WebSphere. Lombardi Edition 7.2

Express Installation and Configuration Guide

IBM.

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Introduction

This guide explains how to use Lombardi Installer to quickly install and configure Lombardi Process Center using the Simple installation option. The Process Center serves as the central development environment and repository for multiple process authors. Lombardi Process Center includes a Process Center Server and a Performance Data Warehouse, allowing authors to build and run process applications and also store performance data for testing and playback during development efforts.
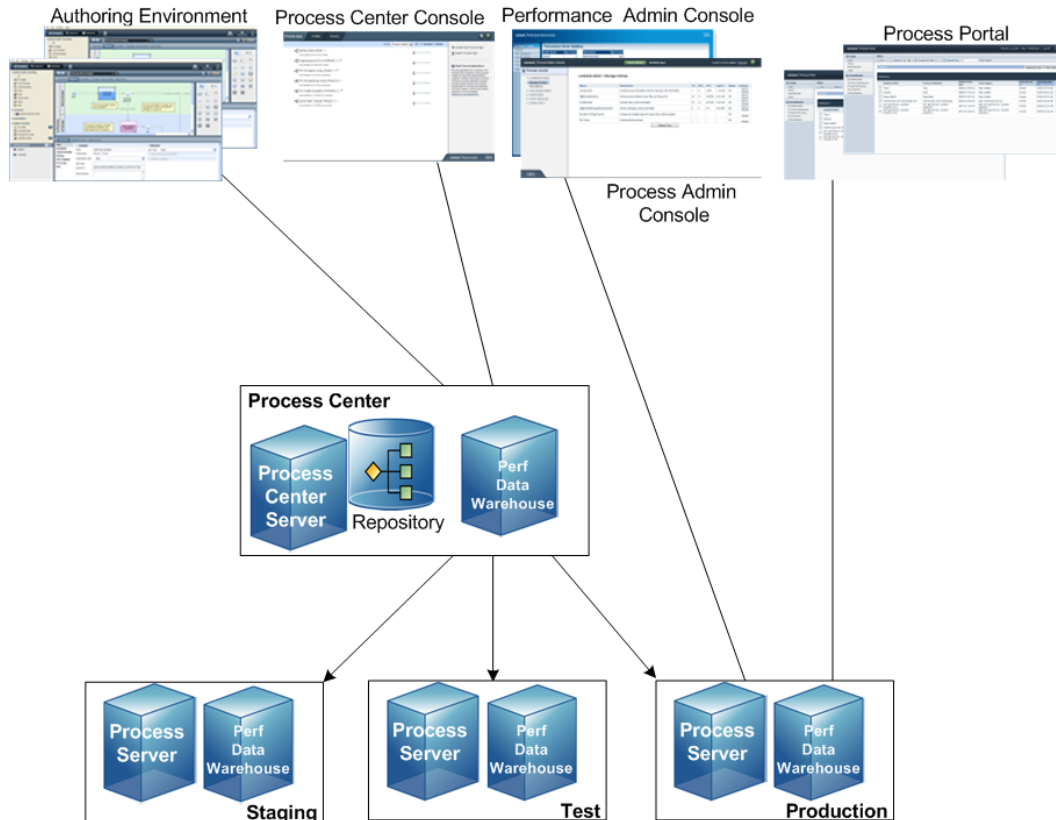
Lombardi product components

IBM® WebSphere® Lombardi Edition includes the following components. The following diagram illustrates how these components are commonly configured.

