LEXMARK™

Print Release, Accounting, and My e-Task for Lexmark Solutions Platform On Premise version 1.3

Installation Guide

Contents

Overview

Lexmark^{TM} Solutions Platform On Premise provides a framework for managing and tracking document output throughout your organization. It is composed of three core functions: Print Release, Accounting, and My e-Task.

Using Print Release, you can submit documents to a server-based print queue and then release print jobs at a connected printer using a user name and password or a badge. Using Print Release increases security, increases your awareness of the amount of jobs printed, and reduces waste created from unwanted or unnecessary print jobs.

Using Accounting, you can view and export reports of your print, copy, scan, e-mail, and fax jobs.

Using My e-Task, you can configure copy and e-mail preferences as well as create customized shortcuts for frequently performed copy and e-mail jobs. You can also customize the language that you want the printer to use whenever you authenticate at any printer.

Getting started

The Lexmark Solutions Platform requires the following prerequisites to be met before installation of the core solution and other solutions can continue. Make sure:

___ Minimum or recommended system requirements are met.

___ Internet Explorer Enhanced Security Configuration is disabled.

___ The virus checker on servers and print servers is turned off.

___ You have administrator-level account permissions.

___ User account control is disabled during installation.

___ .NET Framework 3.5.1 SP1 is installed.

___ Internet Information Services (IIS) 6 or 7 is installed.

___ Windows SharePoint Services 3.0 SP2 is installed.

___ SNMP Service is running.

Minimum and recommended system requirements

Operating system requirements

Any of the following:

- Windows Server 2008 R2 Standard and Enterprise Edition

- Windows Server 2008 SP2 Standard and Enterprise Edition (x86 or x64)

- Windows Server 2003 R2 Standard or Enterprise Edition with SP2 (x86 and x64)

Note: An x86-based system refers to a 32-bit operating system, and an x64-based system refers to a 64-bit operating system.

Hardware requirements for installing Windows SharePoint Services

The Lexmark Solutions Platform uses Windows SharePoint Services to monitor and manage the devices and solutions in the system. SharePoint installation can range from a single computer (basic installation) to many computers (advanced). For additional information, see the Windows SharePoint Web site.

Basic installation

Category	Required	Recommended for enterprise systems
Processor	2.5GHz dual-core	Dual processors that are 3GHz or faster each
RAM	1GB	2GB
Hard disk drive	NTFS file system–formatted partition with a minimum of 3GB of free space **Note:** The listed space requirement includes both space for the application and free space for operation, but requirements may vary depending on system complexity and number of jobs.	NTFS file system–formatted partition with 3GB of free space plus adequate free space for your Web sites

Category	Required	Recommended for enterprise systems
Display	1024 × 768 resolution	1024 × 768 or a higher resolution monitor
Network speed	56Kbps connection between client computers and server **Note:** Network speed affects the time required to perform a solution, and speed requirements depend on each solution.	56Kbps or faster connection between client computers and server

Advanced installation

Category	Required	Recommended for enterprise systems
Processor	2.5GHz dual-core	Dual processors that are 2.5GHz or faster each
RAM	2GB	4GB
Hard disk drive	NTFS file system–formatted partition with a minimum of 3GB of free space **Note:** The listed space requirement includes both space for the application and free space for operation, but requirements may vary depending on system complexity and number of jobs.	NTFS file system–formatted partition with 3GB of free space plus adequate free space for your data storage requirements
Display	1024 × 768 resolution	1024 × 768 or a higher resolution monitor
Network speed	• 56Kbps connection between client computers and server • 100Mbps connection for connections between computers in your server farm **Note:** Network speed affects the time required to perform a solution, and speed requirements depend on each solution.	• 56Kbps connection between client computers and server • 1Gbps connection for connections between computers in your server farm

Other requirements

Category	Requirements
Browser	Internet Explorer 7.0 or 8.0, Mozilla Firefox 3.5 or later
Internet connection (for download and activation of software)	Broadband connection, 128Kbps or greater
Supported drivers	Lexmark Universal Print Driver 1.6.2 or later
Supported databases	Visit the Microsoft Web site for databases that work with your version of SharePoint.

Category	Requirements
Supported card readers (for user authentication on the devices)	For printers: • HID Omnikey 5325 • Magtek - TWN3281 For Print Release Appliance (PRA): • ART11230 Elatec - TWN3 HID Prox Desktop reader with USB • ART11248 Elatec - TWN3 LEGIC Desktop reader with USB For an updated list of supported card readers, contact your Lexmark representative.

Installing prerequisite services on Windows Server 2008

Disabling IE ESC on Windows Server 2008

1 Open the Server Manager.

2 From the Security Information section, click **Configure IE ESC**.

3 From the Internet Explorer Enhanced Security Configuration dialog, select **Off** in the Administrators section.

4 Click **OK**.

Installing .NET Framework on Windows Server 2008

The .NET Framework version 3.5.1 is listed in the Windows Server 2008 Server Manager Features. It can be found by navigating to **Start** > **Control Panel** > **Add/Remove Programs**. If it is not listed, then install it to enable its functions.

1 Open the Server Manager.

2 From the Features Summary View dialog, click **Features** > **Add Features**.

3 Select the **.NET Framework 3.5.1 Features** check box.

4 Click **Add Required Role Services** > **Next** > **Next**.

5 Select the **ASP.NET** check box, and then click **Add Required Role Services**.

6 From the Select Role Services dialog, scroll down and then select the **Management Tools** check box.

7 Click **Next** > **Install**.

Installing IIS 7.0 on Windows Server 2008

The Internet Information Service (IIS) 7.0 is listed in the Windows Server 2008 OS Server Manager Roles, and needs to be installed to enable its functions.

1 Open the Server Manager.

2 From the Role Summary View, click **Roles** > **Add Roles**.

3 From the Add Roles Wizard dialog, click **Next**.

4 From the Select Server Roles dialog, select **Web Server (IIS)**, and then click **Next**.

5 Click **Add Required Role Services** > **Next** > **Next**.

6 From the Select Role Services dialog, in the Application Development menu tree, select **ASP.NET**.
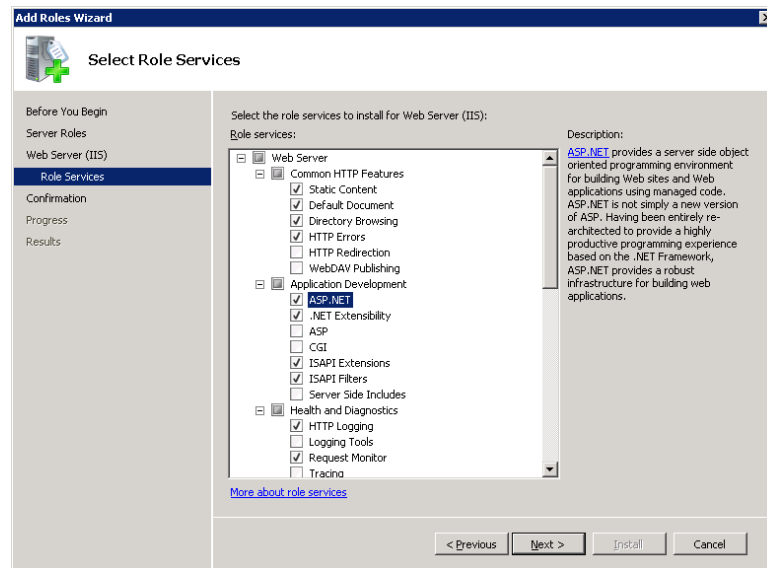
7 Click **Next** > **Install**.

Enabling ASP.NET

Enable ASP.NET v2.0 to satisfy the installation requirements for Windows SharePoint Services after .NET Framework 3.5.1 and its subsequent updates have been installed.

On 32-bit platforms

1 Open a command prompt.

2 Set your directory to `C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727`.

3 On the command line, type `aspnet_regiis.exe -i`.

When the command is completed, ASP.NET v2.0.50727 should now be on the list of Web extensions, and should be the default property in the ASP.NET tab of the Web Site Properties dialog.

4 From the Web Service Extension list on the Internet Information Services Manager, make sure the status of ASP.NET version 2.0.50727 is set to **Allowed**.

On 64-bit platforms

1 Open a command prompt.

2 Set your directory to `C:\WINDOWS\microsoft.NET\Framework64\v2.0.50727`.

3 On the command line, type `aspnet_regiis.exe -i -enable`.

When the command is completed, ASP.NET v2.0.50727 should now be on the list of Web extensions, and should be the default property in the ASP.NET tab of the Web Site Properties dialog.

4 From the Web Service Extension list on the Internet Information Services Manager, make sure the status of ASP.NET version 2.0.50727 is set to **Allowed**.

