Longview 7 Installation Guide

LongView
Solutions

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Zlib General Purpose Compression Library

version 1.0.4, Jul 24th, 1996

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The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files

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Samba JCIFS

W3C SAC

dTree

InstallJammer

PNG Reference Library

wz_tooltip.js

RSA Data Security MD5.c

Trantor Standard Systems B64.c

JSON.org UTF 8 Decoder

D3DES

HP mkguid.c

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Introduction

Longview Solutions provides corporate performance management (CPM) software that leading companies use to drive performance with speed, visibility, and financial integrity. Since 1994, many of the world's most respected companies have been using our technology platform to create a single repository of financial truth from which statutory consolidation, management reporting, financial planning, modeling, analysis, budgeting, forecasting, and strategic tax can be performed quickly and accurately, enterprise-wide. Longview is headquartered in Toronto, Canada with additional offices in Philadelphia, Chicago (USA), and London (UK).

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Web services are a standardized way of integrating applications over the Internet or Internet protocol-based networks. Web services rely on certain software standards including Extensible Markup Language (XML), Simple Object Access Protocol (SOAP), Web Service Definition Language (WSDL) and Universal Description, Discovery & Integration (UDDI).

About this Guide

This guide includes basic information on how to install your Longview system. The following sections indicate conventions that are used in this guide.

Warnings and notes

This guide uses the following conventions for warnings and notes:

Warning   **Warnings provide cautionary information on the possible effect of certain actions, including the unintentional deletion of data. Be sure to read and understand all warnings before performing a related procedure.**

Note   *Notes provide additional information to help you understand your Longview system better. They also provide important information on exceptions to general guidelines.*

Procedures

There may be several ways to perform a procedure in your Longview system.

- You may be able to choose a menu command. For example, to open a file, you can choose Open from the File menu. In this documentation, we use: Choose File > Open.

- You may be able to use a keyboard equivalent. For example, to exit you can press the Alt key and then the letter F to open the File menu, and then press X for Exit.

- You may be able to click a button or icon. If a menu command has an equivalent button or icon, an illustration of the button or icon may appear in the margin.

In this documentation, we may not describe all methods to carry out a task. Use whichever method you prefer. Depending on the task you are performing, certain methods may not be available.

Contacting Longview Solutions

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Hardware and software requirements

This chapter contains information on these main topics:

- "Supported server platforms" on page 21
- "Supported client platforms" on page 24
- "Supported languages" on page 26

Supported server platforms

Supported platforms are defined as the Operating System and RDBMS "families," and minimum patch/point level on which the application is supported under the terms of the Customer's Maintenance Services Agreement. Assistance with issue investigation and resolution is available through Support Services. Any platform-related software issues identified will be addressed based on Longview Solutions' standard issue prioritization criteria.

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- Issues encountered which cannot be replicated on a currently-supported platform will not be addressed.
- For issues that exist on both supported and non-supported platforms, fixes will be verified only on supported platforms and may or may not address the issue on the non-supported platform.
- No support is available for platforms (O/S or RDBMS) that are no longer supported by their respective vendors.

This section contains information on supported platforms for the following items:

- "Data Server OS and RDBMS" on page 22
- "Web Server" on page 22
- "Data Server Web Services" on page 23
- "Longview Grid Server" on page 23
- "HTTP Proxy Server" on page 24

Data Server OS and RDBMS

The following combinations are supported for all servers in the application. For details on the term **Supported**, see "Supported server platforms" on page 21.

Server operating system (x64 architecture)	Server RDBMS
Windows Server 2012 R2 – 64 bit	Oracle 12c – 64 bit
	Oracle 11g Release 2 – 64 bit
	SQL Server 2014 – 64 bit
	SQL Server 2012 – 64 bit
Windows Server 2012 – 64 bit	Oracle 12c – 64 bit
	Oracle 11g Release 2 – 64 bit
	SQL Server 2014 – 64 bit
	SQL Server 2012 – 64 bit
Windows Server 2008 R2 – 64 bit	Oracle 12c – 64 bit
	Oracle 11g Release 2 – 64 bit
	SQL Server 2014 – 64 bit
	SQL Server 2012 – 64 bit
	SQL Server 2008 R2 – 64 bit

Note   *If you are using a separate Database server, then any platform and Operating System supporting the database versions can be used.*

Web Server

The following combinations are supported for the Web Server. For details on the term **Supported**, see "Supported server platforms" on page 21.

Note   *The Web Server supports only x64 Server hardware architecture.*

Server operating system	Web Server
Windows Server 2012 R2 – 64 bit	Microsoft IIS 8.5 – 64 bit
Windows Server 2012 – 64 bit	Microsoft IIS 8 – 64 bit
Windows Server 2008 R2 – 64 bit	Microsoft IIS 7.5 – 64 bit

Data Server Web Services

The following combinations are supported for Data Server Web Services. For details on the term **Supported**, see "Supported server platforms" on page 21.

