisUpdates" on page 7.

Important:

Do not do this step until the Polaris Client Deployment web service is actually up and running. See "Appendix: Installing the Polaris Client Deployment Service" on page 24.

4. If this is a first-time setup configuration, or if you have changed the password of the account used to deploy the Polaris client software, run the Polaris Client Deployment Tool Security Configuration application to create or update the encrypted domain account credentials that will be used to deploy the client software. This account must have rights to access and deploy software on the workstations being targeted by this tool. See "Set Up the Service Account" on page 7.
5. Launch the Polaris Client Deployment Tool Console to set up clients for deployment, using either active (push) or passive (pull) deployments. You will use this tool to set up your Polaris versions, groups, package definitions, and computers. See "Using the Client Deployment Tool" on page 9.

Creating a File Structure

On the file server from which the client files will be deployed, establish a consistent folder structure that will carry forward from release to release of newer clients as they become available. You may create the directory structure as you prefer; however, the following structure is recommended:

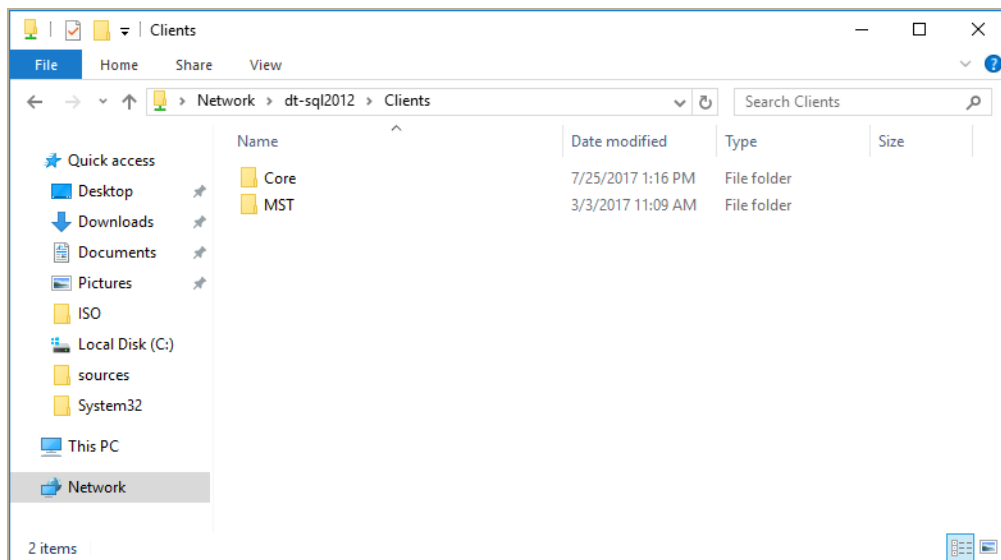
`\\share\Clients\Clients\`

`\\share\Clients\Clients\core`

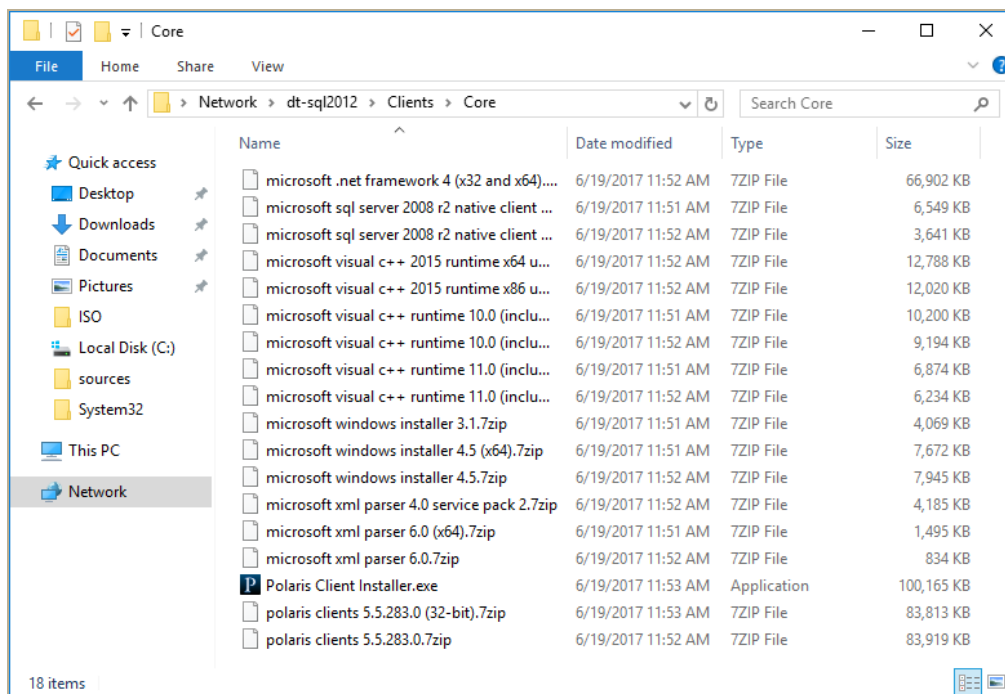
`\\share\Clients\Clients\mst`

`\\share\Clients\Clients\mst\templates`

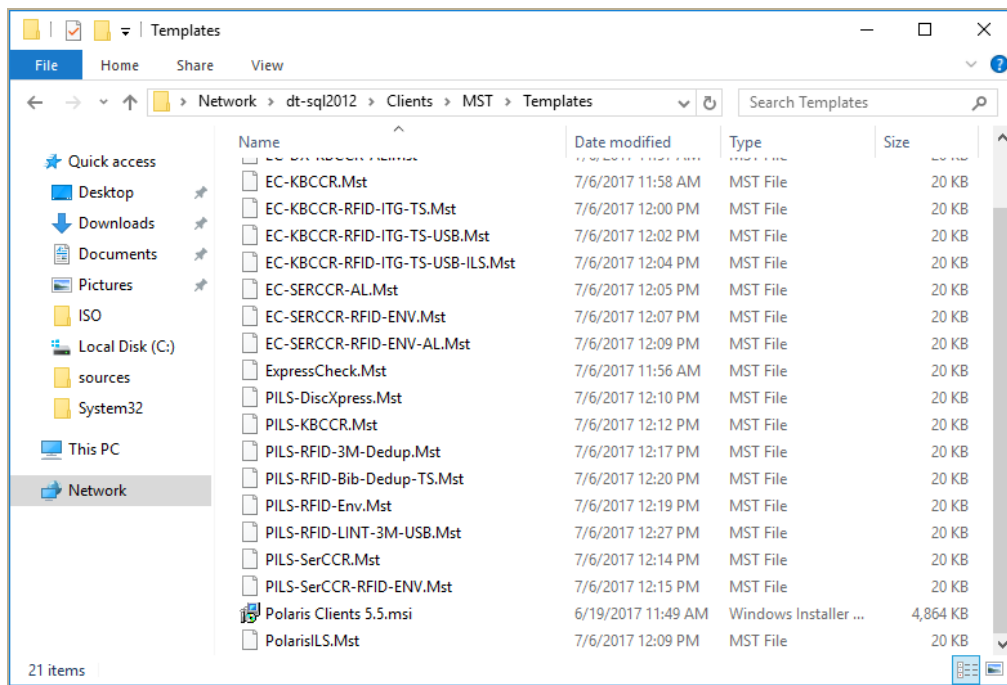
The illustration shows this structure.



The **Core** folder contains the Polaris software without any MST files, as shown below.



The MST directory contains the *transformed* MST file that you will create from a number of MST files located in the **Templates** folder. The **Templates** folder looks similar to the illustration below:



This folder contains the template MST files and the **Polaris Clients 5.5** MSI package. All of these files are included in the upgrade software package that Polaris provides. See "Copy and Transform MST Files" below for information on how to use these files with the client deployment.

Note:

This document refers to the folder structure suggested above when discussing the Polaris Client Deployment Tool. If you have created a different file structure, substitute your structure accordingly in these instructions.

Copy and Transform MST Files

MST files are transform files used by the Microsoft Windows Installer (**msiexec.exe**), a component of the Windows operating system that enables software installations. They contain software configuration options and allow custom parameters to be used for the installation. Appropriate MST files must be created before you use the Polaris Client Deployment Tool.

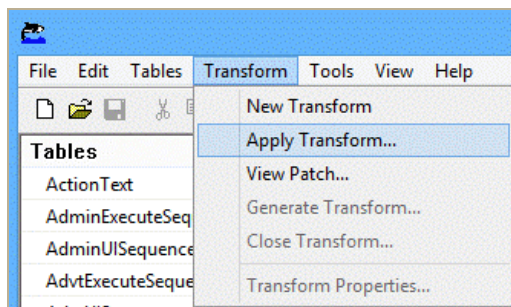
Each MST template file provided by Polaris represents a Polaris client installation with a particular set of options; for example, staff client with credit card reader. Use a tool such as Microsoft's Orca to apply transforms to the MSI files, using the MST as a template file. This process creates the appropriate custom MST files.

For example, to create a transform file, use the **Polaris Clients 5.5** MSI file and the template **PolarisILS.mst** file. Both are located in the **Templates** folder (see "Creating a File Structure" on page 3). The resulting transform file will be generated and saved into the **MST** folder.