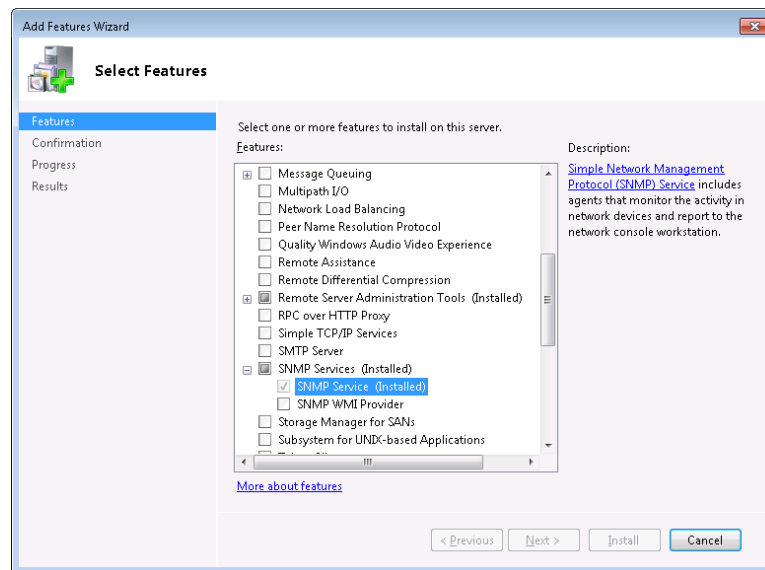## Installing SNMP Service on Windows Server 2008

1 Open the Server Manager.

2 From the Features Summary section, click **Add Features**.

3 Select **SNMP Services (Installed)**.

4 Click **+** to expand the SNMP Services (Installed) option, and then click **SNMP Service (Installed)**.

5 Click **Install**.

6 When setup finishes, restart your computer to complete the SNMP Service installation.

Configuring SNMP Service on Windows 2008

1 Click , or click **Start** > **Run**.

2 In the Start Search or Run field, type **services.msc**.

3 Locate **SNMP Service** from the list of services. Right-click the service, and then click **Properties**.

4 Click the **Security** tab, and then clear the **Send Authentication Trap** check box.

5 From the Accepted Community Names section, click **Add**.

6 From the SNMP Service Configuration dialog, do the following:

    a From the "Community rights" drop-down menu, select **READ ONLY**.

    b In the Community Name field, type **public**.

    c Click **Add**.

7 From the Security tab, select **Accept SNMP packets from any host**.

8 Click **Apply** > **OK**.

Adjusting firewall inbound rules for the new SNMP service

1 Open "Windows Firewall with Advanced Security" from the Administrative Tools menu.

2 In the left pane, click **Inbound Rules**.

3 Locate `SNMP Service` from the list.

By default, there should be two inbound rules for SNMP Service: one with "Local subnet" under the Remote Address column, and another with "Any" under the same column.

4 Double-click the rule with "Any" as a remote address.

5 From the SNMP Service Properties dialog, click the **Advanced** tab.

6 From the Profiles section, select the **Private** and **Public** check boxes to allow all incoming SNMP traffic.

7 Click **Apply** > **OK**.

Installing prerequisite services on Windows Server 2003

Disabling IE ESC on Windows Server 2003

1 Open the "Add or Remove Programs" dialog on the Control Panel.

2 Click **Add/Remove Windows Components**.

3 From the Windows Components Wizard, clear the **Internet Explorer Enhanced Security Configuration** check box.

4 Click **Next** > **Finish**.

Installing the .NET Framework on Windows Server 2003

Note: Make sure you have your Windows Server 2003 installation CD ready. You will need it to install additional Windows components.

1 Open the **Add or Remove Programs** dialog on the Control Panel.

2 Click **Add/Remove Windows Components**.

3 From the Windows Components Wizard dialog, select the **Application Server** check box.

4 Select the **Microsoft .NET Framework 2.0** check box.

5 Click **Management and Monitoring Tools** > **Details**.

  Note: Make sure you clear the **Management and Monitoring Tools** check box.

6 Select the **Simple Network Management Protocol** check box.

7 Click **OK** > **Next**.

8 Insert the installation CD when prompted.

Updating .NET Framework 3.5

1 Run Windows Updates to get the .NET Framework 3.5 executable file with Service Pack 1 or later. This file is usually named **dotnetfx35.exe**.

2 Accept the Terms of Agreement, and then click **Install**.

Installing IIS 6.0 on Windows Server 2003

The Internet Information Service (IIS) 6.0 is listed in the Windows Server 2003 OS Windows Components, and needs to be installed to enable its functions.

1 Make sure you have your Windows Server 2003 installation CD ready. You need it to install additional Windows components.

2 Open the "Add or Remove Programs" dialog on the Control Panel.

3 Click **Add/Remove Windows Components**.

4 From the Windows Components Wizard, select **Application Server**, and then click **Details**.

5 From the Application Server dialog, select **ASP.NET**.

6 Click **OK** > **Next**.

Enabling ASP.NET

Installing IIS 6.0 will also install ASP.NET. You need to enable ASP.NET v2.0 to satisfy the install requirements for Windows SharePoint Services after .NET Framework 3.5.1 and its subsequent updates have been installed.

On 32-bit platforms

1 Open a command prompt.

2 Set your directory to `C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727`.

3 On the command line, type `aspnet_regiis.exe -i`.

Once the command completes, ASP.NET v2.0.50727 should now be on the list of Web extensions, and should be the default property in the ASP.NET tab of the Web Site Properties dialog.

4 From the Web Service Extension list on the Internet Information Services Manager, make sure the status of ASP.NET version 2.0.50727 (32-bit) is set to **Allowed**.

On 64-bit platforms

1 Open a command prompt.

2 Set your directory to `C:\WINDOWS\microsoft.NET\Framework64\v2.0.50727`.

3 On the command line, type `aspnet_regiis.exe -i -enable`.

Once the command completes, ASP.NET v2.0.50727 should now be on the list of Web extensions, and should be the default property in the ASP.NET tab of the Web Site Properties dialog.

4 From the Web Service Extension list on the Internet Information Services Manager, make sure the status of ASP.NET version 2.0.50727 (32-bit) is set to **Allowed**.

Installing SNMP Service on Windows Server 2003

1 Make sure you have your Windows Server 2003 installation CD ready. You need it to install additional Windows components.

2 Open the "Add or Remove Programs" dialog on the Control Panel.

3 Click **Add/Remove Windows Components**.

4 From the Windows Components Wizard, select **Management and Monitoring Tools**, and then click **Details**.

5 From the "Management and Monitoring Tools" dialog, select the **Simple Network Management Protocol** check box.

6 Click **OK** > **Next**.

After installing the SNMP Service on Windows Server 2003, you also need to configure other settings like agent properties, trap destination, and security properties. For more information, visit the documentation on the Microsoft TechNet Web site.

Configuring SNMP Service on Windows 2003

1 Click , or click **Start** > **Run**.

2 In the Start Search or Run field, type `services.msc`.

3 Locate `SNMP Service` from the list of services. Right-click the service, and then click **Properties**.

4 Click the **Security** tab, and then clear the **Send Authentication Trap** check box.

5 From the Accepted Community Names section, click **Add**.

6 From the SNMP Service Configuration dialog, do the following:

    a From the "Community rights" drop-down menu, select **READ ONLY**.

    b In the Community Name field, type `public`.

    c Click **Add**.

7 From the Security tab, select **Accept SNMP packets from any host**.

8 Click **Apply** > **OK**.

Adjusting firewall inbound rules for the new SNMP service

Open **Windows Firewall** from the Control Panel.

If it is not running, and you do not want to enable it, then you can skip this step.

Installing SQL

Before doing an advanced installation of Windows SharePoint Services, you must first install and configure MS SQL Server 2005, and then set up Network Load Balancing (NLB) for improved system performance in larger SharePoint farms.

Installing SQL Server 2005

Installing the paid version

1 Launch the SQL Server installer, accept the End User License Agreement (EULA), and then click **Next**.

2 After setup installs the software required for SQL Server 2005, click **Install** to begin the component update. When component update is finished, click **Finish**.

3 From the Install Wizard welcome page, click **Next** to start the installation.

   Setup does a quick configuration check to scan for conditions that may block installation.

4 Click **Next** when configuration check is finished.

5 Type the appropriate information on the Registration page, and then click **Next**.

6 From the "Components to Install" page, select **SQL Server Database Services** and **Workstation components, Books Online and development tools**.