Note   *Data Server Web Services supports only x64 Server hardware architecture.*

Server operating system	JRE
Windows Server 2012 R2 – 64 bit	JRE 1.8.0_xx
Windows Server 2012 – 64 bit	JRE 1.8.0_xx
Windows Server 2008 R2 – 64 bit	JRE 1.8.0_xx

Note   *Apache Tomcat is deployed as part of the Data Server Web Services install process. If you have already installed Apache Tomcat, you must have version 8.0.26 installed.*

Longview Grid Server

The following combinations are supported for the Longview Grid Server when **Grid Processing Type** is selected in Longview Server Manager. For details on the term **Supported**, see "Supported server platforms" on page 21.

Note   *Longview Grid Server supports only x64 Server hardware architecture.*

Operating system	ODBC
Windows Server 2012 R2 – 64 bit	SQL Native Client 10.0
Windows Server 2012 – 64 bit	
Windows Server 2008 R2 – 64 bit	SQL Native Client 11.0
Windows 7 Enterprise – 64 bit	

You must install the SQL Native Client on the grid node that corresponds to the RDBMS that the Longview application server is configured for.

HTTP Proxy Server

The following combinations are supported for the HTTP Proxy Server. For details on the term **Supported**, see "Supported server platforms" on page 21.

Server hardware	Server operating system
x64 Architecture	Windows Server 2012 R2 – 64 bit
	Windows Server 2012 – 64 bit
x64 Architecture	Windows Server 2008 R2 – 64 bit

Note   *You must have .NET 4.6.1, or 4.5.2 installed to run HTTP Proxy Server.*

Supported client platforms

This section contains information on Supported platforms for the following items:

- Longview Client components
- Microsoft Excel
- Microsoft Silverlight
- Microsoft SharePoint
- Adobe Acrobat Reader

Longview Client components

The following platforms are supported for client computers. For details on the term **Supported**, see "Supported server platforms" on page 21.

Note   *Users must have Internet Explorer as their default browser. The required JRE version is deployed with Longview Component Manager and Longview Launcher.*

Client operating system*	Web browser**	.NET version
Windows 10 – 64 bit	Microsoft IE 11.0 – 32 bit	.NET 4.6.1
		.NET 4.5.2
Windows 8.1 – 64 bit	Microsoft IE 11.0 – 32 bit	.NET 4.6.1
	Microsoft IE 10.0 – 32 bit	.NET 4.5.2
Windows 8 (version 6.2.9200) – 64 bit	Microsoft IE 11.0 – 32 bit	.NET 4.6.1
	Microsoft IE 10.0 – 32 bit	.NET 4.5.2
Windows 7 Enterprise – 64 bit	Microsoft IE 11.0 – 32 bit	.NET 4.6.1
	Microsoft IE 10.0 – 32 bit	.NET 4.5.2
Windows 7 Enterprise – 32 bit	Microsoft IE 11.0 – 32 bit	.NET 4.6.1
	Microsoft IE 10.0 – 32 bit	.NET 4.5.2

* Longview recommends a DPI display setting of 100%. Using a DPI mode other than 100% can cause display issues ranging from incorrect and inconsistent font sizes to interface elements not being visible on the screen.

** If you experience Longview Dashboard display issues and have verified that you have a supported browser version, you may need to turn Compatibility View on. Compatibility View can be found in Internet Explorer's Tools section.

Microsoft Excel

The following Microsoft Excel versions are supported.

Note   *Both Microsoft Office and Microsoft Office 365 are supported; however, you must use the fully deployed version of Microsoft Excel to work with Longview for Excel or the Longview Add-In for Office.*

Longview for Excel	Longview Add-In for Office
Excel 2016 – 32 bit	Excel 2016 – 32 bit and 64 bit
Excel 2013 – 32 bit	Excel 2013 – 32 bit
Excel 2010 – 32 bit	Excel 2010 – 32 bit

Microsoft Silverlight

A compatible version of Microsoft Silverlight is needed to run the Longview Dashboard Symbol Selector. The minimum runtime version of Microsoft Silverlight required is 5.0.

Microsoft SharePoint

Longview 7 supports Microsoft SharePoint 2010 on Windows Server 2008 R2 - 64 bit servers. For more information on integrating your Longview 7 system with Microsoft SharePoint, see the *Longview Integration Guide.*

Adobe Acrobat Reader

Adobe Acrobat Reader is required to view Longview Documentation in PDF format.

Supported languages

Longview client components are language-consistent. For example, for a French client system, this update supports the French version of the Longview client, with the default regional settings, running with the French version of the respective operating system, and the French version of Microsoft Office.

However, for the servers, this update supports English versions of the respective RDBMS, server operating system, or Web server, regardless of the client language.

The following table outlines the language requirements for your Longview system.

	English	*French*
Windows requirements	English Windows	French Windows
	English Microsoft Office	French Microsoft Office
Java JRE	JRE 1.8.0_92	JRE 1.8.0_92
Web browser	English	French
Server operating system	English	English
RDBMS	English	English
Web server	English	English

Installing Longview Platform

Longview Platform provides the financial data repository and framework for your Corporate Performance Management or Tax system.

Installing Longview Platform involves the following steps:

1. "Preparing for a tiered system" on page 27
2. "Installing Longview Data Server" on page 29
3. "Installing Longview Optix" on page 42
4. "Installing Longview Dashboard" on page 43
5. "Installing Longview Smart Client" on page 63
6. "Installing tools and editors" on page 63
7. "Installing Longview Report Viewer" on page 65
8. "Installing Longview HTTP Proxy Server" on page 66
9. "Installing Longview Grid" on page 72
10. "Installing the Data Server Web Service" on page 75
11. "Configuring Longview Data Server for tiered systems" on page 81
12. "Configuring database OS authentication" on page 82
13. "Configuring Single Sign-On (Web)" on page 83

Preparing for a tiered system

This section describes the prerequisites for a tiered system. If your Data Server and database will be on the same host machine, continue to "Installing Longview Data Server" on page 29.