Component	Function
Process Center	Provides a central development environment and repository for multiple process authors working in the Process Center Console and other interfaces in Lombardi Authoring Environment. The Process Center includes a Process Center Server and a Performance Data Warehouse, allowing you to build and run process applications and also store performance data for testing and playback purposes during development efforts.
Process Server	Executes the processes and services built in Lombardi Authoring Environment, stored in the Process Center repository, and then installed in a runtime environment.
Performance Data Warehouse	Collects and aggregates process data according to tracking requirements established in Lombardi Authoring Environment.
Process Center Console	Enables you to manage and maintain the Lombardi repository, including management of process applications, workspaces, and snapshots. Also enables installation of process applications on Process Servers in runtime environments.
Authoring Environment	Lombardi Authoring Environment consists of several interfaces to enable process authors to model, implement, simulate, and inspect business processes.
Process Portal	Provides an interface that enables process participants to perform assigned tasks, view the history of tasks, and view the performance of their processes and teams. Using Process Portal, process participants can connect to the Process Center Server or a Process Server in any configured runtime environment, such as test or production environments.
Process Admin Console	Provides an interface that enables administrators to configure and maintain Lombardi Process Servers in any configured runtime environment, such as test or production environments. Also enables administrators to configure and maintain the Process Center Server.
Performance Admin Console	Provides an interface that enables administrators to configure and maintain Lombardi Performance Data Warehouses in any configured runtime environment, such as test or production environments. Also enables administrators to configure and maintain the Performance Data Warehouse included in the Process Center.

Lombardi architecture

The following diagram illustrates a typical IBM WebSphere Lombardi Edition configuration:

- From Lombardi Authoring Environment, multiple users connect to the Process Center.

- In Lombardi Authoring Environment, users create process models and supporting implementations (process applications) and store those applications and associated items in the Process Center repository. Authoring Environment users connected to the Process Center can share items.

- The Process Center includes a Process Center Server and Performance Data Warehouse, allowing users working in Lombardi Authoring Environment to run their process applications and store performance data for testing and playback purposes during development efforts.

- From the Process Center Console, administrators install process applications that are ready for staging, testing, or production on the Process Servers in those environments.

- From the Process Center Console, administrators manage running instances of process applications in all configured environments.

- From the Process Portal, end users perform assigned tasks. The Process Center Server and Process Servers in configured runtime environments can run the process applications that create the assigned tasks.

- Using the Process Portal, process participants can connect to the Process Center Server or a Process Server in any configured runtime environment, depending on whether a process is being developed, tested, or has been released to a production environment.

- Lombardi Performance Data Warehouse retrieves tracked data from the Process Server or Process Center Server at regular intervals. Users can create and view reports that leverage this data in Lombardi Authoring Environment and Process Portal.

- From the Process Admin Console and Performance Admin Console, administrators can manage and maintain all Lombardi servers.

Lombardi installation options

If you want to...	You should install...	For instructions, see...
Create process models, implement the process steps, and share your work by connecting to a central repository.	Lombardi Authoring Environment (Windows® only)	*Lombardi Authoring Environment Installation and Configuration Guide*
Provide a central repository and shared development environment for process authors (using an existing database).	Lombardi Process Center (includes Process Center Server, Performance Data Warehouse, and Authoring Environment)	*Lombardi Process Center Installation and Configuration Guide*
Install Lombardi servers in a runtime environment such as staging, test, or production (using an existing database).	Lombardi runtime environment (includes Process Server and Performance Data Warehouse)	*Lombardi Runtime Environment Installation and Configuration Guide*
Quickly install Lombardi Process Center with an embedded DB2 Express database.	Lombardi Process Center using Lombardi Installer's Simple option (Windows only)	Installing Lombardi Process Center using the Simple installation option
Automate installation of Lombardi Process Center.	Lombardi Process Center using the Automated Installer	*Lombardi Automated Process Center Installation and Configuration Guide*
Automate installation of Lombardi servers in a runtime environment such as staging, test, or production.	Lombardi runtime environment using the Automated Installer	*Lombardi Automated Runtime Environment Installation and Configuration Guide*

Installing Lombardi Process Center using the Simple installation option

Lombardi Installer's Simple option installs the following Lombardi product components (see Lombardi product components for descriptions):

- Process Center Server

- Process Center Console

- Authoring Environment

- Process Portal

- Process Admin Console

- Performance Data Warehouse

- Performance Admin Console

The Simple Installer option is designed for quick deployments of Lombardi Process Center. The Simple option installs Lombardi Process Center using the most common configuration, requiring minimal user input.

Read the following sections to learn how you can use Lombardi Installer's Simple option to install Lombardi Process Center.

Steps for installing Lombardi Process Center

The following tables list the steps required to install Lombardi Process Center on your system using Lombardi Installer's Simple option.

You must use a local account that has local administrator access to install Lombardi Process Center using Lombardi Installer's Simple option.

