WebSphere. Lombardi Edition Version 7.2

Lombardi for SharePoint 7.2.0
Installation and Configuration Guide

IBM

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Introduction to installing and configuring Lombardi for SharePoint

Welcome to the *Lombardi for SharePoint 7.2.0 Installation and Configuration Guide*.

is an integrated add-on for Microsoft SharePoint that provides access to the Lombardi Process Portal inbox, and task execution and reporting capabilities through SharePoint web parts. Using , you can add Lombardi process-related information to corporate or personal SharePoint sites, and effectively maintain, manage, and analyze Lombardi tasks and process instances from any Microsoft SharePoint portal. The installation and configuration guide helps you install, configure, and troubleshoot .

The guide includes the following sections (some installation environments might include additional instructions).

- *Software and hardware requirements* describes the software that you must install and configure before you begin installing .

- *Upgrading from Teamworks for SharePoint* describes how to upgrade from earlier versions of the product.

- *Installing Lombardi for SharePoint* describes how to install and configure the product.

- *Configuring Lombardi for SharePoint* describes how to configure the product for use with Microsoft SharePoint.

- *Removing the product* describes how to remove the product from your system.

- *Troubleshooting* provides solutions to common problems that can occur during installation and deployment of the product.

Software and hardware requirements

This section describes the software and hardware requirements for installing .

Software requirements

In addition to the following software and hardware requirements, also requires .

SharePoint Server requirements

To run on a server system, the server must have the required software installed and running. Client systems must have Microsoft Internet Explorer installed to access SharePoint sites.

Component type	Component name
Operating system	Microsoft Windows® Server 2003 or later
SharePoint 2007 prerequisites	• Microsoft Internet Information Services (IIS) • Microsoft .NET Framework 3.0 • ASP.NET 2.0 enabled in IIS
SharePoint Server 3.0	Microsoft SharePoint Server 2007, 32-bit or 64-bit edition. The 64-bit edition requires a 64-bit edition of the operating system.

On Windows Server 2003, Microsoft Internet Information Services (IIS) must be enabled using the Application Server (ASP) option. After the .NET Framework is installed, ASP.NET 2.0 can be enabled using the following steps.

1. In the Windows Server 2003 Control Panel, click **Administrative Tools**.

2. Click **Configure Your Server Wizard**.

3. Click **Next** twice.

4. In the **Configure Your Server Wizard - Server Role** window, select **Application server**.

5. Make sure that the **Application Server** role is enabled with IIS and ASP.NET, and that **Configured** is set to **Yes** for the Application server role.

Hardware requirements

The suggested hardware requirements are the minimum required to run .

• Intel® Pentium® 4, 2.0 GHz processor

• 1-2 GB RAM

• About 50 MB of free disk space for the application

IBM Professional Services can help you size your hardware based on more precise numbers of users, transactions, and data.

Upgrading from Teamworks for SharePoint

If you have previously installed , follow these instructions to upgrade to .

There are two methods for upgrading. You can upgrade using the installer program, or you can use the silent upgrade command.

Interactive upgrade using the installer program:

1. On the SharePoint server system, double-click the appropriate installer file, depending on the edition of SharePoint installed on the server system.

   - `Lombardi-for-SharePoint-Installer-x32.exe` for 32-bit editions of SharePoint.

   - `Lombardi-for-Sharepoint-x64.exe` for 64-bit editions of SharePoint.

2. In the installer Welcome window, click **Next** to continue the installation.

3. In the installer Maintenance window, select **Upgrade**, then click **Next**.

4. Complete the installation by following the steps in the section *Running the Lombardi for SharePoint installer*.

To upgrade silently, run one of these commands, depending on whether you want to use basic authentication or integrated authentication.

Silent upgrade command for basic authentication:

```
"./Lombardi-for-SharePoint-x32.exe" /s /v"/qn SHAREPOINTURL=http://myserver
ENABLESHAREPOINT=TRUE WLEAUTHMODE=Basic WLEPASSWORD=tw_admin WLEUSERNAME=tw_admin
 INSTALL_MODE=Upgrade"
```

Silent upgrade command for integrated authentication:

```
"./Lombardi-for-SharePoint-x32.exe" /s /v"/qn SHAREPOINTURL=http://myserver
ENABLESHAREPOINT=TRUE  INSTALL_MODE=Upgrade"
```

If the upgrade is successful, a new SharePoint sample site called **Lombardi Edition** is created. The new sample site does not overwrite or delete the existing sample site that was created previously by the Teamworks for SharePoint installer program. For more information about removing the older sample site, see the section *Removing the product*.

Installing Lombardi for SharePoint

After you have met all the software and hardware prerequisites, you are ready to install using the installer program, or using the silent install procedure.