If you plan to use a tiered system (your Data Server and database will be on separate host machines), you must perform some additional setup steps on your Data Server to accommodate the connection between the Data Server and the database.

For more information, see:

• "Preparing for a tiered system with SQL Server" on page 28
• "Preparing for a tiered system with Oracle" on page 28
• "Preparing for a tiered system with OS authentication" on page 28

Preparing for a tiered system with SQL Server

On the application server, you must install the SQL Management Studio that matches the version of the DBMS that it will connect to. If you choose not to install the full package, you must download the following required components from the Microsoft website:

- the SQL Native Client - 64 bit that matches the version of the DBMS you are connecting to
- the SQLCMD.exe - 64 bit executable

> *Note*   *You may also be required to add the binary path for this executable to the PATH variable on the application server.*

After you install SQL Management Studio or download the required components, you must complete the following steps to enable the BULKINSERT function that the application performs:

1. Locate the SQL Server (MSSQLSERVER) service on the database server.
2. Set the owner of the service to a domain account.
3. Give the owner of the service read/write privileges to the network share on the application server. This network share is created as part of the settings for the RECALC_FILES parameter. For more information, see step 5 on page 81.

Preparing for a tiered system with Oracle

On the application server, you must install the full Oracle Client - 64 bit installation package for Oracle version 11.2.0.*x*. Ensure you have configured your TNS-NAMES.ORA file to point to the Oracle instance you will connect to.

Preparing for a tiered system with OS authentication

If you plan to use OS authentication with a tiered system, extra steps are required in the Active Directory. Make sure the following apply:

- the Longview database owner account can be delegated (this must be the account that owns the Longview Administrative Service on the Application Server)
- the SQL Service Owner is trusted for delegation to any service
- the SQL host computer is also trusted for delegation to any service
- each instance of SQL Server must be owned by a unique service account

For more information on using a tiered system with OS authentication, contact Longview Support Services.

Installing Longview Data Server

The Data Server performs as a single, integrated data source for the Longview 7 system. It is responsible for maintaining access to the system, overseeing authentication and authorization, and maintaining symbols, dimensions, classes, and attributes.

To install a new instance of Longview Data Server:

1. Double-click the Longview Server Setup–7.3 (Build *xxxx*).exe received from Longview Solutions.

    Note   *Depending on your system, a User Account Control dialog may prompt you to allow the installer to make changes to the computer. Click Yes.*

    The Longview Server Setup wizard opens.
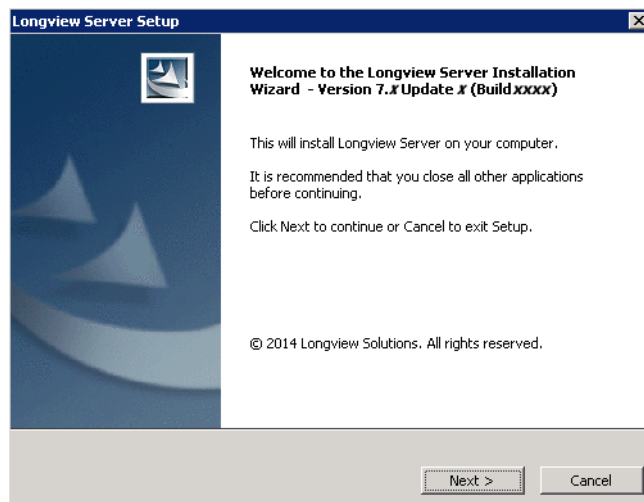
2. Click Next. The Specify Installation Details page opens.
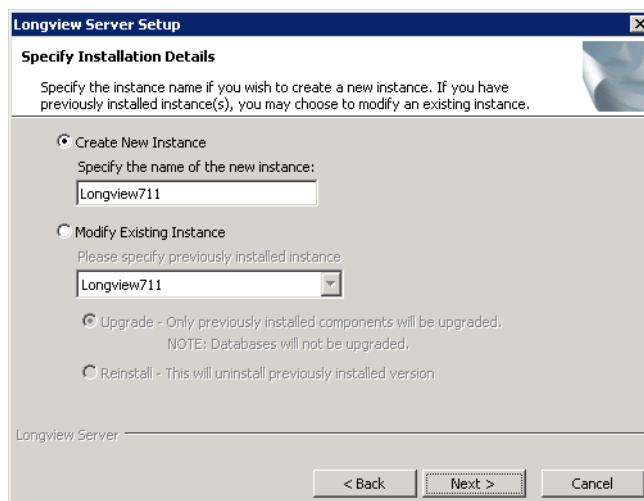
3. Select Create New Instance, and specify the name for the server instance.