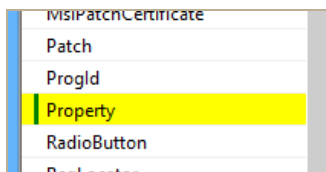
Note:

Navigate to the network share for the location of your files. If you need help with the folder structure, see "Creating a File Structure" on page 3.

1. In Orca, navigate to the **Clients<version>\MST\Templates** folder, and open the **Polaris Clients 5.5** MSI file.
2. On the menu, select **Transform, Apply Transform** as shown:



3. Navigate to the **Clients<version>\MST\Templates** folder and select **PolarisILS.mst**.
4. In Orca, scroll down the **Tables** list on the left and select **Property** (marked with a green bar):



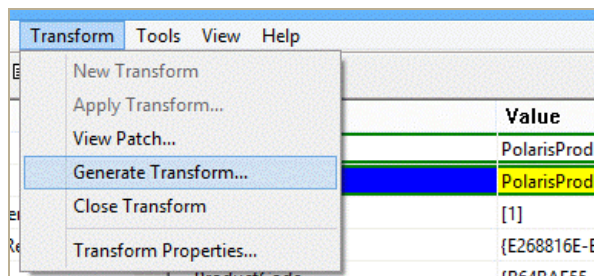
At the top right, after selecting the **Property** table, two entries are displayed at the top:

Property	Value
APPSERVER	APPLICATION_SERVER_NAME
APPSERVERNAME	APPLICATION_SERVER_NAME
DirName	[1]

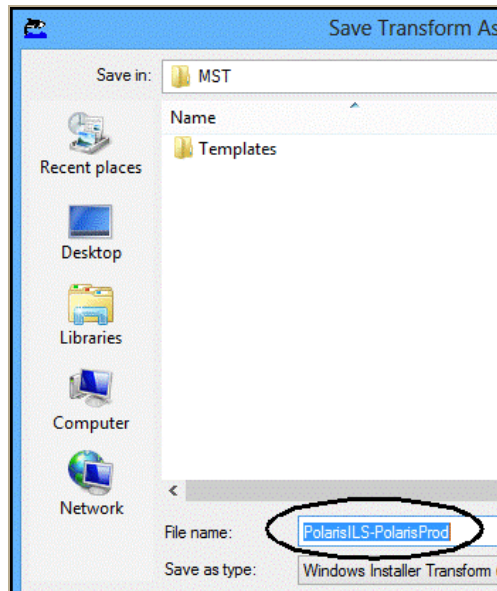
5. Change *both* Property entries to point to the Polaris Application Server. In the example below, the server is called **PolarisProd**.

Property	Value
APPSERVER	PolarisProd
APPSERVERNAME	PolarisProd

6. On the main menu, select **Transform, Generate Transform** as shown:




7. Type a name for the transformed file and save it to the **MST** directory. Do not put the transformed file in the **Templates** folder. The default name of the transform file will be the template name. Since you likely have both training server and a production server, edit the name to indicate the server. The example below uses **PolarisLS-PolarisProd.mst** to indicate the production server:



8. Click **Save**. You may now close Orca.

Create the DNS Record PolarisUpdates

Your network administrator should create, in the DNS manager, a Host (A) or CN record (depending on your DNS configuration) for **PolarisUpdates** that will point to the server running the Polaris Client Deployment services. Here is a snippet of what the record will look like in the DNS Manager if you are using DNS:

DNS Manager	
	
Name	Type
PolarisUpdates	Host (A)

Note:

This example shows a Host (A) record. Your network may require a CN record instead.

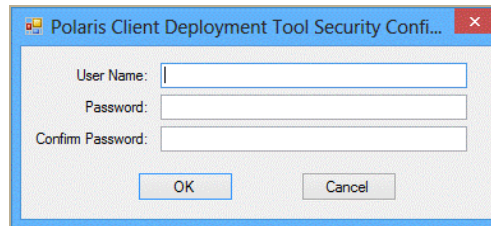
Set Up the Service Account

Use the standalone Polaris Client Deployment Tool Security Configuration application to write the encrypted user name and password to the database. This tool can be found with the Polaris Client Deployment Tool software. You must know the account name and password that will have the appropriate rights to the

workstations to install software. It runs stand-alone and has no installer. Simply run the application and if the DNS information is correct (see "Create the DNS Record PolarisUpdates" on the previous page), the tool will locate the deployment server database and allow you to input the credentials that are necessary.

Due to security implications, this tool only writes the encrypted information to the database and has no retrieval capability to decrypt the information. If you make a mistake in inputting the information, simply re-run the tool, type the correct information, and click **OK** to save it to the database. You need write access to the Polaris Deployment database to save the information. Write access is granted by default to administrators. See your database administrator if you need rights to the database to write this information.

When you launch the Polaris Client Deployment Tool Security Configuration application, the following application window opens:

The image shows a Windows-style dialog box titled "Polaris Client Deployment Tool Security Confi...". It contains three text input fields labeled "User Name:", "Password:", and "Confirm Password:". Below the fields are two buttons: "OK" and "Cancel". The dialog box has a standard Windows title bar with a close button (X) in the top right corner.

Type your credentials and click **OK**.

Important:

Use the **DOMAIN\USERNAME** format (not the **USERNAME@DOMAIN** format) when specifying the **User Name**.

Using the Client Deployment Tool

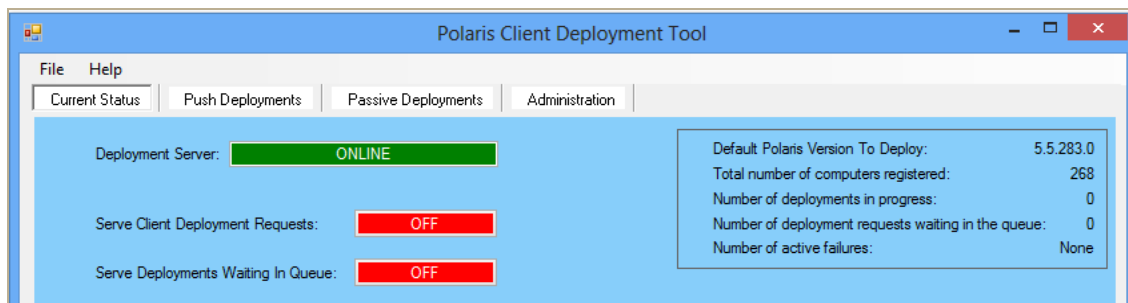
Use the Polaris Client Deployment Tool to configure and start client deployments, and monitor their progress.

Accessing the Client Deployment Tool Console

You can place the Polaris Client Deployment Tool executable in any convenient location; for example, on the administrator's workstation desktop.

When you double-click the executable, the Polaris Client Deployment Tool application opens to the Current Status tabbed page. This page offers summary deployment status (see "Monitoring Deployment Progress" on page 18) and controls to activate and deactivate the deployment server and deployment requests.

When you are initially setting up the client deployment tool, you will want to click the button to the right of **Serve Client Deployment Requests** to turn this function off until you are ready. The Serve Client Deployment Requests function is then displayed in red, as shown below:



Note:

If this is the first time you have run this application, your screen will look slightly different. See "Launching the Polaris Client Deployment Tool for the First Time" on page 32 for the first-time execution of this display.

Configuring Deployment

Do the following preliminary steps to configure the deployment each time you do a deployment:

- **Specify Polaris installation versions.** You may have different Polaris versions in your training environment and your production environment. You can add versions, and specify a selected version as the system default. See "Specify Polaris Versions" on the next page.
- **Set up deployment package configurations.** A package configuration specifies what client software to deploy. See "Set Up Deployment Package Configurations" on page 11.
- **Assign the package to computers.** This will allow the computers that are getting their deployments passively (that is, you are not pushing the deployments out) to install the correct package when the old

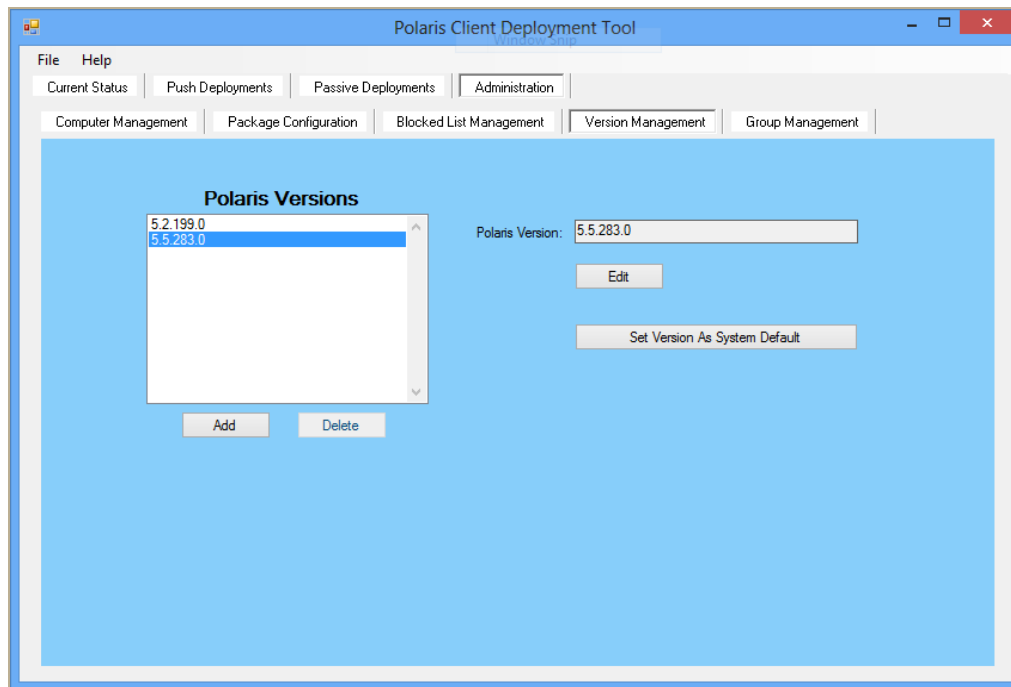
client is executed and determines it needs to upgrade. See "Setting Up Passive ("Pull") Deployment" on page 16.