7 Click **Advanced**.

8 From the SQL Server Books Online drop-down menu, select **Not Available**, and then click **Next**.

9 Select **Named Instance**, and then type a name to identify your database (for example, `LXKWSS`). Click **Next**.

   Note: The Named Instance will be used later as part of the unique database identification. For example, if you install a server with IP address 10.199.64.148 to SharePoint, then that database is known as 10.199.64.148\LXKWSS.

10 From the Service Account dialog, select **Use a domain user account**, and then enter your domain user credentials.

11 From the "Start services at the end of setup" section, select all three SQL services, and then click **Next**.

   Note: You will need to set the SQL Server Agent to automatically start up later for SharePoint to be able to detect the database server.

12 Click **Next** until you reach the "Ready to Install" dialog.

13 Click **Install**.

   Setup completes after 10 to 15 minutes.

14 Click **Finish** to close the dialog.

Installing SQL Express (free version)

1 Launch the SQL Express installer and accept the End User License Agreement (EULA).

2 Click **Install** > **Next** > **Next** > **Next**.

   Note: You may ignore warnings about ASP.NET Version Registration Requirements.

3 Type your name and organization, and then clear the **Hide Advanced Configurations** check box.

4 Leave the default Feature Selection as it is, and then click **Next**.

5 Type a Named Instance, or a name to identify your database. For example, `LXKWSS`.

   Note: The Named Instance will be used later as part of the unique database identification. For example, if you install a server with IP address 10.199.64.148 to SharePoint, then that database is known as 10.199.64.148\LXKWSS.

6 Select **Use a domain user account**, and then type the credentials of the administrator account you are using to install all the applications.

   Note: Do not enter a domain if you are using a local account to install applications.

7 Select the **SQL Server** and **SQL Browser** check boxes, and then click **Next**.

8 Select **Windows Authentication Mode**, and then click **Next**.

   Note: The customer may install using Mixed Mode and have an SQL root password, but this password will not be used by the Lexmark Solutions Platform at any point.

9 Click **Next** repeatedly to keep the default settings, and then click **Install**.

10 Click **Finish** when the installation is complete.

Installing SQL Server 2005 SP3 or later

Install the service pack if necessary.

1 Download the service pack to your desktop, and then click **Run** when download is complete.

2 From the Security Warning dialog, click **Run**.

3 From the Welcome dialog, click **Next**.

4 Accept the EULA, and then click **Next**.

5 From the Feature Selection dialog, leave the default settings, and then click **Next** until the "Ready to Install" dialog appears.

6 Click **Install**.

7 When prompted to restart your computer after installation, click **OK** > **Next**.

8 From the Installation Complete dialog, click **Next**.

9 From the Additional Information dialog, select the **Launch the User Provisioning Tool for Windows Vista after SP2 installation completes** check box.

   Note: If you are installing on Windows Server 2003, then you may opt not to launch the User Provisioning Tool.

10 Click **Finish**.

11 From the SQL Server User Provisioning dialog, select the Named Instance (for example **LXKWSS**), on the left pane, and then click **>>** to add it to the list on the right pane.

**12** Click **OK**, and then restart your computer.

Configuring SQL Server 2005 after installation

After installing the SQL Server 2005, you need to make the database ready for Windows SharePoint Services 3.0 to use.

Setting the SQL Server Agent to start automatically

1 Open the SQL Server Configuration Manager.

2 In the left pane, click **SQL Server 2005 Services**.

3 In the right pane, right-click **SQL Server Agent**, and then click **Start**.

A green arrow on the icon next to `SQL Server Agent` and on the toolbar indicates that SQL Server Agent started successfully.
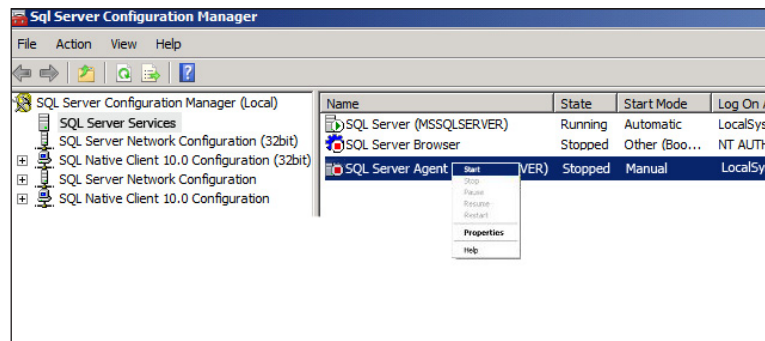
4 Set the SQL Agent Service to start automatically when the server is started up.

a Right-click **SQL Service Agent**, and then click **Properties**.

b Click the **Service** tab.

c From the Start Mode drop-down menu, select **Automatic**.

Configuring Named Pipe and TCP settings

1 Open SQL Server 2005 Surface Area Configuration.

Note: The tool should automatically open to your server. If not, click **change computer**, and then type the IP Address\Named Instance combination of your database server.

2 Select **Add New Administrator**.

3 On the left pane, select the Named Instance your created earlier, for example LXKWSS, and then click **>>** to add it to the list on the right pane.

4 Click **OK**.

5 Click **Surface Area Configuration for Services and Connections**.

6 In the left pane, under the Database Engine menu tree for your Named Instance, click **Remote Connections**.

7 From the "Local and remote connections" section, select **Using both TCP/IP and named pipes**.

8 Click **Apply** > **OK**.

9 Restart the database server by using the standard Windows Services (click **Start** > **Administrative Tools** > **Services**) or by clicking the **Stop** and **Start** on the Service item on the menu tree for your Named Instance.

Opening up firewall ports

If your SQL database is on a separate server from where SharePoint will be installed, then open Port 1433 in your firewall for both TCP and UDP. This establishes inbound and outbound connections on both servers so that SharePoint can detect the database.

Installing Windows SharePoint Services

Setting up a SharePoint Network Load Balancing (NLB) farm

For larger SharePoint farms composed of a database server and more than one Web server, you need to establish a Network Load Balance (NLB) cluster to increase the reliability and capacity of the servers. As many as 32 servers can be gathered in a single NLB cluster. For more information on NLB farms, see the Server Setup *White Paper*.

Note: If a server is removed from the central farm, then you need to uninstall and then reinstall the Solutions Platform on that server for it to function properly as a standalone server.

Before setting up an NLB farm

Make sure:

- You have two or more servers that are identically configured. If not, they should at least be closer in specifications and identical in drive setup.
- You have a static IP address for each server in the cluster.
- You have a static virtual IP address and fully qualified domain name (FQDN). The IP address is used when installing the Solutions Platform, and the FQDN when creating your "SharePoint-80" Web application.
- You have a standalone database server for SharePoint to use. This could be a clustered database setup for larger SharePoint farms.
- All servers (database or Web servers) in the farm are in the same domain.
- You have a domain user name, preferably the same one you used when installing the database server.
- Each server meets the SharePoint prerequisites. For more information, see "Getting started" on page 5.

In addition, it is recommended that each Web server have a second network interface controller (NIC) to be used as a "heartbeat" connection between the nodes in your cluster. If you have more than two nodes, then you may need to set up a switch or another device to cross-connect all the servers. You do not need quorum drives, which are typical in application clusters.

Adding NLB to Web servers

On Windows Server 2003, Network Load Balancing (NLB) is a feature that is already installed by default. On Windows Server 2008, enable NLB using the Server Manager.

1 Open the Server Manager.

2 From the Features Summary section, click **Add Features**.

3 From the Select Features dialog, select the **Network Load Balancing** check box.

4 Click **Next** > **Install**.

5 When installation finishes, click **Close**.

Repeat the steps to enable NLB using the Server Manager on all other Web servers you will be adding to the cluster.

Adding a node to an NLB cluster will modify the network connection in IPCONFIG. This is why you see the connection flicker as you add the node, and why you need to refresh the Manager's view occasionally. You will see two IP addresses listed: the local static IP address for the node and the static virtual IP address.

Setting up Network Load Balancing

Choose one of your Web servers to manage the cluster. Generally, the first one you set up will do. It is also recommended that an external server be used to set up and manage the cluster for reliability in case problems occur. After the NLB feature is installed, your server will have a new menu under Administrative Tools called Network Load Balancing Manager.

Adding the first node

1 Open the Network Load Balancing Manager.

The node tree on the left pane of the Manager window expands as nodes are added.

2 Right-click **Network Load Balancer Clusters**, and then select **New Cluster**.

Note: The next steps describe how to create clusters on Windows Server 2008. For Windows Server 2003, the dialogs are similar. However, you need to configure the cluster IP addresses, cluster parameters, and port rules first before adding the Web server IP address and the host parameters in Windows Server 2003.

3 From the "New Cluster: Connect" dialog, type the IP address of the first Web server, and then click **Connect**.

An entry will appear in the "Interfaces available for configuring a new cluster" section.