4. Click Next. The Choose Destination Location page opens.
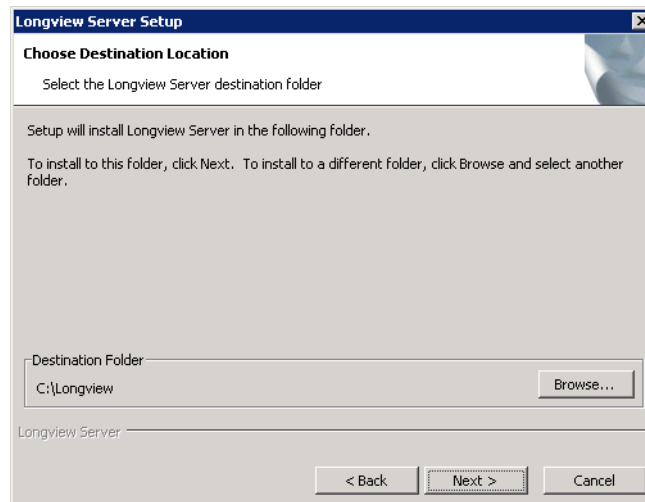
5. By default, new server instances install in the C:\Longview directory. To select an alternate destination folder, follow these steps.

    a.   Click Browse. The Browse for Folder dialog opens.

    b.   Navigate to the destination folder in the tree pane, and select it, or click Make New Folder to create a new folder.

        Warning   **Folders in the destination path cannot contain spaces.**

    c.   Click OK.

6. Click Next. The Setup Type page opens.
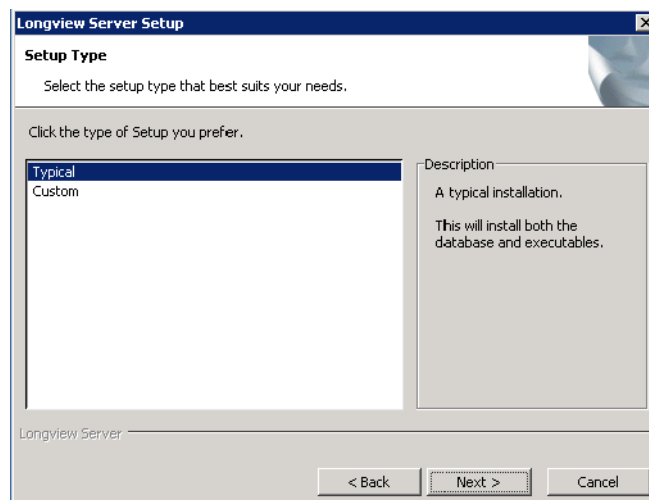
7. Do one of the following:
    - To install all components, select Typical, and continue to step 10.
    - To install specific components, select Custom, and continue to the next step.

8. Click Next. The Select Components page opens.
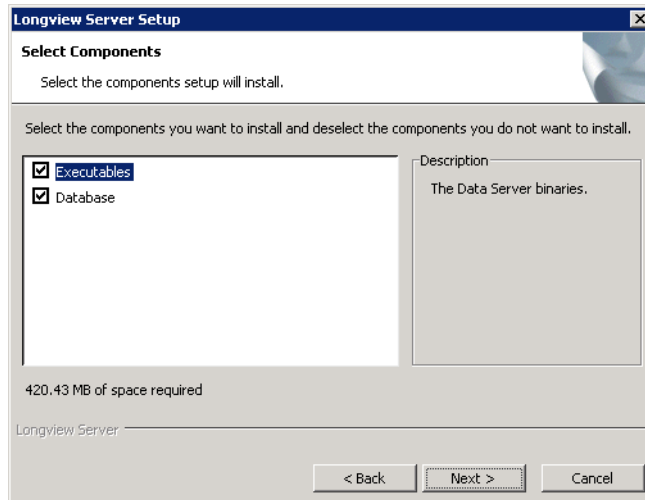
9. Select the components that you want to install.

Executables	Installs the Data Server binaries.
Database	Installs the Longview Database.

10. Click Next. The Select RDBMS Type page opens.
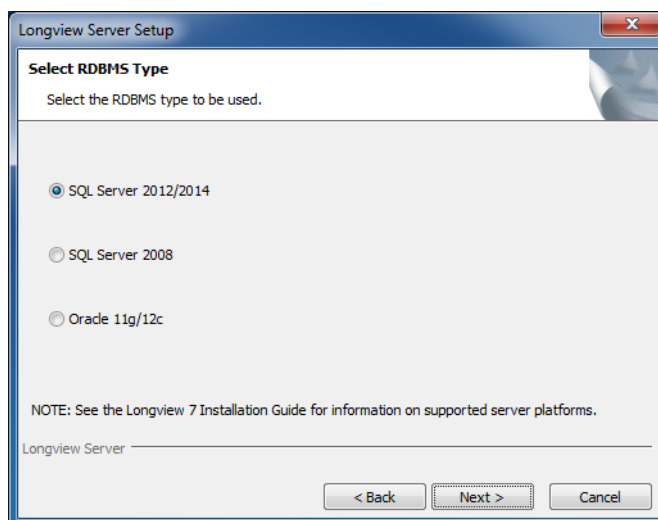
11. Select the type of relational database system (**SQL Server 2012/2014**, **SQL Server 2008**, or **Oracle 11g/12c**).