Pre-installation setup

Task	See...
1. Meet the hardware requirements.	Hardware requirements for installing Lombardi Process Center
2. Meet the software requirements.	Software requirements for installing Lombardi Process Center

Installation

Task	See...
1. Run an express installation.	Performing an installation using Lombardi Installer Simple option

Post-installation tasks

Task	See...
1. Start Lombardi product components.	Starting and stopping Lombardi product components This step is necessary only if the installer fails to start Lombardi product components.

Pre-installation setup

Before installing Lombardi Process Center using the Simple installation option, you must meet the system requirements as described in the following sections.

Hardware requirements for installing Lombardi Process Center

The following table describes the hardware requirements for an express installation of Lombardi Process Center:

By default, Lombardi Installer uses the Windows "temp" directory for temporary storage during installation. You can change the temporary directory by changing the `TMP` and `TEMP` environment variables. Ensure that these variables are set to a directory on a drive that has adequate free space, as indicated.

Lombardi installation	Minimum hardware required
Express	Dual processors, each 1.3 GHz, or a single 2.2 GHz processor 3 GB available RAM 4 GB free disk space for Lombardi servers, applications, and databases 2 GB free disk space for additional database growth in development 10 GB free disk space in your default temporary directory Screen resolution of 1280 x 1024 pixels for viewing Lombardi Authoring Environment

Software requirements for installing Lombardi Process Center

The following tables describe the software requirements for an express installation of Lombardi Process Center:

Lombardi software requirements

Software	Version
Microsoft® Windows	Microsoft® Windows Server 2003 (64-bit and 32-bit)
	Microsoft Windows Server 2008 (64-bit and 32-bit)
	Microsoft Windows Server 2003 R2 (64-bit and 32-bit)
	Microsoft Windows Server 2008 R2 (64-bit and 32-bit)
	Microsoft Windows Vista (64-bit and 32-bit)
	Microsoft Windows XP Service Pack 3 (SP3)
	Microsoft Windows 7
Client browsers	Microsoft Internet Explorer 6, 7, and 8
	Enable Compatibility View for Internet Explorer 8.
	Mozilla Firefox 3

An express installation automatically installs the following required software on your system:

Software	Version
Application server	WebSphere® Application Server Version 7.0
Database	DB2® Express Edition Version 9.7 Fix Pack 1
	DB2 Express Edition requires Microsoft .NET Framework Version 2.0 runtime be installed on Windows hosts.

Express installation

Once you have met the hardware and software requirements for installation, you are ready to install Lombardi Process Center using the Simple installation option, which requires just a few clicks to get started with Lombardi. Lombardi Installer's Simple option automatically:

- Installs and configures WebSphere Application Server.

- Installs and starts Windows services needed to run Lombardi.

- Installs DB2 Express Edition.

- Creates and initializes DB2 Express Edition databases for Lombardi Process Center Server and Performance Data Warehouse.

- Starts the Lombardi servers.

- Imports system data and samples.

- Launches Lombardi Authoring Environment.

- Creates Lombardi program shortcuts, enabling easy access to Lombardi components.

- Installs all available language packs. (Available language packs are listed in WebSphere Lombardi Edition Release Notes.)

> The databases that Lombardi Installer's Simple option creates are named tw_proc and tw_perf. And, the installer creates an account with the following credentials for accessing DB2 Express Edition: `WSLE` (user name), `L0mbard1#BPM` (password)

The following section describes how to run an express installation.

Performing an installation using Lombardi Installer Simple option

The following steps provide instructions for completing an express installation. For an express installation, you should use the WebSphere Lombardi Edition installer for Windows that is appropriate for your operating system and choose the Simple installation option.

> You must use a local account that has local administrator access to install Lombardi Process Center using Lombardi Installer's Simple option.

> You can run the installer from the command line if you want to specify a user name and password for DB2 Express Edition that are different from the defaults. By default, the installer creates an account with the following credentials for accessing DB2 Express Edition: `WSLE` (user name), `L0mbard1#BPM` (password). Run the installer from the Windows command prompt as shown in the following example to specify a different user name and password:
>
> ```
> teamworks_install.exe -Ddb2.user=[user_name] -Ddb2.password=[password]
> ```
>
> The requirements for the user name and password are based on the security settings of the Windows operating system.