4 Select the interface that is on the LAN, and then click **Next**.

5 From the "New Cluster: Host Parameters" dialog, click **Next**.

6 From the "New Cluster: Cluster IP Addresses" dialog, add the virtual IP addresses used by the cluster:

a Click **Add**.

b Type the IP address and subnet mask for the virtual IP address.

c Click **OK**.

7 Click **Next**.

8 From the "New Cluster: Cluster Parameters" dialog, enter your FQDN and select the operation mode:

a From the IP address drop-down menu, select the virtual IP address.

b In the Full Internet Name field, enter your FQDN.

c Select your cluster operation mode.

- If you have more than one NIC on your server, then select **Unicast**.

    Note: The Unicast mode is generally the most preferred if you are interested in performance. For Windows Server 2003, however, you cannot select the Unicast mode unless you have more than one NIC.

- If you have only one NIC on your server, then select **Multicast**.

d Click **Next**.

9 From the "New Cluster: Port Rules" dialog, specify the port rules:

Note: You do not need to restrict the cluster to a particular port or port range, but for security reasons, it is a good practice to do so.

a Select the default port rule, and then click **Remove**.

b Click **Add**.

1 Make sure the **All** check box is selected.

2 From the Port Range section, change the From and To fields to **80**, for your SharePoint-80 Web application.

3 From the Protocols sections, select **Both**.

4 From the Filtering mode section, select **Multiple Host** and **Single**.

5 Click **OK**.

c Click **Finish** to complete the setup.

You can add more ports later, if necessary.

The Network Load Balancing Manager main screen reappears. You will see an entry for the domain name of the cluster and the first server node that you have added in your node tree, with a green background on its icon. You should also notice that the node has your server host name as its label. Now, you can add the second or subsequent node or nodes.

Adding the second node

1 Right-click the domain name, and then select **Add Host To Cluster**.

2 In the Host field, type the IP address of the next Web server that you want to add to the cluster, and then click **Connect**.

As before, there will be a slight pause while the server network cards are polled. When entries appear on the "Interfaces available for configuring the cluster" section, select the LAN connection, and then click **Next**.

3 From the Host Parameters dialog, leave the defaults, and then click **Next**.

4 Click **Finish**.

You should now see two (or more) nodes listed under the cluster. Each should have a green background on its icon. A red background indicates there is a problem.

Verifying if Network Load Balancing is working

1 On your desktop, create a file in Notepad with the file name "default.htm."

2 Type `Served by Server X`, where `X` is the number of the server you are working from.

3 Move or copy and paste the file to `C:\inetpub\wwwroot`.

4 Repeat step 1 through step 3 on your other servers.

5 From a computer outside the cluster, open a Web browser, and then type the cluster URL.

   You should see text indicating what server is currently serving the page.

6 Temporarily disable the network connection for that server, and then refresh the browser window.

   If NLB clustering is working, then you should see text indicating a different server serving the page.

7 When you have established that NLB is working, reenable all network connections and proceed with the SharePoint installation.

Installing Windows SharePoint Services 3.0 (Advanced)

Installing Windows SharePoint Services 3.0 (Advanced)

Before SharePoint begins the installation process, make sure each server has the same install location and file locations. Choosing default settings can be helpful here. For consistency, use the same server you first chose when setting up your Network Load Balancer as the first SharePoint server.

1 Install the Microsoft Windows SharePoint Services 3.0 on a computer running Windows Server 2003 or Windows Server 2008.

2 In the "Choose the installation you want" page, click **Advanced**.

3 Select **Web Front End** as the server type, and then click **Install Now**.

   When Setup finishes, a dialog box appears telling you to complete the configuration of your server. Make sure that the "Run the SharePoint Products and Technologies Configuration Wizard now" check box is selected.

4 Click **Close** to start the SharePoint Products and Technologies Configuration Wizard.

5 In the "Connect to a server farm" dialog, create a new server farm if this is the first WSS system installed, and then click **Next**.

6 Configure the database settings to connect to the database created during the SQL Database install.

a Specify the database server. Remember to include the Named Instance (for example, `10.199.64.148\LXKWSS`).

b The wizard automatically adds the name "SharePoint_Config" to the database name. Leave this as the default.

c Type your domain name and password.

d Click **Next**.

7 Configure other settings.

8 In the Configuration Successful page, click **Finish**.

The SharePoint Central Administration Web page opens.

Creating the "SharePoint-80" Web application

Note: Advanced installation types may not always create the SharePoint-80 Web site during the install process. You may need to create it yourself from the SharePoint Central Administration Web page to complete the post-installation configuration.

1 Open SharePoint Central Administration.

2 Click **Application Management** > **Create or extend Web application**.

3 From the Adding a SharePoint Web Application section, click **Create a new Web application**.

4 Select **Create a new IIS Web site**, and then make sure the default site name is **SharePoint-80**.

5 In the Port field, make sure the default port number is **80**.

6 In the Path field, make sure the path is set to **C:\inetpub\wwwroot\wss\Virtual Directories\80**.

7 From the Authentication Provider section, select **NTLM**.

8 From the Allow Anonymous section, select **Yes**.

9 In the Use Secure Sockets Layer (SSL) section, select **Yes** if you are using SSL. Otherwise, select **No**.

10 In the Load Balanced URL field, replace the default server host name with the virtual IP address of your cluster.

11 From the Application Pool section, make sure the default site name is `SharePoint-80`.

12 Select **Predefined**, and then select **Network Service** or its equivalent from the drop-down menu.

Leave all the other settings as they are.

13 Click **OK** to create the application.

Creating the SharePoint site collection

1 Open SharePoint Central Administration.

2 Click **Application Management** > **Create site collection**.

3 From the Web application drop-down menu, select **SharePoint-80**.

4 In the Title and Description field, type the title and description for the site collection.

5 From the Web Site Address section, under URL, type the IP address of your cluster.

6 From the Template Selection section, in the "Select a template" list, select **Blank Site**.

7 In the Primary Site Collection Administrator field, type your domain user name.

8 In the Secondary Site Collection Administrator field, type the administrator account name of the local server.

Make sure to include the local domain name (for example, `FARM01SVR1\administrator`).

9 Click **OK**.

Adding the second Web server

1 Run the SharePoint Products and Technologies Configuration Wizard.

2 Connect to an existing farm.

3 Type the name of your database server, including the Named Instance, and then click **Retrieve Database Names**. This automatically populates the Database Name and the Username fields.

4 Type the domain user's password, and then click **Next**.

5 In the Summary page, click **Next**.

6 From the Configuration Successful page, click **Finish**.

Installing Windows SharePoint Services 3.0 (Basic)

1 Install the Microsoft Windows SharePoint Services 3.0 on a computer running Windows Server 2003 or Windows Server 2008.

2 In the "Choose the installation you want" page, click **Basic**.

3 When setup finishes, make sure the **Run the SharePoint Products and Technologies Configuration Wizard now** check box is selected on the prompt that appears, and then click **Close** to start the wizard.

For more information, see the documentation for installation and configuration of WSS on standalone servers on the Windows SharePoint Web site.

Configuring IIS and WSS after installation

1 Open Internet Information Services (IIS) Manager.

2 From the left pane, click **+** to expand Sites, if necessary, and then click **SharePoint- 80**.

3 From the display pane, double-click **Authentication**.
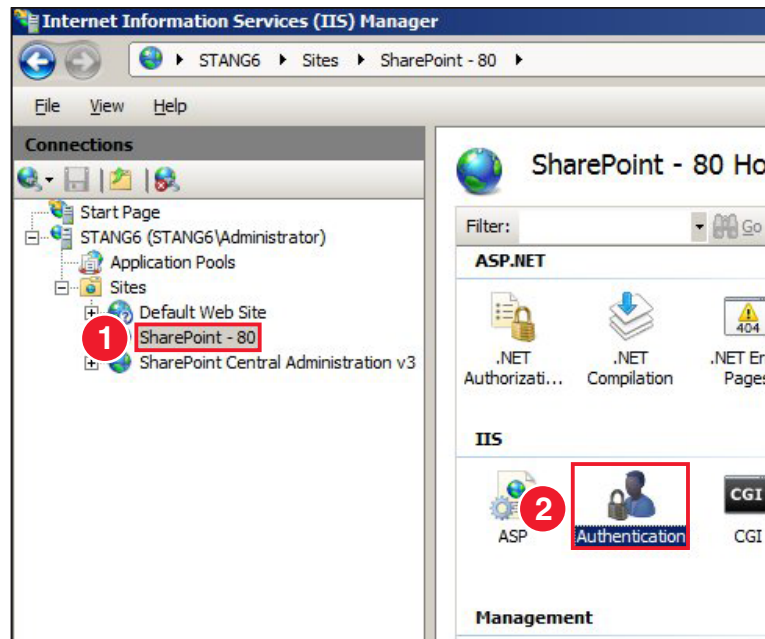
4 Make sure that Anonymous Authentication and ASP.NET Impersonation are enabled.
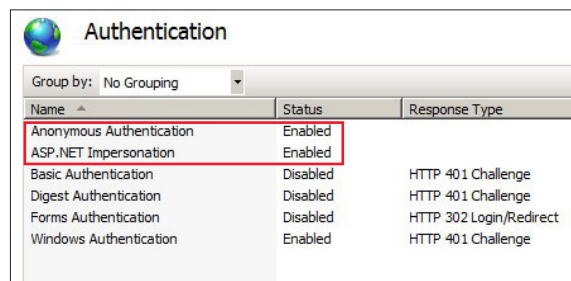
Configuring Alternate Access Mappings (AAMs)

SharePoint will default to using the host name of the server when creating the URLs required for access. To make the host name unique wherever on the network the server resides, use the fully qualified domain name (FQDN) or the IP address of the server.