12. Click Next. The Check for Prerequisites page opens, indicating the success or failure of the installer to locate required resources. Click Next. The Start Copying Files page opens.
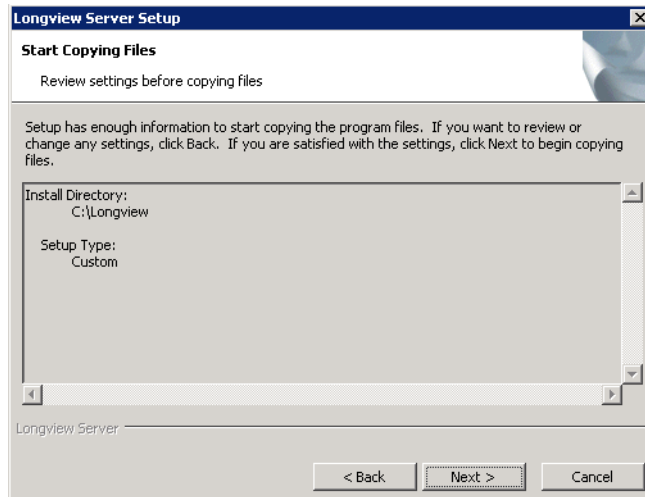
13. Review the settings, and then click Next. The Installing page opens, displaying the progress of the copy process.
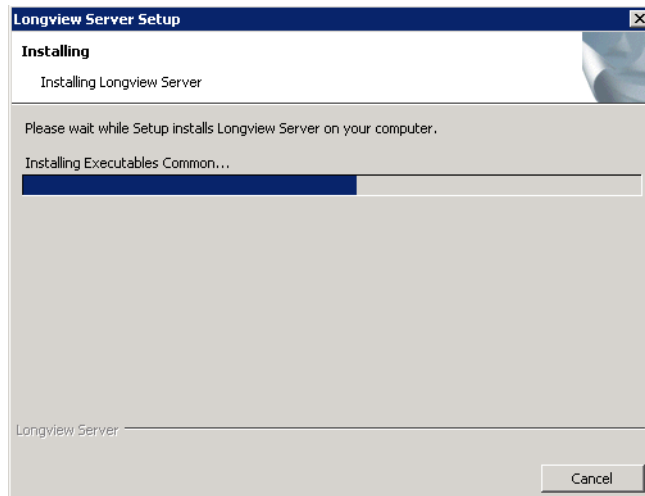
14. When the process is complete, the Set up Longview Server page opens.
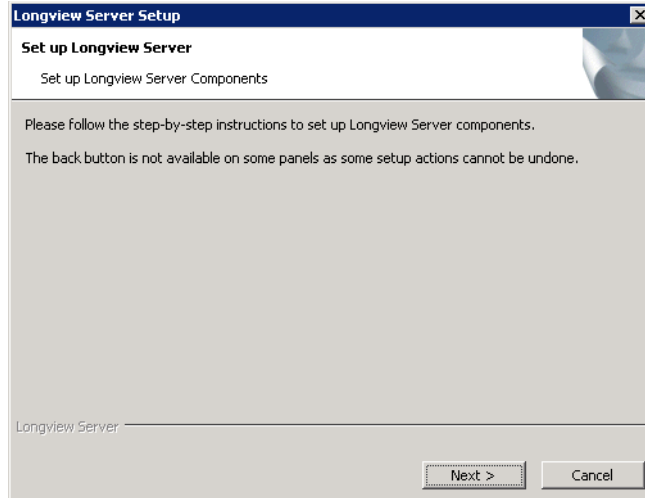
15. Click Next. The Configure Database Account page opens.
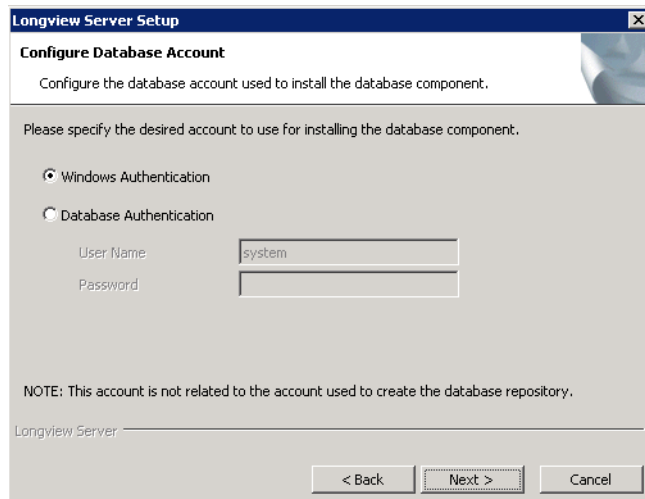
16. Select your authentication type, and specify the user name and password if necessary.

17. Click Next. The Configure Data Server dialog opens.

For SQL Server:

For Oracle:

18. Complete these fields:

   Note   *You cannot use the pound sign (#), percent sign (%), angle brackets (< >), forward slash (/), colon (:), question mark (?), asterisk (*), double quotation mark (") or pipe (|) for the Server Name, Database Name, DBO User Name, or DBO Password.*

Server Name [Instance Name]	Specify the server on which to create the database.
Database/Tablespace Name	Specify the name for the database. This name should be unique.
DBO User Name	Specify the User Name to use for the database. If you specify **system**, the database will use OS Authentication. *Note* When using an OS authenticated database owner all Longview tables, indexes and procedures must be owned by the user. If you use OS authentication, you must complete the steps in "Configuring database OS authentication" on page 82.
DBO Password	Specify the password to use for the database.
DBO Confirm Password	Confirm the password to use for the database.
Oracle Service Name	Specify the service name for the Oracle database to connect to. This field applies only to systems using Oracle databases.