Certain administrative tasks can be done to ease the deployment process, especially if your system has a large number of workstations or branches. These are not necessary to do for each deployment; for example:

- **Set up deployment groups.** Specify groups of computers that can be logically grouped together to ease management tasks. For example, you might place all ExpressCheck workstations in the production environment in a single group. See "Set Up Deployment Groups" on page 12.
- **Block selected computers from automatic deployment.** Your system may include workstations that should not be subject to automatic deployment. See "Block Specific Computers From Deployment" on page 13.

Specify Polaris Versions

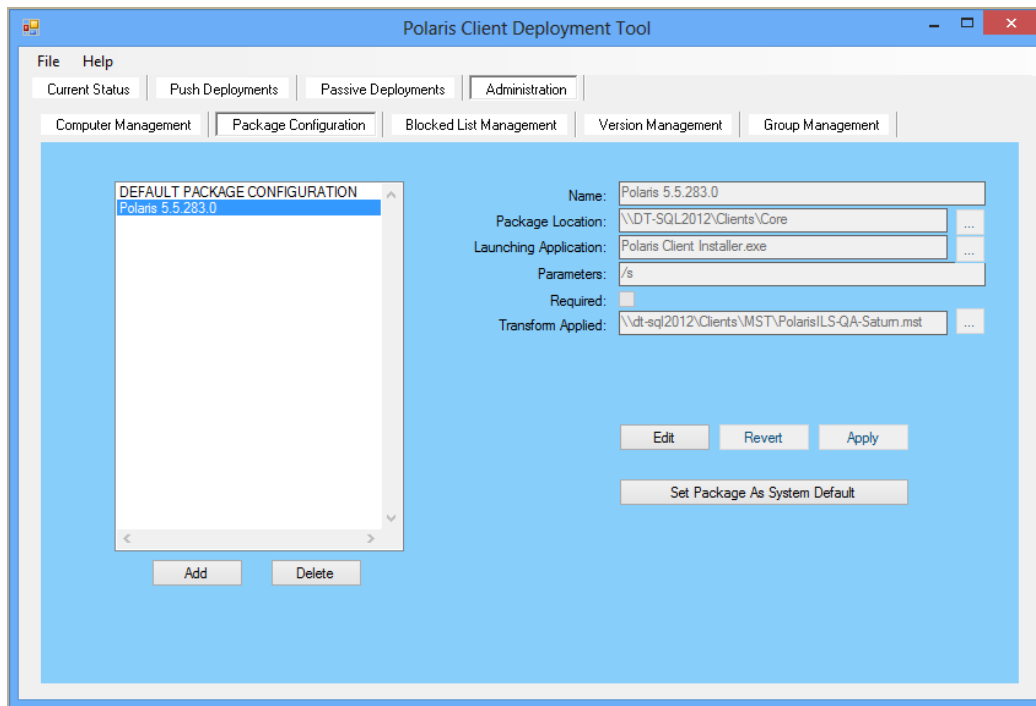
An automatic deployment targets a specific version of Polaris. For example, you may want a deployment package with one version that is applied to staff computers in the production environment, and a deployment package with a new version that is applied to computers in the training environment. Use the Administration tabbed page - Version Management subtab to specify Polaris versions.



- **Add a version** - Click **Add** under the **Polaris Versions** list and type the version in the Polaris Version field. Then click **Apply**.
- **Change a version name** - Click **Edit** and type the new name. Then click **Apply**.
- **Delete a version** - Select the group in the **Polaris Versions** list and click **Delete**.
- **Designate a version as the system default** - Select the version in the **Polaris Versions** list and click **Set as System Default**.

Set Up Deployment Package Configurations

Use the Administration tabbed page - Package Configuration subtab to set up deployment packages for the various Polaris versions you have defined.



A package configuration called **Default Package Configuration** is already defined and is part of a predefined group called **Default Group** (see "Set Up Deployment Groups" on the next page). You can edit the name and content, but there must always be at least one defined package configuration. It is highly recommended that the Default Package Configuration install the Polaris ILS staff client software only.

To edit an existing configuration:

1. Select the package from the list of configurations available.
2. Click **Edit**.
3. To save your changes, click **Apply**.

To define a new configuration:

1. Click **Add**.
2. Type a name for the package.

Important:

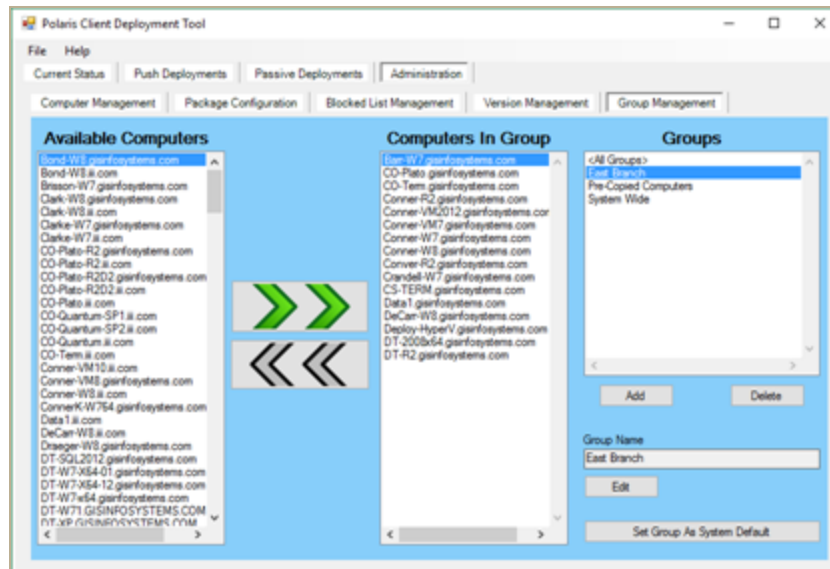
Define a package name that identifies the feature set in the package. When you set up push deployment, you will select a package to deploy from the names you have defined.



3. Set the **Package Location** to the \\share\Clients\Client<version>\Core folder location.
4. To specify **Launching Application**, clicking the ... button. Navigate to the \\share\Clients\Client<version>\Core folder and select the **Polaris Client Installer.exe** executable.

5. In the **Parameters** box, type **/s**. This represents the silent switch.
6. If this package is required when deployed via passive deployment (that is, the client requests the deployment), check the **Required** box. This selection will force the workstation to take the upgrade when running the client, or exit. The selection essentially prohibits the old client from running until the workstation is upgraded to this particular package, if the client is assigned to this package.
7. For **Transformed Applied**, click the ... button, navigate to the **\\share\Clients\Client<version>\MST** directory, and select the appropriate MST file that will be assigned to this package.
8. Click **Apply** to save your changes.

Set Up Deployment Groups

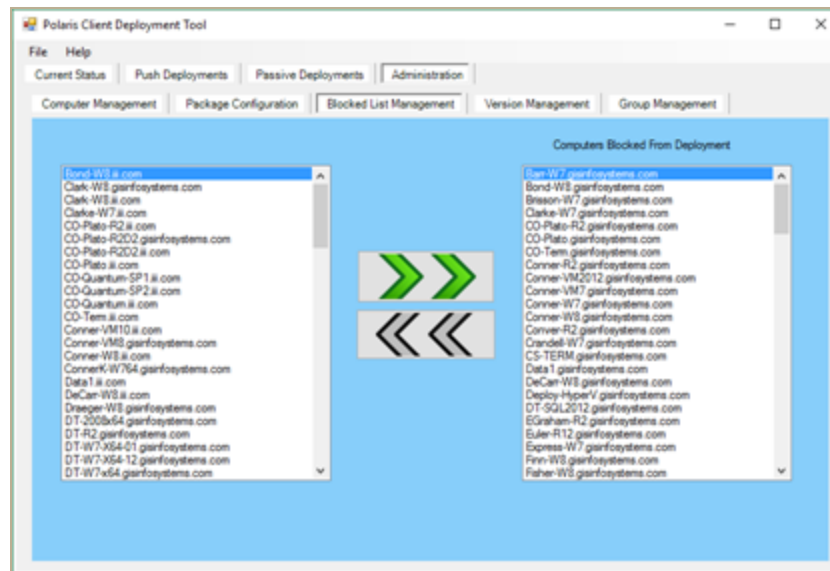
Use the Administration tabbed page - Group Management subtab to set up groups of workstations. These groups can be defined logically, such as by branch or for a specific deployment. For example, you might set up a group for all those workstations that need only Polaris ExpressCheck client software.