1 Open SharePoint Central Administration.

2 Click **Operations**.

3 From the Global Configuration section, click **Alternate access mappings**.

4 Set Public URLs to use the IP address of the SharePoint server.

   a Navigate to:

      Edit Public URLs > Alternate Access Mapping Collection menu > select **Change Alternate Access Mapping Collection** > **SharePoint-80**

   b In the Default field, replace the host name with the IP address of the server.

      Note: Do *not* delete **http://** from the field.

   c Click **Save**.

   d From the Alternate Access Mappings List, navigate to:

      Edit Public URLs > Alternate Access Mapping Collection menu > select **Change Alternate Access Mapping Collection** > **Central Administration**

   e In the Default field, replace the host name with the IP address you used earlier.

      Note: Do *not* delete **http://** and the port number from the field.

   f Click **Save**.

5 Set Internal URLs to use the FQDN of the SharePoint server.

  Note: Creating another internal URL for mapping the site will properly trigger all event calls from requests, whether they come from the FQDN or IP address.

   a Navigate to:

      Add Internal URL > Alternate Access Mapping Collection menu > select **Change Alternate Access Mapping Collection** > **SharePoint-80**

   b Type the Internal URL. Use either the FQDN of the server.

   c Click **Save**.

   d From the Alternate Access Mappings List, navigate to:

      Add Internal URL > Alternate Access Mapping Collection menu > select **Change Alternate Access Mapping Collection** > **Central Administration**.

   e Type the Internal URL using the host name and port number. For example, **http://hostname:*port***, where *port* is the Central Administration port you used for the Public URL.

   f Click **Save**.

Note: If you encounter issues with setting up your Alternate Access Mappings and cannot get into SharePoint Central Administration, then uninstall SharePoint and install again

Installing the Solutions Platform

Installing the Solutions Platform

1 Run the Lexmark Solutions Platform installer.

2 Verify that the prerequisites are met.

Note: The verification process is done in the background as the installer is starting up. If any of the prerequisites described in this *Installation Guide* are missing, then the installer shows an error message and fails. Make sure all requirements are completely installed before proceeding with the installation.

3 Choose a language.

4 Accept the End User License Agreement (EULA).

5 Type the URL of the SharePoint site your created earlier.

Note: Click **What is this?** to open the list of installed Web applications for this installation. These are the only valid Web application URLs on the server. Use one of these URLs. The URL should be in the form `http://ipaddress:port/`. It should match the IP address specified when creating Alternate Access Mappings (AAMs) and the SharePoint site on Port 80.

6 Type your e-mail address.

7 Verify that the administrator account you used to install SharePoint is correct.

Notes:

- Make sure the domain name here is correct as this may default to the local host name.
- The site owner's user account needs to be an Administrator account on the Windows server to be able to install and deploy solutions. This user becomes the Super Administrator of the site being created within the Web application. In cases where the server is not part of a domain, the computer name is used as a domain prefix for the user (for example, `MACHINENAME\Administrator`).

Adding a license

Configuring group permissions

Before adding a license, make sure to configure group permissions first.

1 Navigate to the following folder:

`c:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12`

2 Right-click **Config**, and then click **Security**.

3 From the Security tab, select the **WSS_WPG** group, and then allow read and write permissions for this group.

Uploading the license file

1 From your Web browser, access the Lexmark Solutions Platform.

2 From the Home tab, in the System section, click **Licensing**.

3 Click **Browse** to upload license files.

4 If necessary, click **Overwrite**.

5 Click **Upload**.

Notes:

- The Solutions Platform supports modular licensing. Install licenses for each of the components (Print Release, Accounting, and My eTask) separately to add them to the Solutions Platform.

- The Solutions Platform can support multiple license files. For example, a customer can initially have a license file for 100 devices, and then later purchase another license file for 100 additional devices. Both license files should be uploaded to be able to support all 200 devices.

- If uploading multiple licenses, you can either upload a license file one at a time or zip them into a single file and upload only the zipped file. If uploading a zipped file, make sure files are zipped at the root directory to avoid creating unnecessary folders.

Upgrading the Solutions Platform

Upgrade your system to version 1.3.0 to take advantage of the new and improved features and functionality.

When upgrading, make sure:

- You use the Solutions Platform version 1.3.0 installer package for new installations as well as for upgrading your system to 1.3.0. There is no need to uninstall the previous installation. Run the installer, and it will automatically upgrade the system.

- You update the LDAP Membership, Active Directory, or List Membership version references in the web.config file from `v1.2.0.0` to `v1.3.0.0` when configuring the membership providers. The XML code in "Configuring the membership provider manually" on page 29 has been updated to reflect this change.

- You revert Alternate Access Mappings to use host names instead of the IP address or fully qualified domain name (FQDN) before upgrading the system.

Creating a Virtual Directory

For IIS 7.0

1 Open Internet Information Services (IIS) Manager.

2 On the left pane, in the Sites menu tree, right-click **SharePoint-80**.

3 Click **Add Virtual Directory**.

4 In the Alias field, type **PrintJobs**.

> **Note:** The alias must be called "PrintJobs" during setup. This can be changed later.

5 In the "Physical path" field, type the path to the directory that contains the content for the Virtual Directory.

6 Click **Connect as** to specify provide credentials in order to access the Virtual Directory.

If you do not use specific credentials, then select **Application user (pass-thru authentication)**.

7 Click **Test Settings** to verify your settings for the Virtual Directory, and then click **OK**.

For IIS 6.0

1 Open Internet Information Services (IIS) Manager.

2 On the left pane, in the Web Sites menu tree, right-click **SharePoint-80**.

3 Click **New** > **Virtual Directory**.

The Virtual Directory Creation Wizard opens.

4 In the Alias field, type **PrintJobs**, and then click **Next**.

 Note: The alias must be called "PrintJobs" during setup. This can be changed later.

5 Browse or type the path to the directory that contains the content for the Virtual Directory, and then click **Next**.

6 Type the user name and password to use for access to the Virtual Directory, and then click **Next**.

7 Type the password again to confirm, and then click **OK**.

8 Select the check box of the access permission that you want to allow.

9 If necessary, click **Yes** to confirm selected permissions, and then click **Finish**.

Note: Make sure you use the IP address or the Fully Qualified Domain Name (FQDN) when creating the virtual directory. Using the host name causes trouble and should be avoided.

Verifying the version of ASP.NET installed

1 Open Internet Information Services (IIS) Manager.

2 On the left pane, under Web Sites, expand **SharePoint-80**.

3 Right-click **PrintJobs**, and then click **Properties**.

4 On the Properties dialog, click the **ASP.NET** tab.

5 Make sure the Virtual Directory is using version 2.0 or later of ASP.NET.

Configuring the URI location and UNC path location

1 Access the Lexmark Solutions Platform.

2 Click the **Print Release** tab > **Print Release Settings**.

3 From the Print Release Settings page, edit the following settings as necessary.

- **URI Location**—Type the path of the Virtual Directory (for example, **http://servername/PrintJobs**).

  Note: Make sure you use the IP address or the Fully Qualified Domain Name (FQDN) when entering the URI location. Using the host name causes trouble and should be avoided.

- **UNC Path Location**—Type the path of the physical directory where all print jobs should be stored (for example, **\\servername\sharedfolder\subfolder** or **C:\SolutionsPlatform \PrintJobsFileRepository**).

- **UNC Path Username**—Type the user name to access the UNC location.

  Note: Do not include the domain name when typing the user name in this field.

- **UNC Path Password**—Type the password to access the UNC location.

- **UNC Path Domain**—Type the domain where the UNC path location resides.

Resetting IIS

After configuring the URI location and UNC path location, it is recommended that you reboot IIS to make sure the system is running and up-to-date.