19. Click Next. The Configure Data Server dialog appears as follows.

20. Complete these fields:

Use the DBO user	To increase security, Longview recommends that you create a new user as the View User and do not use the DBO. Select this option to populate the view user name and password with the DBO user name and password that you specified in the previous dialog. **Note** *If you specify the DBO user as the view user, the DBO user is able to query all tables as well as views.*
View User Name	Specify the user name for the view user.
View User Password	Specify the password for the view user.
View User Confirm Password	Confirm the password to use for the View User.

21. Click Next. The Configure Data Server page opens. Enter the locations of the Primary file, the `KLX_BASE_DAT` file, the `KLX_DERIVED_DAT` file, and the Log file, or browse to their locations.

If you are using Oracle, the Configure Data Server page appears as follows. Specify the path for the Tablespace Directory, or click Browse to select the directory.
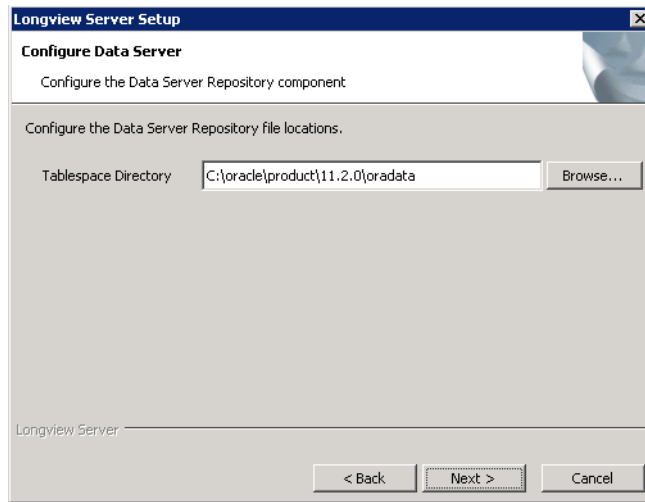
22. Click Next. The Configure Data Server page opens.
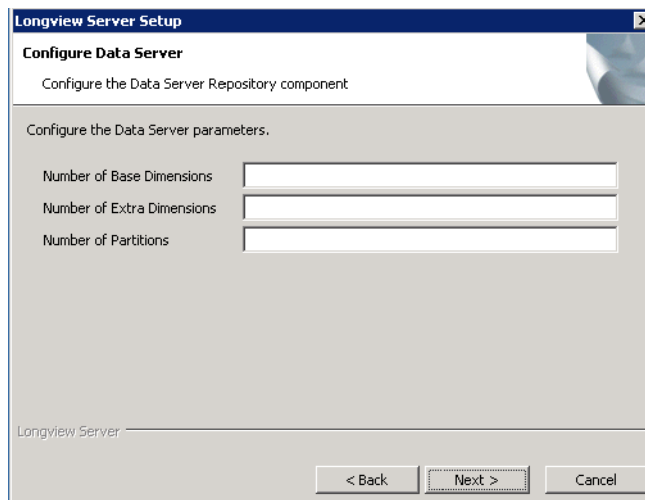
23. Enter the number of base dimensions (1 to 16), extra dimensions (1 to 8), and partitions (1 to 256) for this data server.

   Note   *If you are installing the server for a Longview Tax system, configure your server repository to have 8 base dimensions, 3 extra dimensions, and 1 partition.*