Before beginning the installation steps, review the *Lombardi for SharePoint 7.2.0 Release Notes* for important, late-breaking information.

Running the Lombardi for SharePoint installer

Install using the installer program.

Before installing , make sure that your system meets these requirements:

- Microsoft SharePoint Server 2007 is installed on the SharePoint Server system.

- All of the components listed in the *Software requirements* section are installed.

- You must have local administrator privileges for the Microsoft SharePoint Server system and you must be a member of the Home Owners group within SharePoint 2007 to run the installer program. This permission level allows you to install the example portal page.

1. On the SharePoint Server system, double-click the appropriate installer file, depending on the edition of SharePoint installed on the server system.

   - `Lombardi-for-SharePoint-x32.exe` for 32-bit editions of SharePoint.

   - `Lombardi-for-SharePoint-x64.exe` for 64-bit editions of SharePoint.

2. In the installer **Welcome** window, click **Next** to continue the installation.

3. Click to select the terms of the license agreement.

4. If your IIS installation is not on drive `C:\` or if you are not using port `80`, then you must change the default directory information. Click **Change**, then navigate to the directory where the `web.config` file is located.

5. The next window verifies the security policy directory. Click **Change** to modify the security policy directory. In this window, you can also enable a security policy for the SharePoint server.

   The installer program modifies the existing IIS `web.config` file by adding the application files to the list of allowed DLLs. Optionally, an example security policy file can also be added to the `web.config` file to help you configure for your environment. If you want to add the security policy to the `web.config` file, select the **Enable this policy in SharePoint** option.

   > Selecting the **Enable this policy in SharePoint** option changes the security policy for all of your SharePoint web pages, and might break other programs installed on the SharePoint server. If you have other programs installed, do not select the **Enable this policy in SharePoint** option. Instead, you must manually modify the SharePoint security policy to add support for . See the section *Manually configuring the security policy* for more information.

6. In the SharePoint Server URL window, enter the URL of the SharePoint Server using the syntax `http://servername`.

7. In the Lombardi Information window, enter the URL and port number of the Lombardi server using the syntax `http://servername:port`.

    The Lombardi server information is used to configure SharePoint site templates to work in your environment. Select the **Authentication Mode**, either **Basic** or **Integrated**.

    - If you select basic authentication mode, you must also enter your username and password.

    - If you select integrated authentication mode, the **Username** and **Password** fields are not available.

    > supports both NTLM-based and Kerberos-based automatic login, also referred to as single sign-on (SSO). The SSO function reduces configuration effort and simplifies the authentication process by using your Windows credentials to authenticate with . The NTLM and Kerberos protocols allow you to automatically log on to Lombardi Process Portal, Lombardi Process Admin Console, , and . supports SSO with through the Kerberos protocol. NTLM is not supported for . For more information, see the section *Configuring integrated authentication in Lombardi for SharePoint*.

8. The installer program is now ready to begin writing the files. You can click **Back** to change the installation settings, or click **Install** to continue.

9. During the installation process, the status bar indicates progress towards completion, which typically takes several minutes.

10. When the installation is complete, click **Finish**. The installer program restarts IIS so that the services and web parts are available for immediate use.

Running the silent installer

You can install silently using a command.

Before running the silent installer, make sure that your system meets these requirements:

- Remove any earlier versions of the product. Instructions are provided in the section *Removing the product*.

- Prerequisite client software is installed. For more information, see the section *Software requirements*.

Run the `Lombardi-for-SharePoint-x32.exe` install command, using the following command arguments to perform the silent configuration:

- `WLESERVERURL`: Specifies the URL of the Lombardi server. For example: `http://LombardiEditionServer:PortNumber`.

- `PATHTOVIRTUALDIRECTORYWEBCONFIG`: Specifies the path to the virtual configuration directory.

- `PATHTOSECURITYPOLICYDIR`: Specifies the path to the security policy directory.

- `ENABLESHAREPOINT`: Enables the policy in SharePoint. Valid values are `TRUE` or `FALSE`. The default value is FALSE.

- `SHAREPOINTURL`: Specifies the SharePoint URL.

- `WLEAUTHMODE`: Sets the authentication mode of the Lombardi server. Valid values are `Basic` and `Integrated`. The default value is Integrated.

- **WLEUSERNAME**: Indicates the username to authenticate to the Lombardi server. This argument is required for basic authentication mode only.

- **WLEPASSWORD**: Indicates the password to authenticate to the Lombardi server. This argument is required for basic authentication mode only.

- **INSTALL_MODE**: Specifies the installation mode. Valid values are `Install` or `Upgrade`. The default value is Install.