1 Open a command prompt shell window.

2 At the command prompt, type `iisreset /noforce`.

3 Press **Enter**.

Increasing TPA log capacity

In the Event Viewer, TPA is shown as `TransportProtocolAdapter`. Its Windows Service name is **Lexmark Transport Protocol Adapter**.

1 Open the Event Viewer.

2 Right-click **TransportProtocolAdapter**, and then click **Properties**.

3 In the "Log size" section, select **Overwrite events as needed**.

4 Click **OK**.

Configuring the membership provider automatically

To validate user accounts, configure the Lexmark Solutions Platform to store these accounts in the system using lists or to use the Lightweight Directory Access Protocol (LDAP) as membership provider.

To configure membership provider automatically, download the **WebConfigHelper** tool from the Lexmark Solutions Platform Web site for free.

Note: Use *only one* membership provider to authenticate users for Solutions Platform. LDAP is the preferred authentication option. If the customer does not have LDAP and Active Directory, then use List Membership Provider.

WebConfigHelper options

Use	To
`-l, --createLdapMembership=VALUE`	Create LDAP Membership Provider. The default value is FALSE.
`-c, --createListMembership=VALUE`	Create List Membership Provider. The default value is FALSE.
`-r, --createLdapRole=VALUE`	Create LDAP Role Provider. The default value is FALSE.
`-o, --createListRole=VALUE`	Create List Role Provider. The default value is FALSE.
`-a, --isSharePointCentralAdministrationConfig=VALUE`	Specify whether this is the web.config file for the SharePoint v3.0 Central Administration site. The default value is FALSE.

Use	To
`-p, --webConfigAbsolutePath=VALUE`	Specify the absolute path to the web.config file. The default path is **c:/inetpub/wwwroot/wss/VirtualDirectories/80/web.config**
`-m, --MembershipSettingsAbsolutePath=VALUE`	Specify the absolute path to the **ini** settings file of the membership provider.
`-s, --RoleSettingsAbsolutePath=VALUE`	Specify the absolute path to the **ini** settings file of the role provider.
`-t, --testLdapConnection=VALUE`	Test the LDAP Connection with supplied **ini** settings file. The default value is FALSE.
`-d, --detectWebConfigLocations=VALUE`	Enable the tool to automatically detect the location of the web.config file. The default value is FALSE.
`-n, --defaultSharePointSiteName=VALUE`	Specify the IIS site name where Solutions Platform is installed. This is used for automatic detection.
`-h, --help`	• Show the list of options. • Exit the tool.
`-f, --save`	Save the settings as defaults.

For more information, see the *Readme* file and sample settings file that came with the tool.

Configuring the membership provider manually

Notes:

- Use *only one* membership provider to authenticate users for the Solutions Platform. Non-Active Directory Lightweight Directory Access Protocol (LDAP) is the preferred authentication option.
- If the customer does not have LDAP, then use Active Directory as the membership provider.
- If the customer does not have LDAP and Active Directory, then use List Membership Provider.
- Role manager is optional. It is useful for importing groups and allowing all authenticated users to log in, but it is not required for a working system.
- Make sure you install the Solutions Platform application first before editing the web.config file.
- After configuring the web.config file, enable your membership provider for site collection from the SharePoint Central Administration. For more information, see "Enabling membership provider for site collection" on page 33.

Configuring LDAP or Active Directory Membership Provider

1 Locate the following file, and then open it in a text editor: **C:\inetpub\wwwroot\wss \VirtualDirectories\80\web.config**.

2 Add the following XML nodes to register LDAP or Active Directory as an authentication option.

Notes:

- If you are not using an optional value, then remove it from the XML file to avoid errors and failures.
- If you encounter errors, then navigate to **Administrative Tools** > **Event Viewer** for detailed messages and information.
- The examples are for Lexmark's LDAP system.

```
<configuration>
    ...
    <system.web>
      ...
     <membership defaultProvider="LdapMembership">
      <providers>
       <add name="LdapMembership"
         type="Lexmark.SharePointSolutions.Core.LdapMembershipProvider.LdapMembershipProvider,
            Lexmark.SPS.Core.LdapMembershipProvider, Version=1.3.0.0, Culture=neutral,
            PublicKeyToken=cd98fdb728e8c0c6"
         server="testdirectory.ap.lexmark.com"
         searchBase="dc=testdirectory,dc=ap,dc=Lexmark,dc=com"
         lookupAuthType="Basic"
         lookupUserDN="cn=manager,dc=testdirectory,dc=ap,dc=Lexmark,dc=com"
         lookupPassword="password"
         lookupUseSSL="false"
         lookupPort="389"
         writeAuthType="Basic"
         writeUserDN="cn=manager,dc=testdirectory,dc=ap,dc=Lexmark,dc=com"
         writePassword="supersecret"
         writeUseSSL="false"
         writePort="389"
         validateAuthType="Basic"
         validateUseSSL="false"
         validatePort="389"
         uidProperty="uid"
         emailProperty="mail"
         displayNameProperty="sn"
         badgeIdProperty="pager" />
      </providers>
     </membership>
    <roleManager defaultProvider="LdapRole" enabled="true">
     <providers>
      <add name="LdapRole"
         type="Lexmark.SharePointSolutions.Core.LdapMembershipProvider.LdapRoleProvider,
         Lexmark.SPS.Core.LdapMembershipProvider, Version=1.3.0.0, Culture=neutral,
         PublicKeyToken=cd98fdb728e8c0c6"
         applicationName="name"
         server="host name or IP address"
         authType="authentication type"
         useSSL="true or false"
         port="port"
         lookupUserDN="dn"
         lookupPassword="password"
         lookupDomain="domain"
         groupContainer="value"
         groupFilter="value"
         groupNameAttribute="value"
         groupMemberAttribute="value"
         userSearchBase="value"
         userUidAttribute="value"
         timeout="timeout" />
      </providers>
```

```
        </roleManager>
        ...
      </system.web>
      ...
</configuration>

where
applicationName       = option application name, defaults to application virtual path
server                = LDAP server address (eg. directory.lex.lexmark.com)
searchBase            = required base on which to search for users
                         (eg. ou=Employees,o=Lexmark)
lookupAuthType        = Anonymous, Basic, Digest, Dpa, Kerberos, Msn, Negotiate,
                         Ntlm or Sicily (authentication type for lookups, optional
                         default is Anonymous)
lookupUserDN          = user DN for application lookups (optional, not required for
                         anonymous connections, eg. uid=XXX,ou=Employees,o=Lexmark)
lookupPassword        = password corresponding to lookupUser (optional)
lookupuseSSL          = true or fales (optional, defaults to false for
                         Anonymous authentication, true for others)
loukupPort            = communication port (optional, defaults to 389 for clear text
                         and 636 for SSL)
lookupDomain          = domain (optional)
WriteAuthType         = Anonymous, Basic, Digest, Dpa, Kerberos, Msn, Negotiate,
                         Ntlm or Sicily (authentication type for user validation,
                         optional,default is Basic)
WriteUserDN           = user DN for application lookups
WritePassword         = password corresponding to WriteUserDN
WriteUseSSL           = true or false (optional, defaults to false for
                         Anonymous authentication, true for others)
WritePort             = communication port (optional, defaults to 389 for clear text
                         and 636 for SSL)
WriteDomain           = domain (optional)
validateAuthType      = Anonymous, Basic, Digest, Dpa, Kerberos, Msn, Negotiate,
                         Ntlm or Sicily (authentication type for user validation,
                         optional, default is Basic)
uidProperty           = user id property on user object, required (eg. uid)
displayNameProperty   = display name property on user object (eg. displayname)
emailProperty         = email property on user object, optional (should not be
                         specified for Lexmark LDAP because this property is not
                         indexed for searches)
badgeIdproperty       = badge id property on user object, optional
timeout               = timeout (in seconds, should be fairly high, say 300 seconds
                         for Lexmark, to import all users from LDAP)
authType              = same as lookupAuthType above
groupContainer        = required base on which to search for groups
                         (eg. ou=Groups,o=Lexmark)
groupFilter           = an LDAP search sub-string that defines a group object
                         (eg. ObjectClass=groupOfUniquenames)
groupNameAttribute    = the name attribute on a group object (eg. cn)
groupMemberAttribute  = the name of a member attribute on a group object
                         (eg. uniquemember). The value in this attribute is the DN
                         of a user.
userSearchBase        = same as searchBase above
userUidAttribute      = same as uidProperty above
```

3 Locate the following file, and then open it in a text editor: **C:\inetpub\wwwroot\wss \VirtualDirectories\27644\web.config**.

   Note: The port number may be different. This is the SharePoint administration site.