24. Click Next. The Configure Data Server summary page opens. If you need to make changes to any of the scripts listed on the summary page, open them and make the necessary changes.
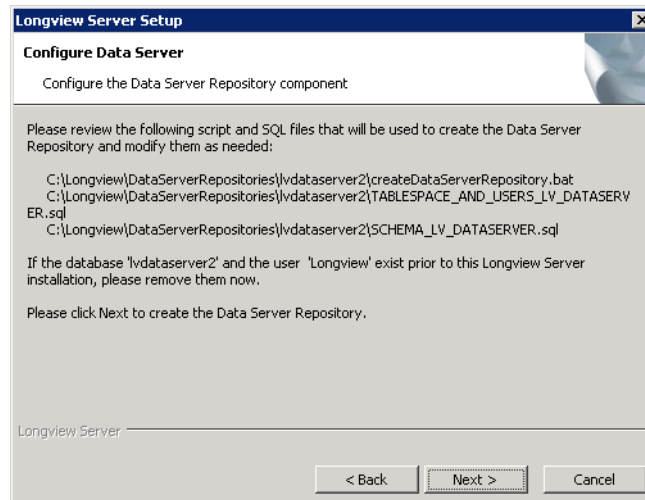
25. Click Next. A progress page opens.
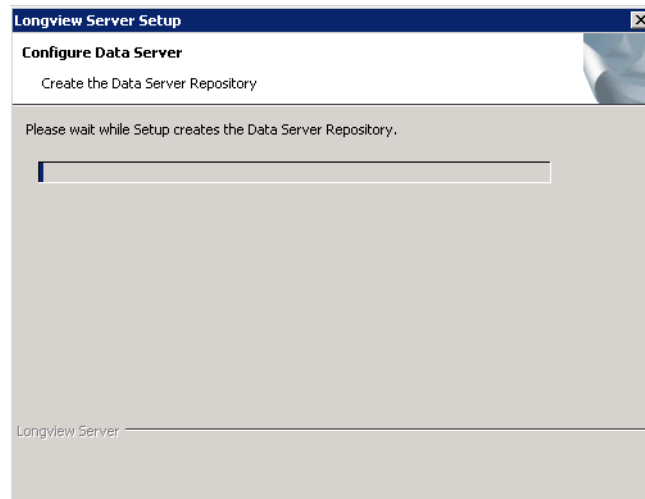
26. When the Data Server Repository is created, a summary page opens displaying the generated output. Review this information.
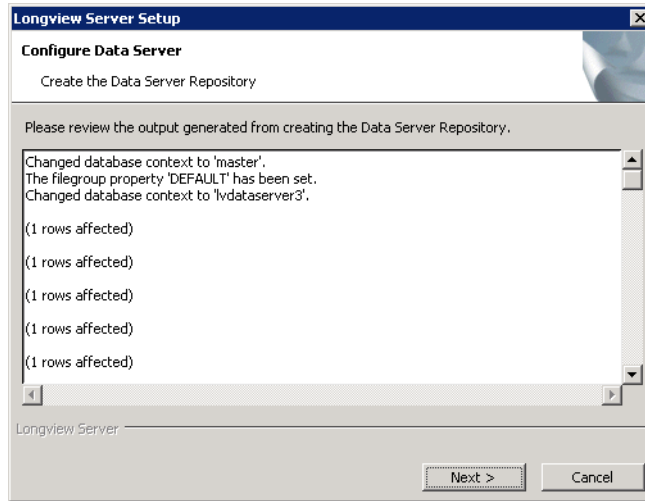
27. Click Next. The Configuration complete page opens.
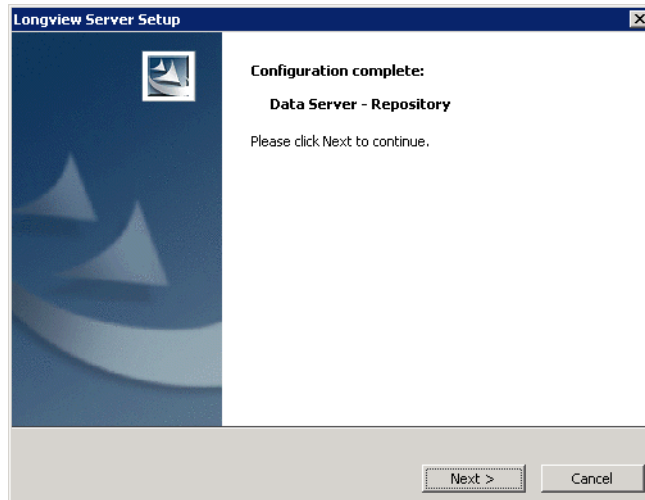
28. Click Next. The Configure Data Server Executables page opens.

29. Complete these fields:

Identifier	Specify the Longview Identifier for your system.
Administrator Port	Specify the port number that the Server Administrator service should use. The valid range for this parameter is 1000 or higher, and the default is 27999.
Listener Port	Specify the port number that the Listener should use. Usually the value of this port is the value of the port used by the Server Administrator +1. The valid range for this parameter is 1000 or higher, and the default is 28000.
Web Listener Port	This parameter sets the port number through which the Longview web application connects to the database when using the ISAPI extension. Set this value to two more than the Longview base port. For example, if the Longview base port is 20000, this value should be 20002. If you are using CGI, you do not need to specify a value for this parameter.
ODBC Data Source	This parameter applies only to SQL Server installations. Longview Solutions suggests that you match this value to the Longview Identifier.