The following example shows the installation command for basic authentication:

```
"./Lombardi-for-SharePoint-x32.exe" /s /v"/qn
SHAREPOINTURL=http://myserver ENABLESHAREPOINT=TRUE WLEAUTHMODE=Basic
WLEPASSWORD=tw_admin WLEUSERNAME=tw_admin"
```

The following example shows the installation command for integrated authentication:

```
"./Lombardi-for-SharePoint-x32.exe" /s /v"/qn
SHAREPOINTURL=http://myserver ENABLESHAREPOINT=TRUE"
```

To upgrade from an earlier version of the product, add the `INSTALL_MODE=Upgrade` argument to the command.

Lombardi for SharePoint directories and files installed on the server and the client

The installer program creates several important directories and files on the Microsoft SharePoint server system and your local system.

These files and directories include various web parts and services, depending upon the version of the server. The installer program adds files to the SharePoint Server system, and can also modify server configuration files.

By default, application files are installed in the following directory:

```
C:\Inetpub\wwwroot\wss\VirtualDirectories\80\
```

The subdirectories in this directory contain the program DLLs. For example, the `bin\Lombardi.Server.WebParts.dll` file enables the Portal web parts function.

The installer program can modify the existing `web.config` file to add an example security policy. This optional modification can help you configure for your environment. The `web.config` file is updated to point to the new policy file only if you select the **Enable this policy in SharePoint** option during installation. For more information, see the section *Running the Lombardi for SharePoint installer*.

The file name of the example security policy file added by the installer program is `wss_mediumtrust_lombardi.config`. By default, this file is installed in the following directory:

```
C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\CONFIG
```

The installer program automatically adds references to `wss_mediumtrust_lombardi.config` inside the specified `web.config` file, as shown in this example:

```
<securityPolicy>
   <trustLevel name="WSS_Medium" policyFile="C:\Program Files\Common
```

```
Files\Microsoft Shared\web server extensions\12\config\wss_mediumtrust.config"
 />
   <trustLevel name="WSS_Minimal" policyFile="C:\Program Files\Common
Files\Microsoft Shared\web server extensions\12\config\wss_minimaltrust.config"
 />
   <trustLevel name="WSS_Medium_Lombardi" policyFile="C:\Program Files\Common
Files\Microsoft Shared\web server
extensions\12\config\wss_mediumtrust_lombardi.config" />
. . .
```

This security policy becomes the current trust level in the `web.config` file if the **Enable this policy in SharePoint** option is selected during installation. The trust level entry in the web.config file is shown in the following example:

```
<trust level="WSS_Medium_Lombardi" originUrl="" />
```

Configuring Lombardi for SharePoint

After you have successfully installed , you must configure Microsoft® SharePoint and the environment.

Manually configuring the security policy

During installation of , if you did not select the **Enable this policy in SharePoint** option in the security policy installer window, then you must perform the following steps to successfully run .

The services and web parts do not run until you manually enable the website to use a security policy that allows the installed files to run on the web server. You can enable the policy by setting the trust level in `web.config` to `full` (not recommended), or by creating a custom policy file. Creating a custom policy file is the best approach to optimize security while allowing to run properly.

If the trust level is currently set to `WSS_Minimal`, which means that you are using the default contents of the `wss_minimaltrust.config` file, will not run. To run properly, SharePoint web parts and web services require a higher level of permissions than the level provided by the default SharePoint permissions.

You can modify an existing custom security policy file to add the necessary policy information, or you can modify a default policy file. provides a policy updater tool to help you modify the policy file and audit the results. Follow these steps to run the policy updater tool.

1. Start the policy updater by double-clicking the `TeamworksSharePointSecurityPolicyUpdater.exe` file. This file is located in the directory where the policy file was created during installation. By default, the policy file location is:

    `C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\CONFIG`

2. In the Policy Updater window, click **Browse** and then navigate to an existing policy file that you want to modify. The existing policy file can be a custom file that is already in use, or the default `wss_mediumtrust.config` policy file.

    The updater tool computes default names for the reformatted existing policy file and the new output file. By saving the original policy file, the tool allows you to compare the original file with the output file, in case the saved original is necessary for future troubleshooting. You can change the default file names, but you must make these changes before clicking **Generate**. If you enter a file name instead of clicking Browse, the tool computes default file names when you click Generate.

3. Click **Generate**. The original policy file is saved to the **Reformatted Original File For Comparison** file name. The new policy file is saved to the **New Security Policy File with Teamworks strong names** file name. You can use a diff program or utility to compare the original file with the new file. The policy updater tool does not add redundant strong names to a policy file that already contains the strong names.

4. Close the policy updater window when you have finished using the updater tool.

After you have successfully generated the modified policy file, place the new file on the web server and reference the policy file from the `web.config` file. This step enables the new policy to become the global policy for the website.

Web parts overview

provides web parts that enable you to view data from Lombardi Process Portal within a Microsoft SharePoint site.