4 Add the same XML nodes as in step 2 on page 29 to register the LDAP or Active Directory component with the SharePoint administrator application.

This lets you choose a site administrator for the site collection using the administrator application. The membership node is the same except that the **defaultProvider** attribute is omitted as shown in the following. The **roleManager** node is the same except that the **defaultProvider** and enabled attributes are omitted.

```
<configuration>
    ...
    <system.web>
      ...
      <membership>
        ...
      </membership>
      <roleManager>
        ...
      </roleManager>
      ...
    </system.web>
    ...
  </configuration>
```

Configuring List Membership Provider

1 Locate the following file, and then open it in a text editor: **C:\inetpub\wwwroot\wss \VirtualDirectories\80\web.config**.

2 Add the following XML nodes to register the SharePoint List component as an authentication option:

```
<configuration>
  ...
  <system.web>
    ...
    <membership defaultProvider="ListMembership">
     <providers>
      <add name="ListMembership"
       type="Lexmark.SharePointSolutions.Core.SPListMembershipProvider.SPListMembershipProvider,
         Lexmark.SPS.Core.SPListMembershipProvider, Version=1.3.0.0, Culture=neutral,
         PublicKeyToken=b13181d43a8e8c47" spListName="Users" />
     </providers>
    </membership>
   <roleManager defaultProvider="ListRole" enabled="true">
     <providers>
       <add name="ListRole"
        type="Lexmark.SharePointSolutions.Core.SPListMembershipProvider.SPListRoleProvider,
         Lexmark.SPS.Core.SPListMembershipProvider, Version=1.3.0.0, Culture=neutral,
         PublicKeyToken=b13181d43a8e8c47" />
     </providers>
    </roleManager>
    ...
  </system.web>
  ...
</configuration>

where    spListName  = option list name, defaults to a custom "Users" list within
                      SharePoint provided by the Core team.
```

3 Locate the following file, and then open it in a text editor: `C:\inetpub\wwwroot\wss`
`\VirtualDirectories\27644\web.config`.

 Note: The port number may be different. This is the SharePoint administration site.

4 Add the same XML nodes as in step 2 to register the List component with the SharePoint administrator application.

This lets you choose a site administrator for the site collection using the administrator application. The membership node is the same except that the `defaultProvider` attribute is omitted as shown in the following. The `roleManager` node is the same except that the `defaultProvider` and enabled attributes are omitted.

```
<configuration>
  ...
  <system.web>
    ...
    <membership>
      ...
    </membership>
    <roleManager>
      ...
    </roleManager>
    ...
  </system.web>
  ...
</configuration>
```

Enabling membership provider for site collection

1 Open SharePoint Central Administration.

2 Click the **Application Management** tab.

3 In the SharePoint Web Application Management section, click **Web application list**.

4 If necessary, select **SharePoint-80**.

5 In the Application Security section, click **Authentication Providers**, and then click **Default**.

6 In the Authentication type section, select **Forms**, and then select the **Enable anonymous access** check box.

7 In the "Membership provider name" field, type `LdapMembership` or `ListMembership`, depending on the authentication option you are using.

8 In the "Role manager name" field, type `LdapRole` or `ListRole`, depending on the authentication option you are using, and then click **Save**.

 Note: Restart IIS after saving the options for the changes to take effect.

9 Click the **Application Management** tab.

10 In the SharePoint Site Management section, click **Site collection administrators**.

11 From the Site Collection drop-down menu, select **Change Site Collection**.

12 From the list of sites, select **/sites/Lexmark**, and then click **OK**.

13 Type the user name of the primary site collection administrator.

If necessary, type the user name of a secondary site collection administrator.

Note: For List Membership, the initial user name must be **admin**, and the password must be **admin** as well. This is a preset account to allow you to log in for the first time. You can import or create other users from the Users page later.

14 Click **OK**.

Adding a print release queue on a client workstation or print server

Adding a new printer

1 Make sure you have installed the PCL5, PCL XL, or PostScript Lexmark Universal Driver appropriate for your operating system, available from **http://support.lexmark.com**.

Note: If you are installing the Universal Print Driver for the first time, then you will be prompted to add a new Windows printer during the driver installation process. You can proceed to step 6 to add the printer during installation.

2 Click [image], or click **Start** and then click **Run**.

3 In the Start Search or Run box, type **control printers**.

4 Press **Enter**, or click **OK**.

The printers folder opens.

5 Click **Add a printer** > **Next**.

6 Select a local printer. In Windows XP, clear the **Automatically detect and install my Plug and Play printer** check box.

7 Click **Next**.

8 Select **Create a new port**.

9 From the "Type of port" drop-down menu, select **Standard TCP/IP Port**, and then click **Next**.

The Add Standard TCP/IP Printer Port Wizard appears. If necessary, click **Next** again.

Adding a new TCP/IP port

1 In the "Hostname or IP address" field or the "Printer Name or IP Address" field, type the address of the server for the Solutions Platform (*not* the address of the printer).

Note: If you do not know the address, then contact the server administrator.

2 In the Port Name field, type a descriptive port name (for example, "Print Release Server"). In Windows 7, clear the **Query the printer and automatically select the driver to use** check box.

3 Click **Next**.

4 When prompted for additional port information, select **Custom**, and then click **Settings**.

5 In the Port Number field, type the port number used to submit print release jobs, and then click **OK**.

> **Note:** Leave the default port number of 9100 unless your server uses a different port. If you do not know the correct port number, then contact the server administrator.

6 Click **Next**, and then click **Finish** if necessary.

Installing printer software

1 When prompted to install printer software, click **Have Disk**.

2 In the "Copy manufacturer's files from" field, enter the location where the Lexmark Universal Print Driver files were installed, or click **Browse** and browse to the INF file for the driver.

3 Click **OK**.

4 Make sure **Lexmark Universal**, **Lexmark Universal XL**, or **Lexmark Universal PS3** is selected, and then click **Next**.

5 If prompted, select **Use the driver that is currently installed** or **Keep existing driver**, and then click **Next**.

6 Complete the remaining steps in the Add Printer Wizard. Enter a descriptive name for the print release queue, select whether to use the new print queue as the default, and then print a test page if you want.

> **Notes:**
>
> - In Windows XP, you can also select whether to share the new print release queue for installation on a print server. If you want to share the print release queue in Windows 7, then edit the printer properties after the printer is added.
> - If you print a test page, then it is submitted to the print release queue and can be released from a connected printer like any other job.

Changing the logging level

The Solutions Platform supports `WARN` logging level as the default. For troubleshooting or information purposes, you can change the logging level accordingly.

- **DEBUG**—This level logs all of the details related to a specific event or activity on the server. This is the highest level of logging. If logging is set to DEBUG, all other levels of logging information are displayed in the log file.
- **ERROR**—This level logs only error conditions. The ERROR level provides the smallest amount of logging information.
- **INFO**—This level logs information about workflow. It generally explains how an event or activity occurs.
- **WARN**—This level logs information when an event or activity is completed successfully, but there are issues related to it.

1 Locate the following file, and then open it in a text editor:

`C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions`
`\12\CONFIG\LexmarkEntSolSuite\LexmarkEntSolSuite_log4net.config`.

Separate log files are created for each site as follows:

> Log for Home site: Home.log
>
> Log for Accounting site: Accounting.log
>
> Log for Print Release site: PrintRelease.log
>
> Log for My e-Task site: MyETask.log

These log files are located in `C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\12\LOGS\Lexmark`.

2 Change the level value.

```
<root>
<level value="WARN" /> <!--values: ERROR, INFO, WARN, DEBUG-->
<appender-ref ref="LexmarkDocumentAccountingRollingFileAppender" />
<appender-ref ref="LexmarkPrintReleaseRollingFileAppender" />
<appender-ref ref="HomeRollingFileAppender" />
<appender-ref ref="MyETaskRollingFileAppender" />
</root>
```

Modifying the change log retention time

Change the number of days events are kept in the change log.

1 Open SharePoint Central Administration.

2 Click **Application Management** > **Web application general settings**.

3 From the Change Log section, select **After**, and then enter a number from **3** to **7** in the number of days field.

4 Click **OK**.

Turning off the recycle bin settings

Turn off the recycle bin status to empty all the Recycle Bins in the Web application.

1 Open SharePoint Central Administration.

2 Click **Application Management** > **Web application general settings**.

3 From the Recycle Bin section, select **Off** in the Recycle Bin Status menu.

4 Click **OK**.

Disabling list versioning

By default, the site creates versions of each list record, adding to the size of the content database. To minimize the size of the content database, turn off list versioning.

Note: You must have site collection administrator privileges to view the list versioning settings.