- **Add a computer to an existing group** - Select the group in the **Groups** list. Then select the computer in the **Available Computers** list and click . The computer is placed in the **Computers in Group** list.
- **Remove a computer from an existing group** - Select the group in the **Groups** list. Then select the computer in the **Computers in Group** list and click .
- **Add a group** - Click **Add** under the **Groups** list and type a name for the group in the Group Name field. Then click **Save**.
- **Delete a group** - Select the group in the **Groups** list and click **Delete**.
- **Designate a group as the system default** - Select the group in the **Groups** list and click **Set Group as System Default**.

Block Specific Computers From Deployment

Use the Administration tabbed page - Blocked List Management subtab to block specific computers or groups of computers from automated deployment.



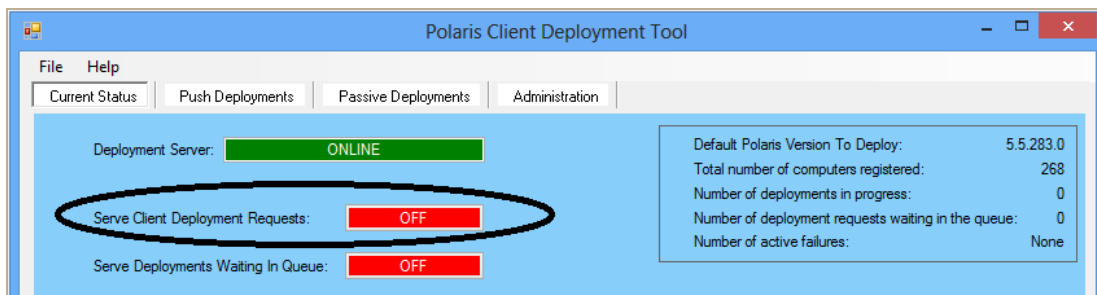
- **Block a group** - Select **Groups** in the **List Filter**, select a group from the list, and click . The group is placed in the **Blocked** list.
- **Block a computer** - Select **Computers** in the **List Filter**, select a computer from the list, and click . The computer is placed in the Blocked list.
- **Unblock a computer or group** - Select the computer or group in the Blocked list and click . Your selection is moved to the unblocked list.

Setting Up “Push” Deployments

With this method, you “push out” the installation of specified packages to selected groups or workstations. You can also choose to pre-copy client files to locations, perhaps where network speed is an issue, to reduce network congestion when you actually deploy the installation.

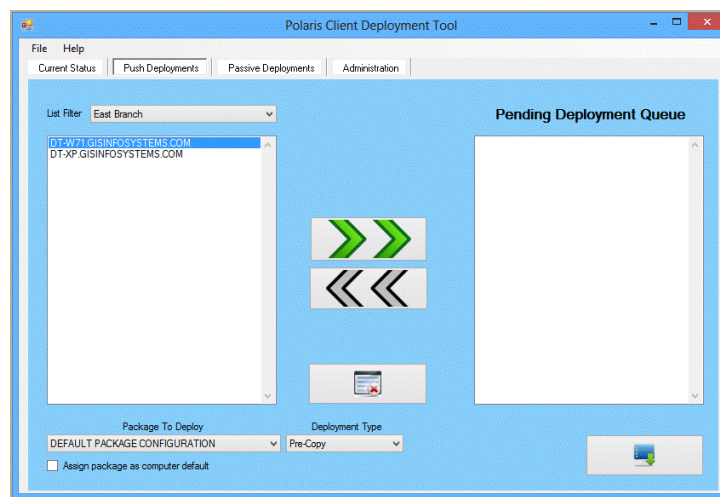
Important:

If you plan to pre-copy client files, first set **Serve Client Deployment Requests** to **Off** on the Current Status tabbed page. This setting prevents upgrades until the pre-copy is complete.

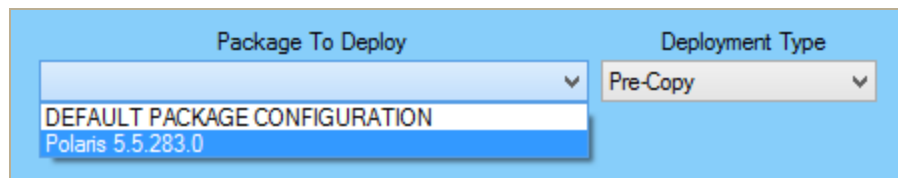


When the server is upgraded and you are ready to deploy the installation, set **Serve Client Deployment Requests** to **On**.

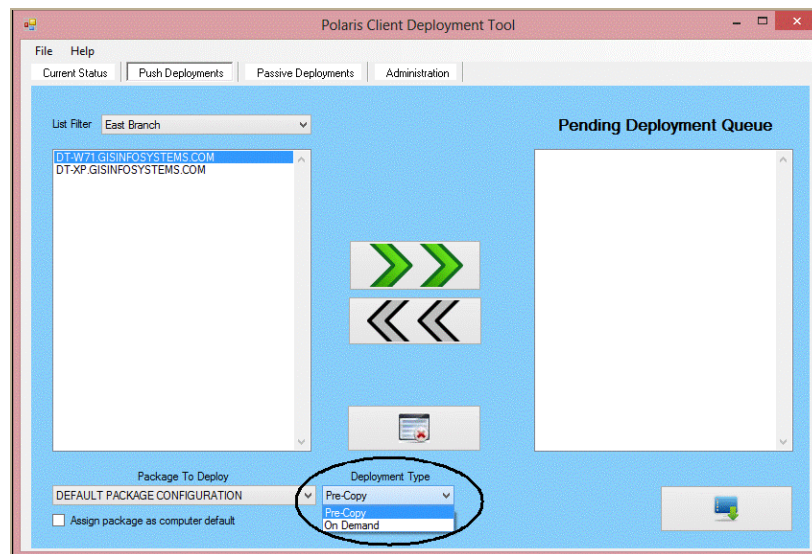
1. Select a group list filter. All workstations in the selected deployment group are listed. See "Set Up Deployment Groups" on page 12.



2. Select a package to deploy. See "Set Up Deployment Package Configurations" on page 11.



3. Select a deployment type:





- **Pre-Copy** - *Highly recommended. This is the default behavior.* The designated package will be copied to the specified workstations, to be installed later. This method saves much time during installation by freeing network bandwidth from copying files. If you select this option, uncheck **Assign as computer default**. With this option, if the pre-copy is complete, when the staff user starts the staff client application, a message informs the user the upgrade is required, and the upgrade commences. If the pre-copy process fails because the workstation is off, the process commences when the workstation is turned on.
- **On Demand** - Installation of the designated package will begin on the specified workstations when the deployment is launched. See step 4. If you select this option, select (check) **Assign as computer default**. With this option, when the staff user starts the staff client application, a message appears. The user can choose to install the upgrade or defer it to another time. This option is convenient when certain workstations will be used offline during an upgrade.

Note:

To remove all workstations and groups from the pending deployment queue, click the clear icon



4. Click  to pre-copy or launch the deployment to groups and computers in Pending Deployment Queue.
 - If you selected the **Pre-Copy** deployment type (step 3), the client files are copied to **C:\\PolarisClientInstall** on the selected workstations. When you are ready to start the installation on these workstations, place them in the Pending Deployment Queue, select the **On Demand** deployment type, and click .
 - If you selected the **On Demand** deployment type (step 3), the installation begins immediately.

Note:

The installation program checks for the files even if they were pre-copied. If the copy process

failed on a computer for any reason, the files are copied to that computer again as part of the installation.

Setting Up Passive (“Pull”) Deployment

With this method, the upgrade is initiated from the client. When the user logs on, the client application performs a version check at startup and, if out of revision, checks to see if there an upgrade available. If so, it prompts the user to upgrade.

Once a client communicates with the deployment server, a value is returned that determines how the upgrade, if any, is going to proceed. There are four possible deployment server return values:

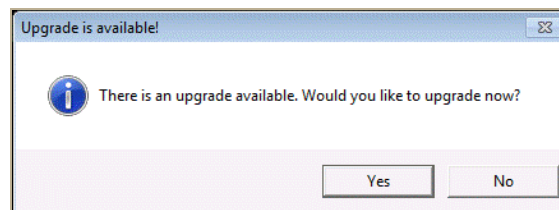
- No
- No - Already Pending
- Yes - Optional
- Yes - Required

Note:

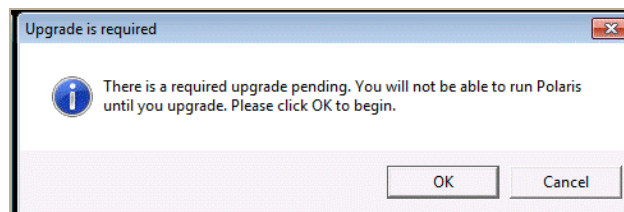
If the client is unable to communicate with the Polaris deployment server, no deployment communication takes place. The user can log on to the currently installed version.