Using , you can perform many of the same tasks in SharePoint that you can do in the web-based Lombardi Process Portal, including:

• Launch processes from a list of favorites.

• View and perform assigned tasks.

• Manage in-flight processes, including starting and stopping process instances, viewing process diagrams, and reassigning tasks to balance workload.

• View real-time reports showing performance for individuals, teams and business processes.

The following table describes the function of the Lombardi Process Portal web parts.

Web part function

Web part	Function
Lombardi Saved Search	Displays active tasks from a Lombardi saved search.
Lombardi Process Start	Launches Lombardi processes from a SharePoint site.
Lombardi ScoreBoard Launcher	Displays commonly-used links from the Lombardi Process Portal.
Lombardi Embedded Web Site	Displays a Lombardi Report or Coach within a SharePoint site. This web part can also display other types of web sites using any valid URL.

For more information about Lombardi Process Portal web parts, see the *Lombardi for SharePoint 7.2.0 User Guide*.

Adding web parts to a SharePoint site

Add functions such as saved searches and processes to by adding web parts to a Microsoft SharePoint site.

The installer creates sample templates that use web parts. You can add and modify these templates instead of using the web parts directly, since the web parts rely on the structure of the SharePoint site.

To add web parts to a SharePoint site:

1. Click **Site Actions** > **Edit Page**.

2. Go to the web part zone and click **Add a Web part**.

3. In the **Add Web Parts** window, expand the tree until you see the **Miscellaneous** section.

4. Click to select the Lombardi web parts that you want to add to your SharePoint site.

5. Click **Add**.

To configure the properties for each web part, click **Edit** > **Modify Shared Web Part**. For more information about configuring Lombardi web parts in your SharePoint site, see the *Lombardi for SharePoint User Guide*.

Configuring integrated authentication in Lombardi for SharePoint

The integrated authentication between Microsoft® Windows® and allows you to access the client more efficiently.

supports both NTLM-based and Kerberos-based automatic logon. These authentication modes are also referred to as single sign-on (SSO). SSO reduces configuration effort and simplifies the authentication process by using the credentials of the current Windows user to authenticate with consoles. The NTLM and Kerberos protocols allow Lombardi users to automatically log on to Lombardi Process Portal, Lombardi Process Center Console, Lombardi Process Admin Console, , and .

 supports SSO with through the Kerberos protocol. The NTLM protocol is not supported for .

supports integrated authentication by default. During installation, the authentication mode is configured for each site template and the sample Lombardi Portal, using the authentication mode selected in the installer program. Each web part can be manually configured to use either integrated or basic authentication. To change the authentication settings, click **Edit** > **Modify Shared Web Part** in each page. If you select basic authentication mode, you must specify the authentication credentials for the Lombardi server, including username and password. You can encrypt the password that is used for basic authentication. In the web part properties window, click **Encrypt Credentials**. For help with implementing single sign-on for , contact IBM Customer Support.

Removing the product

To remove from your system, you can run the uninstaller program using the Windows® Add and Remove Programs function, or use the uninstall command to uninstall silently.

To uninstall the product silently, use this command:

```
"./Lombardi-for-SharePoint-x32.exe" /s /v"/qn" /x
```

The uninstaller program does not remove some of the files that were previously installed. The small number of remaining files are necessary to avoid potential problems. For example, uninstalling might cause the rest of a website to stop working, due to the removal of a critical file. The policy file and the associated `web.config` entry for it are not removed in case the website administrator is using them or has extended them with other applications.

Additionally, the sample site created to demonstrate the Portal web parts is not removed, because the sample site might be customized. The installer program creates a new SharePoint site instead of writing over the existing sample site. You can keep the older sample site, or remove it using the following steps:

1. Click **Site Actions** > **Site Settings**.

2. In the **Site Settings** window, under **Site Administration**, click **Delete this site**.

3. In the next window, click **Delete**. A message confirming the page deletion is displayed.

Troubleshooting

Review the troubleshooting issues to diagnose and fix common problems.

Because the configuration of your particular environment might differ from the standard, you might see some of the following common issues during an installation update. Ensure that you also review the *Known problems and workarounds* section in *Release Notes* for late-breaking information.

Configuring Kerberos for single sign-on (SSO)

supports SSO with through the Kerberos protocol. NTLM is not supported with .

sample page is not installed if account has insufficient permissions

The installer program creates a Microsoft® SharePoint site called **Lombardi Edition** with an example portal page. If the account used to install has insufficient permissions, the Lombardi Edition sample page is not created.

Workaround

Uninstall and verify that you are using an account with appropriate permissions. Then run the installer program again.

For more information, see the *Running the Lombardi for SharePoint installer* section.

Configuring permissions

Check the `web.config` file to ensure that has the appropriate permissions to run. For more information, see the *Lombardi for SharePoint directories and files installed on the server and the client* section.

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