1. Copy the WebSphere Lombardi Edition installer to a temporary directory on your file system.

   > Windows installers are available for 32-bit and 64-bit operating systems. Be sure to copy and use the installer that is appropriate for your Windows operating system.

2. Double-click the installer executable to start Lombardi Installer.

3. Select the language that the Lombardi installer should use when presenting information and options and then click **OK**.

   The language that you select from this drop-down list applies only to the installer itself and does not affect the language packs installed with the product. The Simple installation option installs all available language packs. (Available language packs are listed in WebSphere Lombardi Edition Release Notes.)

4. Read the Introduction panel and then click **Next**.

5. Read the Lombardi Software License Agreement. If you agree, select **I accept the terms of the license agreement**. Click **Next** to continue.

6. On the Choose Setup Type panel, select **Simple**.

7. On the Choose Install Folder panel, provide the directory where Lombardi product components should be installed, and then click **Next**.

The directory path that you specify for installation of Lombardi product components cannot contain spaces. Spaces in directory paths can cause problems in some environments.

8. On the Choose Shortcut Folder panel, provide the location where Lombardi installer should create the shortcuts for its components.

    When you are ready to install, click **Install**. Installation takes several minutes to complete.

9. When installation is complete, click **Done**.

Cleaning your system if express installation fails

If Lombardi Installer freezes during the setup process, you need to remove any Lombardi product components that might have been installed:

1. End the Simple Install process using Windows Task Manager.

2. From the **Start** menu, select **Control Panel** > **Add or Remove Programs**, and then from the list of programs, remove IBM WebSphere Lombardi Edition.

3. Delete the Lombardi installation directory from your file system.

4. If a `[Lombardi_home]\DB2` directory was created by the Installer, delete that directory and all files contained in it.

5. Run the Installer again, following the steps outlined in Performing an installation using Lombardi Installer Simple option.

Post-installation tasks

After installing Lombardi Process Center on your system using the Simple Installer option, you are ready to start Lombardi Authoring Environment and begin modeling processes, as described in the following sections.

The directory where you installed Lombardi product components is referred to as `[Lombardi_home]`.

For information about performing optional configuration tasks for Lombardi Process Center, see *Lombardi Process Center Installation and Configuration Guide*.

Starting and stopping Lombardi product components

If Lombardi Installer fails to start Lombardi servers and interfaces, you can start the product components from the Windows start menu or from the command line as described in the following sections.

To launch Lombardi product components from the Windows start menu shortcuts, select **Start** > **Programs** > **IBM WebSphere Lombardi Edition**, and then select the component that you want to start. You must start the Lombardi servers (Process Center Server and Performance Data Warehouse) before starting Lombardi Authoring Environment or Process Center Console.

You can log in to Lombardi Process Center Console or Lombardi Authoring Environment using the default administrative user name (tw_admin) and default administrative password (tw_admin), or using the default authoring user name (tw_author) and default authoring password (tw_author). If you want to change the default system user names and passwords, see *Setting up Lombardi user accounts* in *Lombardi Process Center Installation and Configuration Guide*. If you want to create and manage Lombardi users and groups, see *Managing Lombardi users* in *Lombardi Administration Guide*.

You can also start and stop Lombardi components from the command line. To start Lombardi servers (Process Center Server and Performance Data Warehouse):