New installations - For workstations that do not have Polaris client software installed, the administrator can make the client application available from a network share or by some other means (such as a USB stick), and the client can be manually installed from that location by users who do not have administrator rights - by running only the Polaris client executable **Polaris.exe**. When the user goes to that location, executes **Polaris.exe** and clicks **Yes** to install the client software when prompted, the installation (including any necessary prerequisites) proceeds.

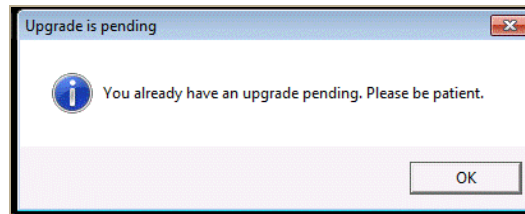
Optional upgrades - When the user starts the Polaris client application, an optional upgrade message is displayed. If the user clicks **Yes**, the upgrade proceeds, and no further user input is required. If the user clicks **No**, the currently installed client version opens, and the user can proceed to work offline.



Required upgrades - When the user attempts to start the Polaris application and the upgrade is required, the user must click **OK** to begin the upgrade. No further user input is required. If the user clicks **Cancel**, the upgrade is not installed but the user cannot log on to the currently installed version.




Pending upgrades - Once the optional or required upgrade is in progress, if the user attempts to launch Polaris again, the client will notify the user that the client is being upgraded and it is unable to continue until the installation process is complete.



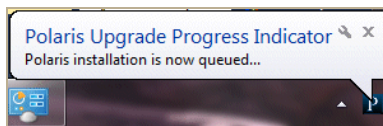
No upgrade available - If the assigned version reveals that the user's client application version is the same as or newer than that available on the deployment server, and the user starts the client application, log-on to the currently installed version simply proceeds. No message is displayed.

Deployment tool unavailable - If the deployment tool is unavailable, a message is displayed. The user can notify the administrator in case the administrator is unaware of the problem, and continue to log on and work with the current version on the workstation without upgrading.

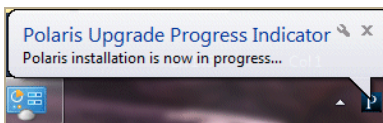
When the user accepts an optional upgrade or acknowledges a required upgrade, a notification is sent to the deployment server so that the administrator is able to see a status report while the clients are being deployed

and installed. On the client workstation, a Polaris icon  is displayed in the system tray. Balloon tips and icon text report the progress of the installation:

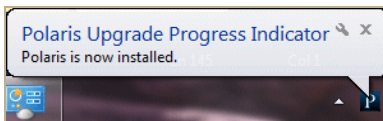
- When the installation request is queued:




- When the client software is being installed:

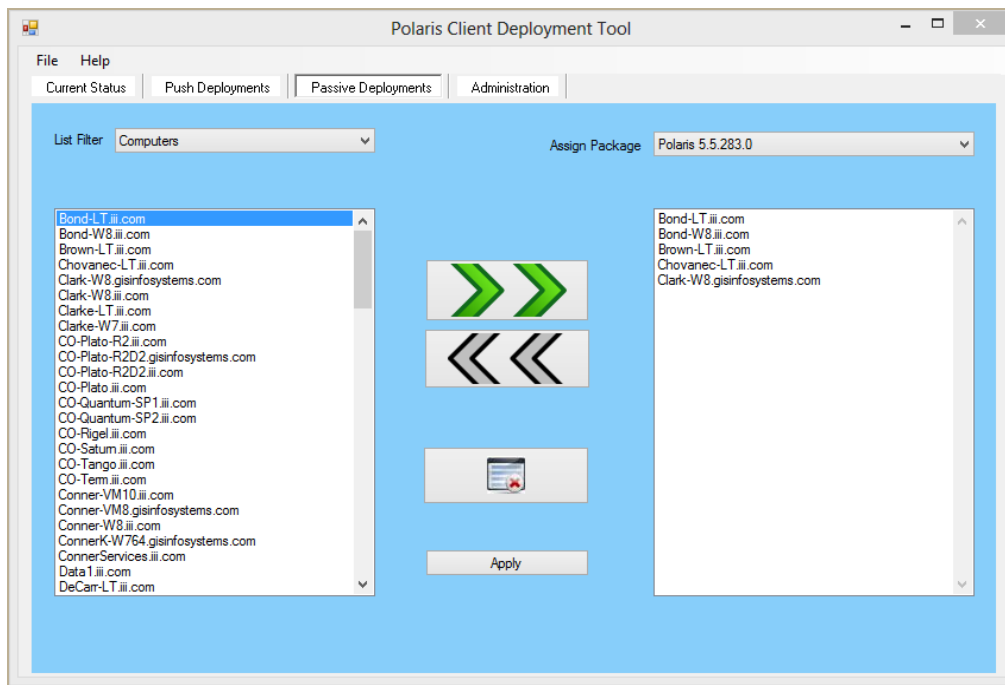


- When the installation is complete:



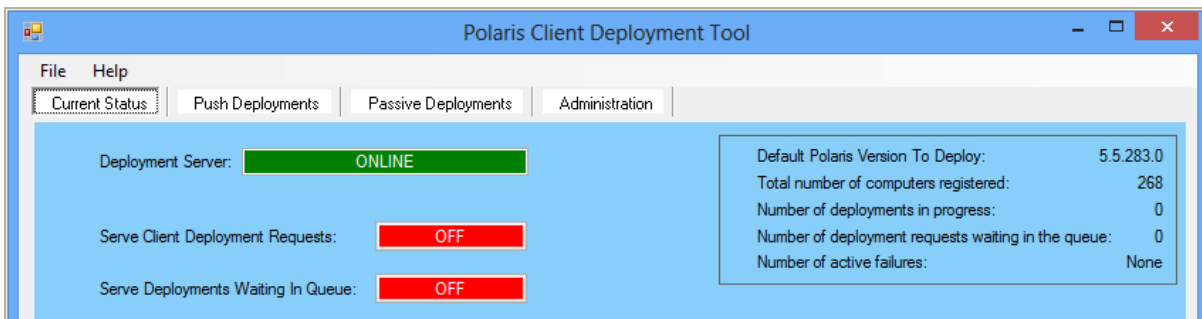
Changing the Deployment Package for Multiple Computers

You can also use the Passive Deployments options to change the deployment package for multiple computers. Select the computers in the list, click , and choose the assigned package and version under the selected list. Click **Apply** to assign the package to the computers in the right column.



Monitoring Deployment Progress

The Current Status tabbed page summarizes deployment status.



- **Total number of computers registered** - The total number of computers registered with the deployment service. Each time the client is executed, it checks with the deployment service to see if a new update is available. By this process we are able to determine the number of unique client computers that are known to the deployment service.
- **Number of deployments in progress** - This number matches the number of machines listed as in progress.
- **Number of deployment requests waiting in queue** - The number diminishes as the deployment progresses.
- **Number of active failures** - Records how many computers encountered an issue while the client was being deployed. At the end of the deployment, this number should be 0.

If deployment has stalled or failed on individual computers, you can restart it. See "Clearing a Stalled Deployment" below.

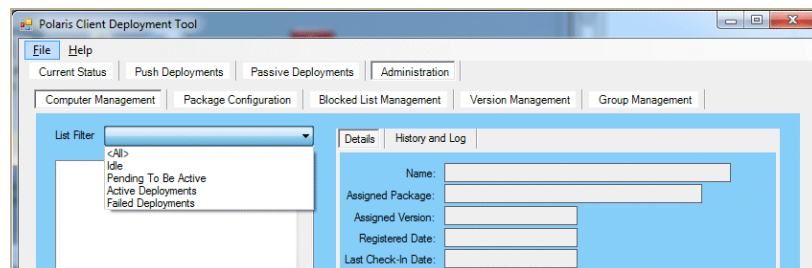
Editing Settings for Individual Computers

Use the Administration tabbed page - Computer Management subtab to inspect and change the state of individual workstations; for example, to clear a stalled deployment, change a computer's assigned package, or check a computer's status.

Clearing a Stalled Deployment

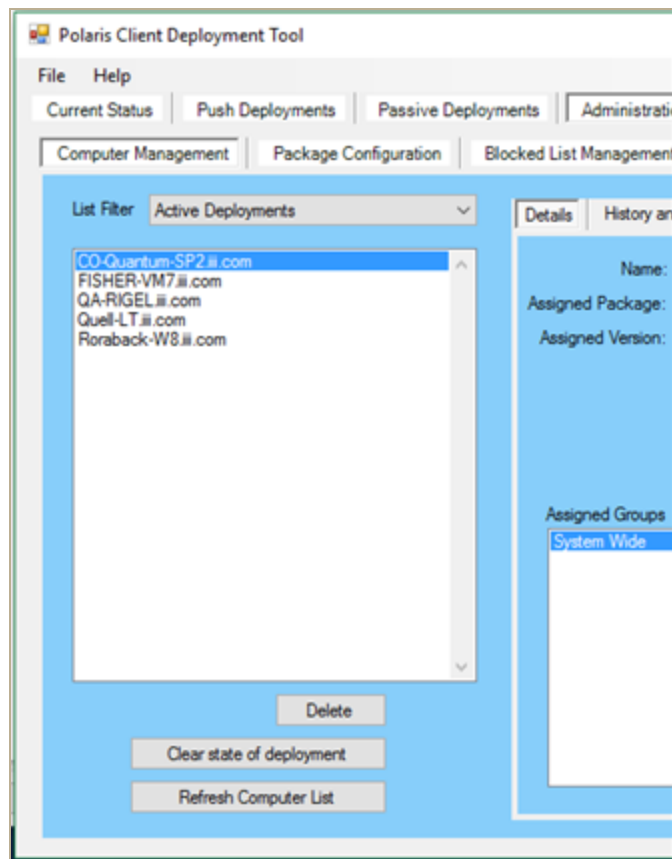
If a deployment "stalls" on an individual computer, perhaps because of message failure, you can use this method to clear the stall and restart the deployment:

1. Select the **Idle**, **Active Deployments** or **Failed Deployments** list filter to list computers where the deployment has stalled or failed.