1 From your Web browser, access the Lexmark Solutions Platform.

2 In the URL field, type the URL of the site where you want to disable the versioning.

- **Home—`http://server/sites/Lexmark/_layouts/settings.aspx`**
- **Print Release—`http://server/sites/Lexmark/PrintRelease/settings.aspx`**
- **Accounting—`http://server/sites/Lexmark/Accounting/settings.aspx`**
- **My e-Task—`http://server/sites/Lexmark/MyProfiles/settings.aspx`**

   Note: Replace `server` with the IP address of the server for the solution.

3 In the Site Administration section, click **Site libraries and lists**.

4 Select the list or content that you want to customize.

5 In the General Settings section, click **Versioning settings**.

6 In the Item Version History section, select **No**.

7 Click **OK**.

Turning off the search visibility of a site

To minimize the size of the content database, disable the search visibility for each site in the solution.

1 From your Web browser, access the Lexmark Solutions Platform.

2 In the URL field, type the URL of the site.

- **Home**—**http://*server*/sites/Lexmark/_layouts/srchvis.aspx**
- **Print Release**—**http://*server*/sites/Lexmark/PrintRelease/srchvis.aspx**
- **Accounting**—**http://*server*/sites/Lexmark/Accounting/srchvis.aspx**
- **My e-Task**—**http://*server*/sites/Lexmark/MyProfiles/srchvis.aspx**

Note: Replace ***server*** with the IP address of the server for the solution.

3 In the Indexing Site Content section, select **No**.

4 Click **OK**.

Troubleshooting

An application error has occurred

This" error message may appear when logging into SharePoint.

CHECK THE EVENT VIEWER FOR ERRORS IN THE WEB.CONFIG FILE

1 Click **Start** > **Administrative Tools** > **Event Viewer** > **Application**.

2 View the recent errors, taking note of those specific to the Solutions Platform and SharePoint.

Messages in the Event Viewer indicate the location of the root cause of the issue in the web.config file. The web.config file is located in **c:\inetpub\wwwroot\wss\VirtualDirectories**.

3 In the web.config file, search for the error or line number specified in the Event Viewer, and then fix it accordingly.

If there is no line number specified in the Event Viewer, then the most likely issue in the web.config file is the presence of two sets of `<control> </control>` tags. Delete the empty `<control> </control>` tag.

4 Log in to SharePoint again.

Application is unavailable

This error message may appear when launching SharePoint on Windows 2003.

RESTART IIS 6.0

1 Make sure the Application Layer Gateway Service is started.
> Click **Start** > **Administrative Tools** > **Services**.

2 Stop IIS on the server.

a Click **Start** > **Administrative Tools** > **Internet Information Services (IIS)**.

b From the IIS Manager, right-click the server name node, and then click **All Tasks** > **Stop IIS**.

3 Start the Task Manager.

a Right-click the toolbar at the bottom of the screen, and then click **Task Manager**.

b From the Processes tab, click the **Show processes from all users** check box.

c End all w3wp.exe processes.

4 Restart IIS on the server.

a Click **Start** > **Administrative Tools** > **Internet Information Services (IIS)**.

b From the IIS Manager, right-click the server name node, and then click **All Tasks** > **Restart IIS**.

5 Check if you can now log in to SharePoint.

Cannot install solution

Try one or more of the following:

MAKE SURE ALL THE PREREQUISITES ARE MET

For more information, see "Getting started" on page 5.

MAKE SURE YOU USE THE IP ADDRESS WHEN CONFIGURING ALTERNATE ACCESS MAPPINGS

Use the IP address or the fully qualified domain name (FQDN) when configuring Alternate Access Mappings. Using the host name causes issues and should be avoided.

CHECK PORT 9100 AND RESET SERVICES

Make sure Port 9100 is enabled and listening. On the command prompt, type `netstat -a`.

If it is not enabled, then reset IIS by typing `iisreset \noforce` on the command prompt, and then restart the Lexmark Transport Protocol Adapter (LTPA) service.

UNINSTALL AND THEN INSTALL THE SOLUTIONS PLATFORM

Launch the **uninstaller.exe** file from `c:\Program Files\<installation directory>`.

Jobs do not appear in the print release queue

Try one or more of the following:

MAKE SURE THE VIRTUAL DIRECTORY AND UNC PATH SETTINGS ARE CONFIGURED PROPERLY

1 Make sure IIS and the Lexmark Transport Protocol Agent (LTPA) are running.

   Click **Start** > **Administrative Tools** > **Services**.

2 Make sure the URI location is identical to the Virtual Directory setup.

   a Log in to the Solutions Platform Web portal as an administrator.

   b Click the **Print Release** tab > **Print Release Settings**.

   c Make sure the URI location is identical to the Virtual Directory, with the format
   http://ipaddress/VirtualDirectoryName.

   d Make sure the UNC path location and UNC path credentials are correct.

   Note: For the connection to work, make sure the correct slash ("\" or "/") is used in either of these settings.

   e Make sure the domain and user name entries are typed separately in their respective fields.

   Note: The user name must not contain the domain name. It must not have the *domainname \username* format.

3 Make sure the hard drive where the network share is housed has sufficient space for writing files.

4 Verify that the user credentials have the permissions required to write files to the network share.

a Using the credentials specified in the UNC path user name and password fields, create a **test.txt** file, and then save it in the network share.

b Open a Web browser, and then type the location of the test.txt file, in the format
http://ipaddress/VirtualDirectoryName/test.txt.

The test file you created should appear. If it does not appear, then check the settings for the Virtual Directory in IIS to make sure that it is pointed to the correct location with valid authentication.

Note: If you are using pass-through authentication, then change this setting to connect using the static credentials used on the share and when restarting IIS.

c If the test.txt file opened correctly in the Virtual Directory, then do the following:

1 Stop IIS and then restart LTPA.

2 Open the Task Manager, and then end all w3wp.exe processes.

3 Restart IIS.

4 Send another print job to verify that it now appears in the print release queue.

CHECK THE SOLUTIONS PLATFORM SERVER ADDRESS

Make sure you provided the correct IP address for the Solutions Platform server when you installed the print release queue on your workstation or print server. The Windows Add Printer Wizard allows you to complete the installation successfully as long as you provide a valid IP address, even if it is not the correct address for the Solutions Platform server.

1 Click [Windows logo], or click **Start** and then click **Run**.

2 In the Start Search or Run dialog, type **control printers**.

3 Press **Enter**, or click **OK**.

The printers folder opens.

4 Right-click the print release queue, and then click **Printer properties** or **Properties**.

5 Click the **Ports** tab > **Configure Port**.

6 Make sure the address in the "Printer Name or IP Address" field is the correct address for the Solutions Platform server.

MAKE SURE TO USE THE IP ADDRESS WHEN CREATING THE VIRTUAL DIRECTORY

Make sure to use the IP address or the fully qualified domain name (FQDN) when creating the Virtual Directory and when entering the URI location on the Solutions Platform server. Using the host name causes issues and should be avoided.

MAKE SURE ANONYMOUS ACCESS IS ENABLED

Enabling anonymous access from the Internet Information Services (IIS) Manager

1 Open the IIS Manager.

2 In the left pane, click **SharePoint-80** in the Sites menu tree.

3 In the right pane, double-click **Authentication**.

4 From the Authentication page, make sure that Anonymous Authentication is enabled.

Enabling anonymous access from the SharePoint Central Administration

1 Open SharePoint Central Administration.

2 Click the **Application Management** tab.

3 In the SharePoint Web Application Management section, click **Web application list**.

4 If necessary, select **SharePoint-80**.

5 In the Application Security section, click **Authentication Providers**.

6 In the Anonymous Access section, make sure the **Enable anonymous access** check box is selected.

Jobs do not print when released from the printer

MAKE SURE THE VIRTUAL DIRECTORY AND URI LOCATION ARE CONFIGURED PROPERLY

1 Create a **test.txt** file, and then save it in the network share or in the physical folder you specified when creating the Virtual Directory.

2 Log in to the Solutions Platform Web portal as an administrator.

3 Click the **Print Release** tab > **Print Release Settings**.

4 Copy the URI location.

5 Paste it on the Web browser URL field, and then add `test.txt`.

The address on the browser should now have the format
`http://ipaddress/VirtualDirectoryName/test.txt`.

6 Press **Enter**, and then check if the file opens properly.

7 If the file does not open properly, then there is an issue with the permissions on the Print Jobs folder or the Virtual Directory settings within IIS. Check these settings again and make sure they are correct.

8 If the file opens properly, then make sure the printer can resolve the server name in your URI location by using telnet on Port 10000.

Your URI may be using a host name that the printer cannot resolve without a change to the DNS server. Change this to an IP address or a fully qualified domain name (FQDN).

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NDesk Options 0.2.1

END OF NDESK OPTIONS NOTICES AND INFORMATION

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