1. From a command prompt, navigate to the `[Lombardi_home]/bin` directory.

2. Run `startLombardi.cmd`.
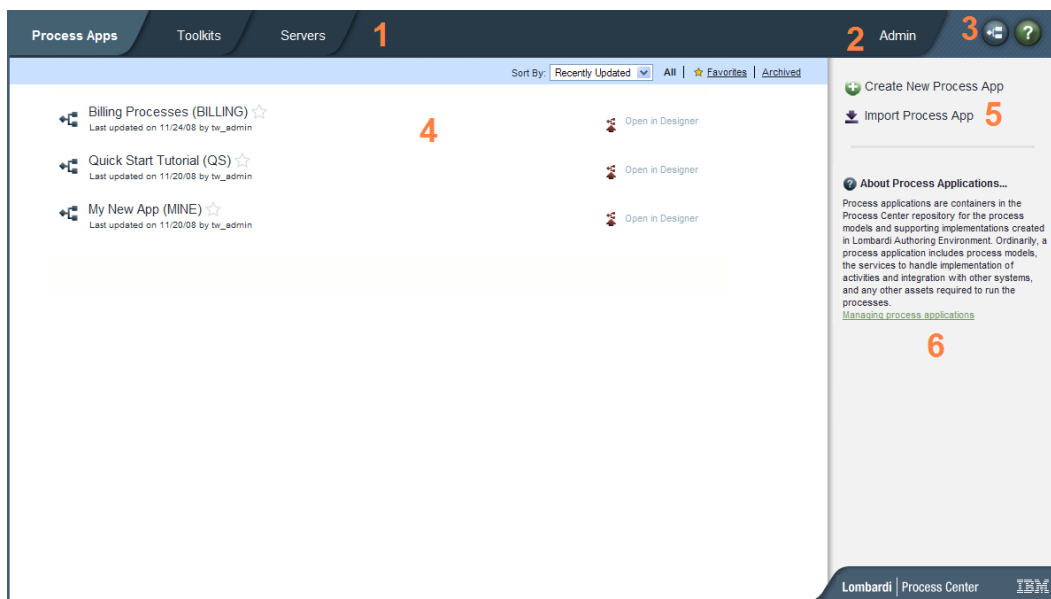
To stop Lombardi servers:

1. From a command prompt, navigate to the `[Lombardi_home]/bin` directory.

2. Run `stopLombardi.cmd`.

To start Lombardi Authoring Environment:

1. From a command prompt, navigate to the `[Lombardi_home]/Lombardi Authoring Environment` directory.

2. Run `eclipse.exe`.

Navigating Lombardi Authoring Environment initial views

The first time you start Lombardi Authoring Environment, it opens to the Process Center Console:

Lombardi Process Center Console enables you to create and manage process applications, install snapshots on test, staging, and production servers and perform other tasks. The following table describes each numbered area in the preceding image of Lombardi Process Center Console:

1	Click one of the available tabs to pick the items you want to create or manage. Clicking **Process Apps** takes you to the page shown in the preceding image where you can create and manage process applications. Clicking **Toolkits** takes to you to a similar page for managing toolkits. Click **Servers** to manage the servers configured in your environment.
2	Click **Admin** to manage access to the Process Center repository.
3	Clicking the **Designer** button takes you directly to the Designer interface in Lombardi Authoring Environment. To learn more about the Designer and other interfaces in Lombardi Authoring Environment, see the following section. Clicking the Help button opens the online help for Lombardi Authoring Environment.
4	This is the main area of the Process Center Console where the items that you are currently managing, such as process applications, snapshots, or servers, are displayed. You can click the All, Favorites, or Archived options to filter the items displayed. Click an item to view and manage its settings. In the example, you can click one of the listed process applications to view and manage its snapshots, history, and general settings. To open a specific process application in the Designer, click the Open in Designer option for the process application that you want to access.
5	Use these options to either create a new process application or import one.
6	Informational dialogs such as this one are available throughout the Process Center Console. You can click the link shown to learn more about the subject, which in this case is process applications.

- To create a process application and get started developing processes, see *Creating your first Lombardi project* in the *Authoring Environment User Guide* or online help.