2. Select the computer in the list.
3. Click **Clear state of deployment**. This will set the computer back to an idle state so that the deployment service can respond to a deployment request for that particular computer, either by push or passive deployment strategy.

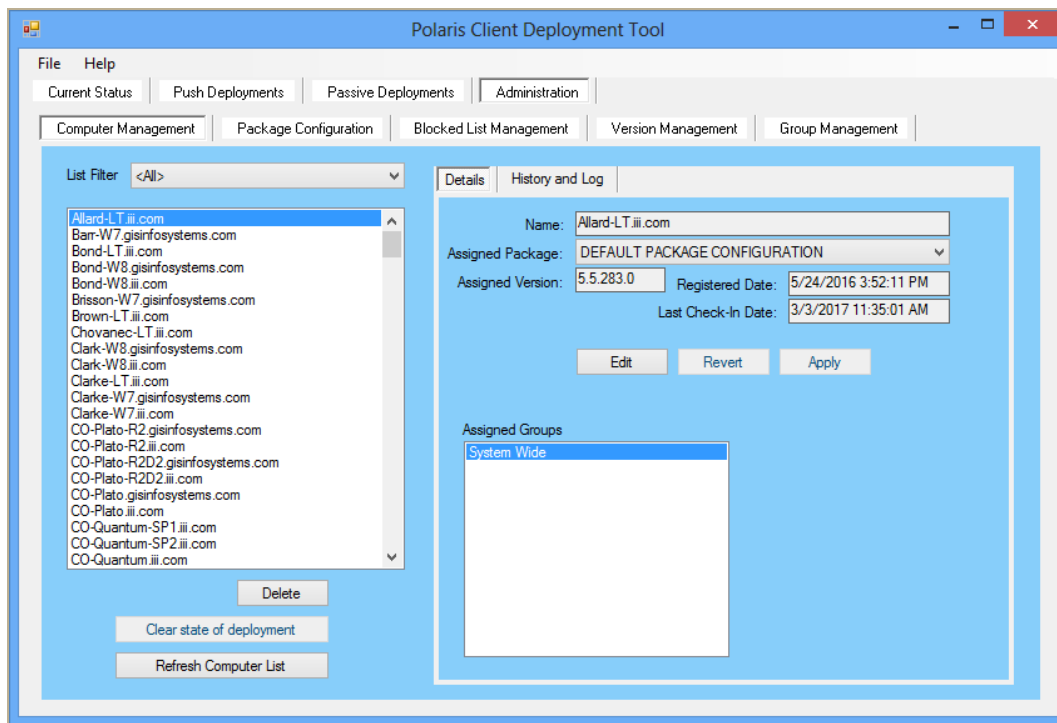
The illustration shows active deployments where you might clear the deployment because you suspect that it is taking too long.



Changing a Computer's Assigned Package

To change a computer's assigned package:

1. Click the **Details** subtab on the right side of the window.
2. In the left list, select the computer you wish you update.
3. In the right side, click the **Edit** and change the package in the **Assigned Package** drop-down list.



4. Click **Apply**.

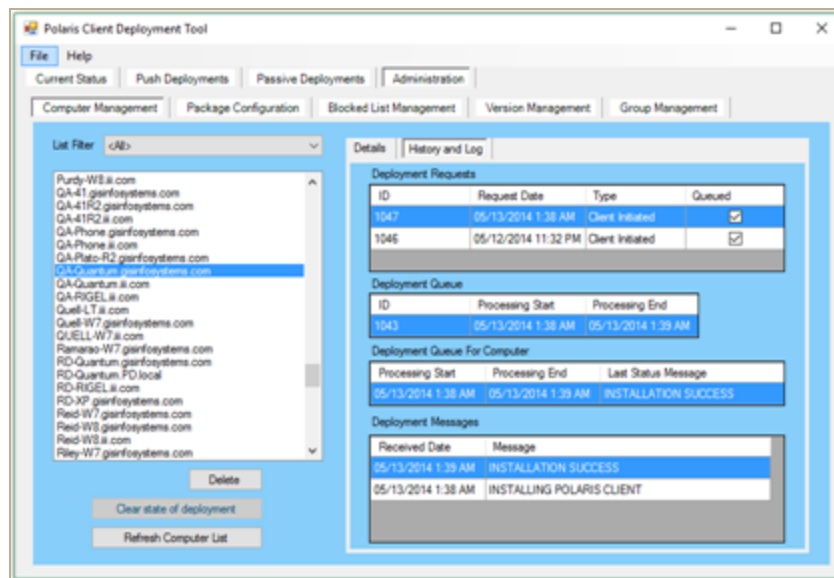
Note:

On the Computer Management subtab, you can view the computer's currently assigned groups. Use the Administration tabbed page - Group Management subtab to change the computer's assigned groups.

The **Last Check-In Date** indicates the last time the workstation “checked in” with the deployment server.

Checking Individual Status

Use the History and Log subtab to view deployment requests and messages from the installation.

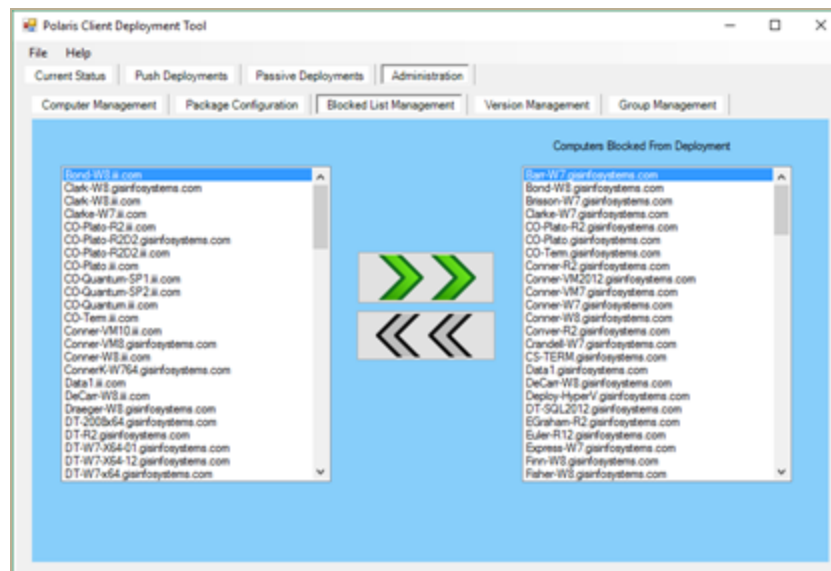


Blocked Computers

You can add individual workstations to the Blocked list from the Administration tab (**Blocked List Management**).

Note:

The deployment service does not support client installation to a Windows server. Add all the Polaris-related servers to the blocked list.



Computers Without Polaris

If a workstation has never had a Polaris installation, make a network share to the Polaris Upgrade Progress Indicator (PUP) and the Polaris ILS “bootstrapper” (**Polaris.exe**). Double-click **Polaris.exe** to place the new workstation in the list, then click **Cancel** when prompted to upgrade. This registers the workstation with the deployment service.

Alternatively, you can choose to allow the client upgrade to proceed. The system features defined for the default package, which is used when there is no assigned package for a computer, will be installed.

Appendix: Installing the Polaris Client Deployment Service

This section describes the preliminary service installation steps for automating Polaris client deployment. See the following sections:

- "SQL Server DeploymentShell Database Restore" below
- "Installing the Polaris Client Deployment Tool Web Service" on page 26
- "Installing the Polaris Client Deployment Tool Windows Service" on page 30
- "Running the Client Deployment Tool Security Configuration Tool" on page 31
- "Launching the Polaris Client Deployment Tool for the First Time" on page 32

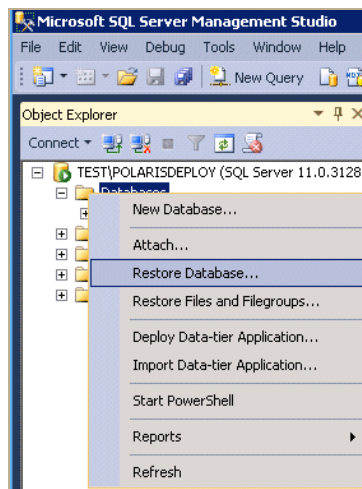
SQL Server DeploymentShell Database Restore

This procedure is based on the following assumptions:

- SQL Server 2012 Express or later is installed.
- The SQL Instance **PolarisDeploy** is the named instance.
- DNS for **PolarisUpdates** is not configured. This prevents clients from trying to connect until after the web service is actually installed and running. See "Preparing for Automatic Deployment" on page 3 and "Create the DNS Record PolarisUpdates" on page 7.