- To learn about all of the administrative tasks you can perform in the Process Center Console, see *Managing the Process Center repository* in the *Authoring Environment User Guide* or online help.
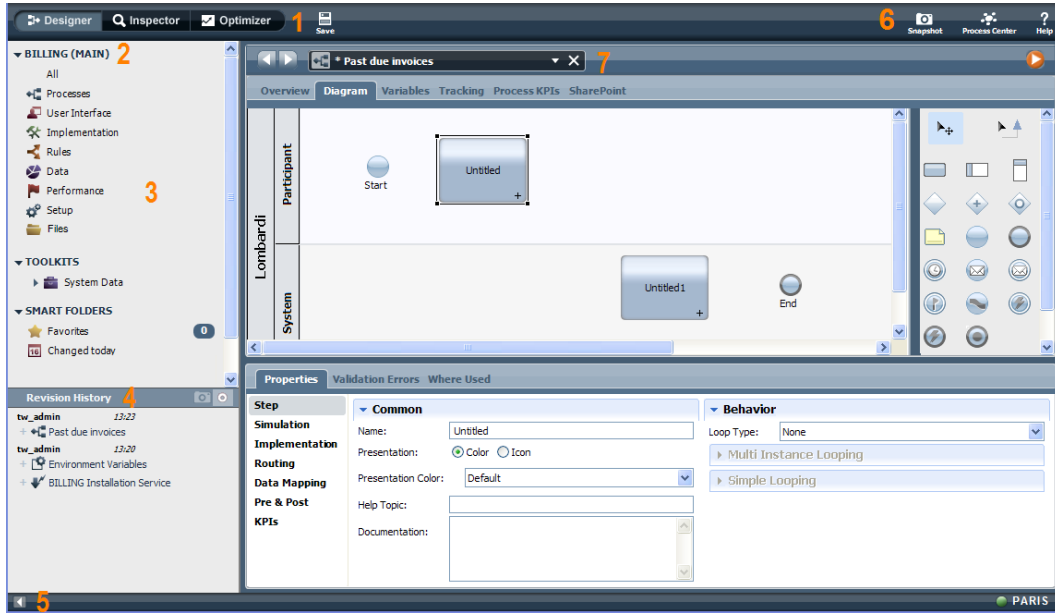
> You can also access the Process Center Console by opening your Web browser to the following location: `http://[host_name]:[port]/ProcessCenter`. You can log in using your Lombardi user name and password. When accessing the Process Center Console from a browser, you cannot select library items such as process applications and immediately open them in the Designer view. To work interactively with the Designer and other available interfaces, you must start the Authoring Environment.

Accessing and using Lombardi Authoring Environment interfaces

From the Process Center Console, you can click the **Designer** button or an **Open in Designer** option to begin developing processes in Lombardi Authoring Environment. The following image shows the Designer interface and each functional area:

You can use the Designer interface to develop process models and their underlying implementations, such as services. The following table describes each numbered area in the preceding image of the Designer interface in Lombardi Authoring Environment:

1	Click the appropriate button to access other interfaces in Lombardi Authoring Environment, including the Optimizer and Inspector views.
2	Shows the process application currently open. In this sample, the Billing process application is open.
3	Shows the types of library items included in the currently open process application. Click a category, such as Processes, to see the processes that you can open and alter.
4	Shows the revision history for the currently open process application. In this sample, a user has recently added items to the open process.
5	Click this icon to hide the library and revision history. The icon enables you to toggle back and forth if you want to alternately hide and view the library and revision history. This toggle control is available in all Lombardi Authoring Environment interfaces: Designer, Optimizer, and Inspector.
6	Use the icons to create snapshots, access the Process Center Console, or access online assistance.
7	Shows the library item currently open for editing in the Designer. In this sample, the user has a process open and is working in the diagram, palette, and properties to create the steps of the process.

To learn more about the tasks that you can perform in each available interface in Lombardi Authoring Environment, including the Process Center Console, see *Lombardi tasks* in the *Authoring Environment User Guide* or online help.

Removing Lombardi components

If you need to remove Lombardi from your system, the Uninstaller program removes installation files and folders for Lombardi, the embedded database system, and the embedded application server.

Before you begin:

- Back up any files that you want to preserve.

- If you are running the Lombardi servers as Windows services, first remove the services. Removing services does not remove files; it only removes them from the list of Windows services.

- Remove the Windows service for IBM WebSphere Application Server v7.0 - ProcessCenter01.

1. Run the Uninstaller program, `[Lombardi_home]\uninstall\uninstall.bat`. You can do this by executing it from a Command Prompt window or by double-clicking the file in Windows Explorer.

2. When the Uninstaller program completes, you might need to remove some installation files manually. For example, if you have a Windows Explorer or Command Prompt window open to a directory in the Lombardi installation directory, the Uninstaller program cannot remove that directory.

3. The Uninstaller program does not remove shortcuts from the Start menu, All Programs menu, Quick Launch toolbar, or desktop. Remove these shortcuts manually.

4. Delete the directory `\DB2` (located on the same drive that Lombardi was installed on) and all files contained in it.

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