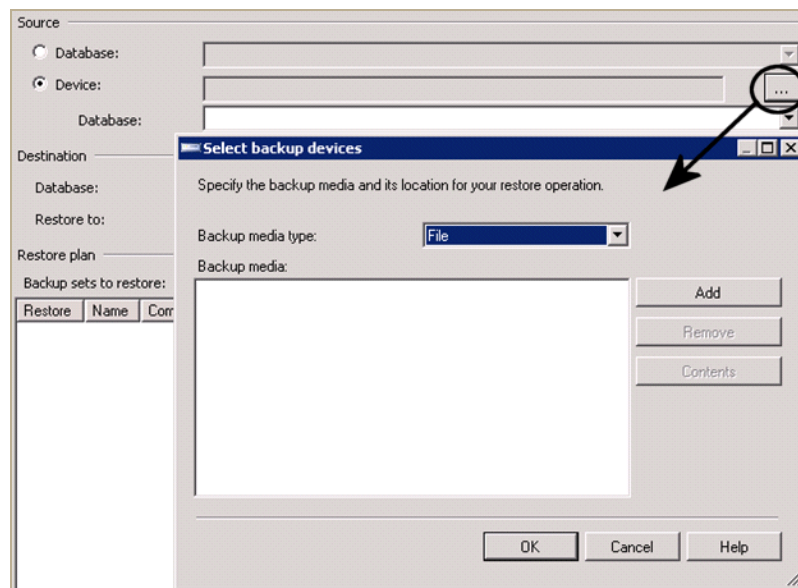
Locate the **Polaris Client Deployment Database** folder in the Polaris Client Deployment Tool software package. The folder contains a single .bak file called **DeploymentShell.bak**, the SQL Server database shell for the deployment tool.

1. Launch SQL Server Management Studio.
2. Connect to the PolarisDeploy instance.
3. In the object explorer, expand the server instance node and right-click the **Databases** folder.
4. Select **Restore Database** as shown below:

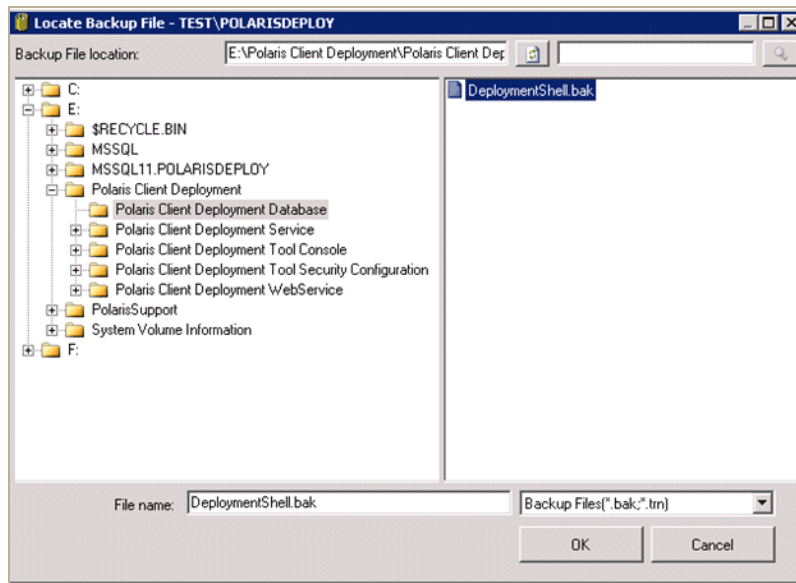


The Restore Database dialog box opens.

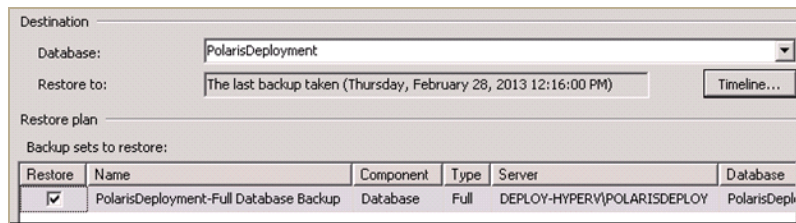
5. For **Source**, select **Device**, then click the ... button. The **Select backup devices** dialog box opens.



6. Click **Add** and navigate to the **Polaris Client Deployment Database** folder.
7. On the right pane, select **DeploymentShell.bak** as shown:



- Click **OK** on the Locate Backup File dialog box, and click **OK** on the Select backup devices dialog box. The **Destination** and **Restore plan** sections on the Restore Database dialog box are now filled in as shown below:



The database files will be automatically restored to the defined defaults for the database directory for this particular SQL Instance.

- Click **OK** to start the restore. If it is successful, you see this message:

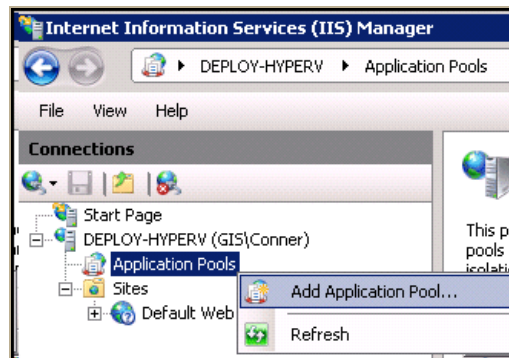


By default, the NETWORK SERVICE account on the local machine has full DBO access to the database.

Installing the Polaris Client Deployment Tool Web Service

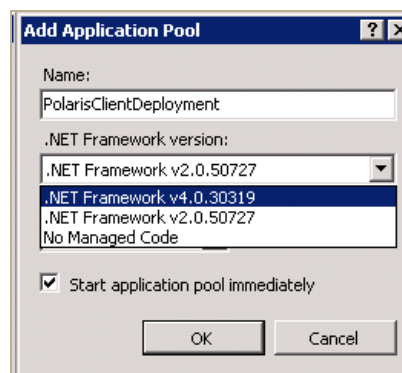
This procedure is based on the following assumptions:

- IIS is installed with its default configuration
 - DNS for **PolarisUpdates** is not configured. This prevents clients from trying to connect until after the web service is actually installed and running. See "Preparing for Automatic Deployment" on page 3 and "Create the DNS Record PolarisUpdates" on page 7.
1. Launch the Internet Information Services (IIS) Manager on the server that will be running the web service.
 2. Navigate as shown below and right-click **Application Pools**; select **Add Application Pool** from the context menu.

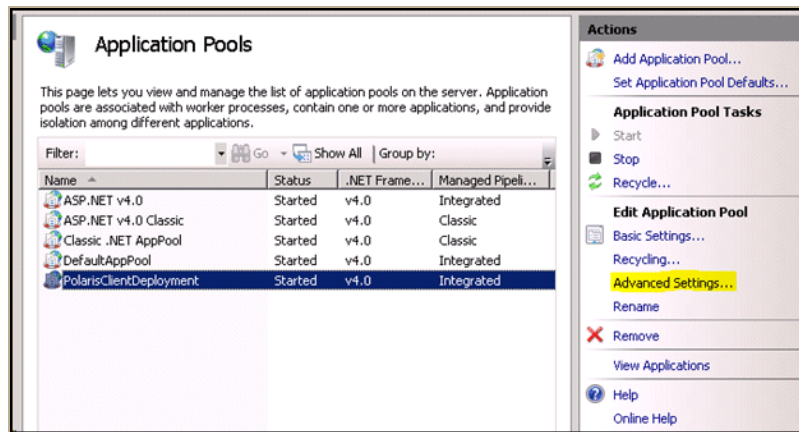


The Add Application Pool dialog box opens.

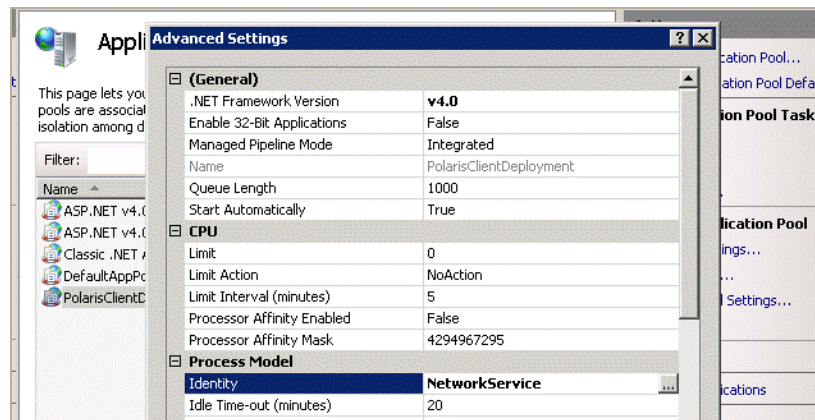
3. Type the name **PolarisClientDeployment** and select the .NET framework version **v4.0.30319**. (Leave **Managed Pipeline Mode** set to **Integrated**.) Then click **OK**.



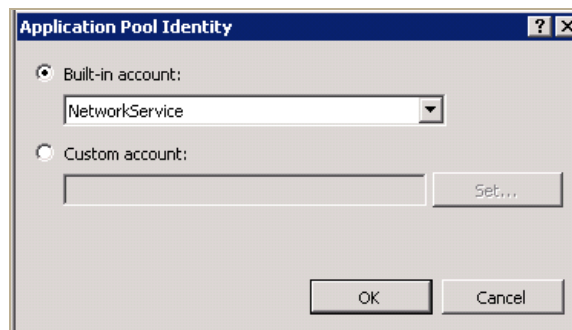
4. In the Application Pools list, highlight **PolarisClientDeployment** and click **Advanced Settings** in the Actions pane on the right.



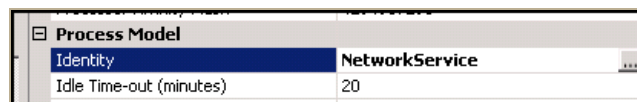
The Advanced Settings dialog box opens.



- Under the **Process Model** section, confirm that the identity of the PolarisClientDeployment application pool is set to **NetworkService**. If it is not, click ... and change it on the Application Pool Identity dialog box. Then click **OK**.



The Process Model should look like this:

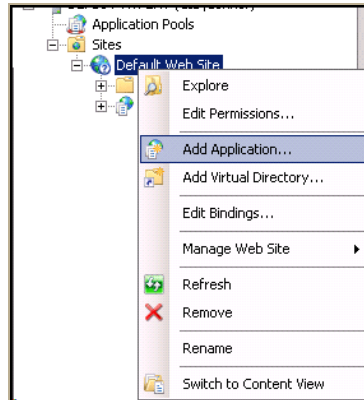


- Click **OK** to close the Advanced Settings dialog box.
- On the left side of the Internet Information Services (IIS) Manager, expand the **Sites** folder to reveal the **Default Web Site** folder.

Note:

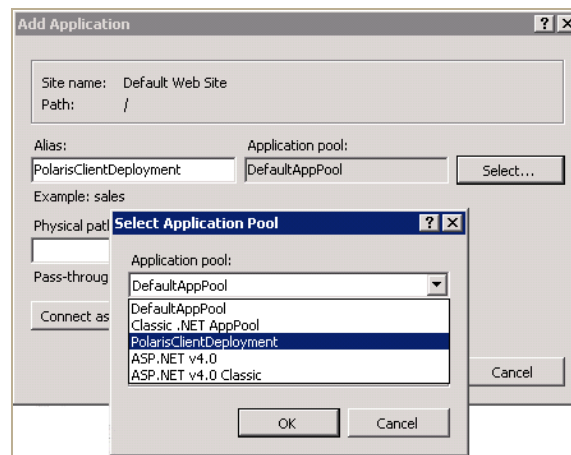
If you expand the **Default Web Site** folder you will see the **aspnet_client** folder. You will be adding the PolarisClientDeployment application.

- Right-click **Default Web Site** and select **Add Application**.

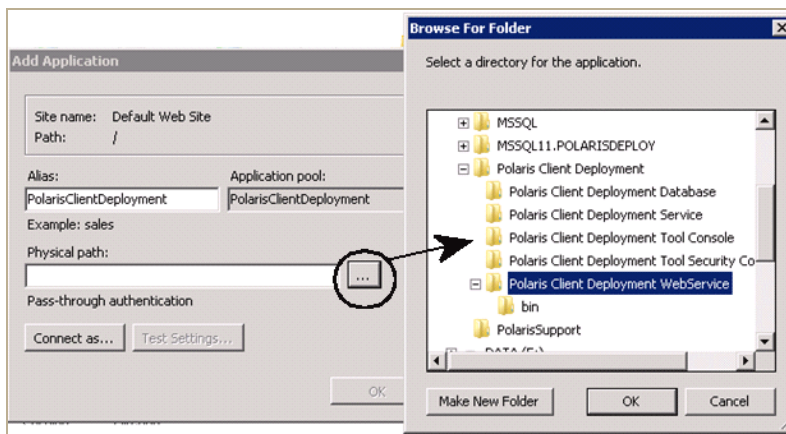


The Add Application dialog box opens.

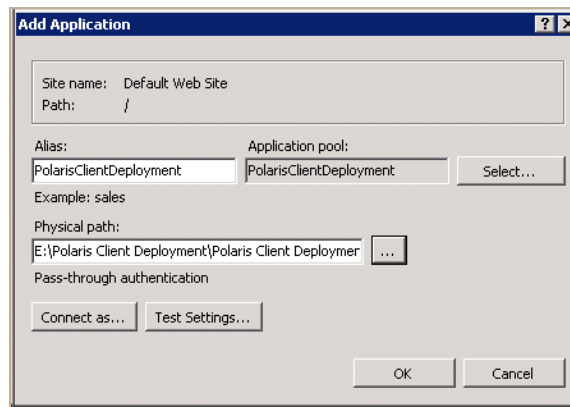
- On the Add Application dialog box, type **PolarisClientDeployment** (all one word) in the **Alias** box.
- Click **Select** by the **Application pool** field and change **DefaultAppPool** to **PolarisClientDeployment**.



- Click ... by **Physical path** and navigate to the **Polaris Client Deployment WebService** folder as shown below:

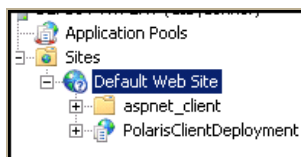


The Add Application box will now look like this:



12. Click **OK** to close the Add Application dialog box.

The **Sites** area of the IIS manager explorer now looks like this:

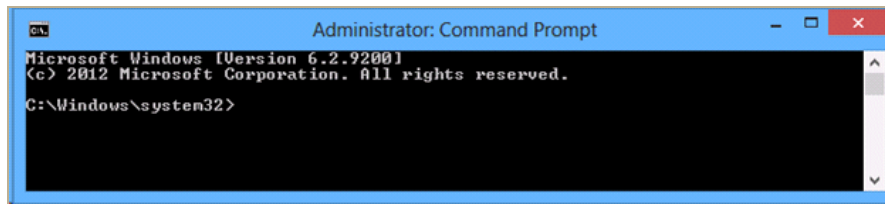


The web service installation is complete.

Installing the Polaris Client Deployment Tool Windows Service

The DNS entry for **PolarisUpdates** can already exist at this point. See "Create the DNS Record PolarisUpdates" on page 7.

1. Open an elevated command prompt. **Administrator** appears in the title bar. The illustration shows an example.



2. Type the following:

CD \Windows\Microsoft.NET\Framework64\v4.*

Be sure to include **64** in the name.

The Command Prompt window displays the following text:

```
C:\Windows\System32>cd \windows\microsoft.net\framework64\v4.*  
C:\Windows\Microsoft.NET\Framework64\v4.0.30319>_
```

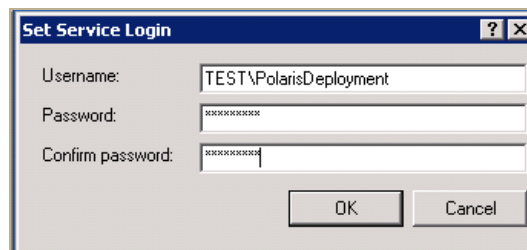
3. For the purposes of this example, assume that the **Polaris Client Deployment Tool** Windows Service is located on the E: drive in the folder **Polaris Client Deployment**. Type the following command line:

InstallUtil E:\Polaris Client Deployment\Polaris Client Deployment Service\PolarisInstallationService.exe

```
C:\Windows\System32>cd \windows\microsoft.net\framework64\v4.*  
C:\Windows\Microsoft.NET\Framework64\v4.0.30319>installutil "E:\Polaris Client Deployment\Polaris Client Deployment Service\PolarisInstallationService.exe"_
```

4. Press **ENTER**. The Set Service Login dialog box opens.
5. Provide a domain username/password for the service to run under. This service account must have rights to copy files to the local workstations.

In this example, a special domain account called **PolarisDeployment** has those rights. Your account will likely differ from the example.



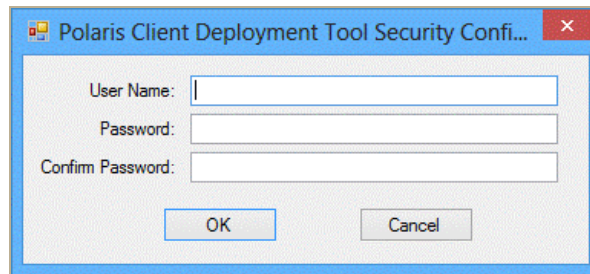
6. Click **OK** to finish the installation of this service.

Running the Client Deployment Tool Security Configuration Tool

The DNS entry for **PolarisUpdates** has been created at this point. See "Create the DNS Record PolarisUpdates" on page 7.

After you have installed the web service and Windows service you need to configure the security of the Deployment Tool Web Service. Until you do this, the service will be unable to deploy any clients.

1. Launch the **Polaris Client Deployment Tool Security Configuration.exe** application from the **Polaris Client Deployment Tool Security Configuration** folder.



2. Type the credentials for the domain account that has "local admin" rights to the workstations for which the Polaris software will be deployed.
3. Click **OK** to complete this configuration.

Launching the Polaris Client Deployment Tool for the First Time

When you run the Polaris Client Deployment Tool for the first time, you see the following window. For details on setting up your deployment environment, see "Using the Client Deployment Tool" on page 9.