30. Click Next. The Setup process completes the configuration of the Data Server Executables.
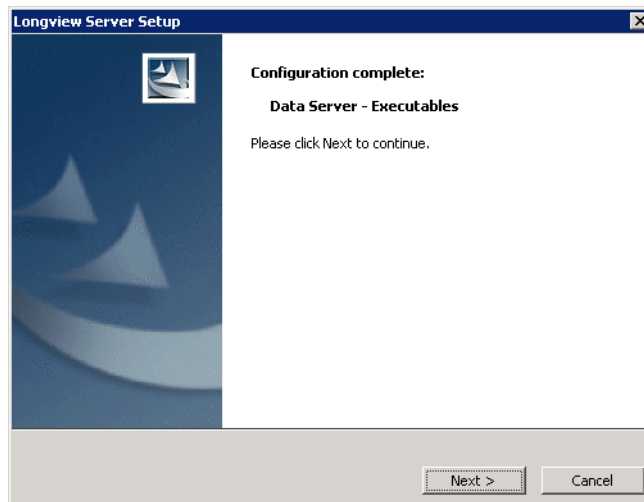
31. Click Next. The Completing Install page opens. The Setup process now completes the installation.
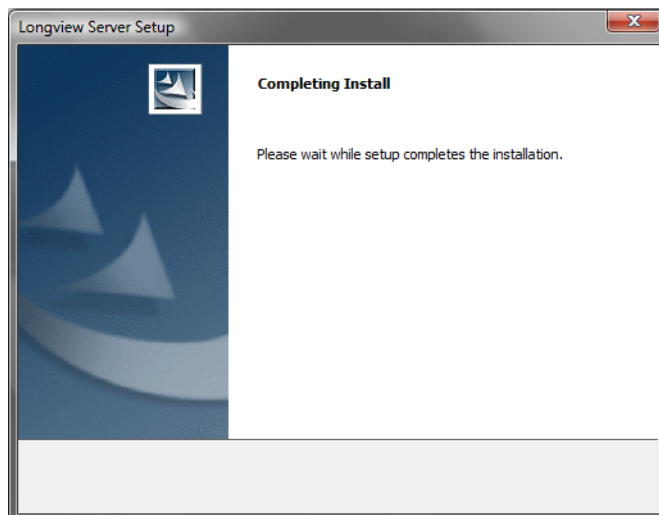
When the installation is complete, the Longview Server Setup Complete page opens.
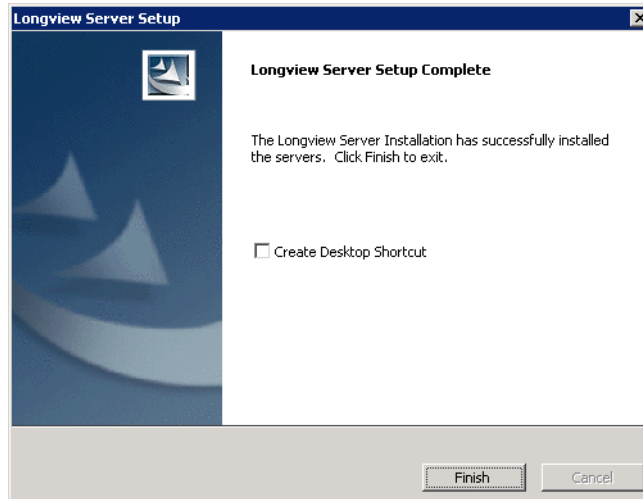
32. Click Finish to exit the wizard.

33. Depending on your company's IT policy, you may need to install web controls, using the Longview Web Controls Installer. For more information, see "Installing Longview Web Controls" on page 115.

34. Continue to "Installing Longview Optix" on page 42.

Installing Longview Optix

Longview Optix provides data visualization and analysis tools. If your company has purchased a license for Longview Optix, you can install it. If your company is not using Longview Optix, continue to "Installing Longview Dashboard" on page 43.

To install Longview Optix:

1. Obtain the OptixEnterprise-7.3 (Build *xxxx*).zip file from the location provided by Longview Support Services.

2. Extract the contents to the Application Server ...\DataServers\Longview\web directory.

3. Continue to "Installing Longview Dashboard" on page 43.

Installing Longview Dashboard

Installing Longview Dashboard consists of these steps:

1. "Obtaining the files" on page 43
2. "Configuring your Longview system for Longview Dashboard" on page 43
3. "Installing program components" on page 50
4. "Configuring program components on IIS" on page 51
5. "Configuring IIS for Longview Dashboard" on page 55

Obtaining the files

Obtain the Web(x64)–7.3 (Build *xxxx*).zip file from Longview Solutions. This file is available, by prior arrangement, on CD-ROM or from the Longview Solutions FTP site. Once the .zip file has been copied from the CD-ROM or downloaded from the FTP site, move it to a temporary directory, and unzip it. Continue to "Configuring your Longview system for Longview Dashboard" on page 43.

Configuring your Longview system for Longview Dashboard

Before you set up program components, you must modify certain settings in the Longview Data Server configuration file.

To modify the Longview Data Server configuration file:

1. In the ...\DataServers\<*LID*> directory, right-click the lvsrvr.cfg file, and open it in your preferred text editor.
2. Set the following parameters to the suggested values:

Parameter	Suggested value	Description
WEB_AGENT_PROTOCOL	For CGI, enter IPC For ISAPI, enter TCP	This parameter specifies the communication protocol used by the Longview web application. If your Longview servers are not on the same machine as the web server, you must use ISAPI.
WEB_LISTENER_PORT	Two more than the Longview base port number.	This parameter sets the port number through which the Longview web application connects to the database. Set this value to two more than the Longview base port. For example, if the Longview base port is 20000, this value should be 20002.

Parameter	Suggested value	Description
WEB_SERVER_BRIDGE	For IPC: /cgi-bin/*\<LID\>*/lvweb.cgi For TCP: /cgi-bin/*\<LID\>*/ks_iweb.dll where *\<LID\>* is the Longview Identifier for your system	This parameter specifies the location of the CGI or ISAPI program. It is a relative path from the IIS root directory.
WEB_AGENT_POOL	5	This parameter specifies the number of Longview web agents spawned when the Longview servers are started. A value of **0** disables the Longview web functionality. You can change this parameter to an optimal value at a later time.

3. Once the changes have been made, save and close the lvsrvr.cfg file.

4. If the Longview Servers are already running, stop and restart them.

5. From your Web server, open the Windows Server Manager. The Server Manager dialog opens with the Roles screen in view.
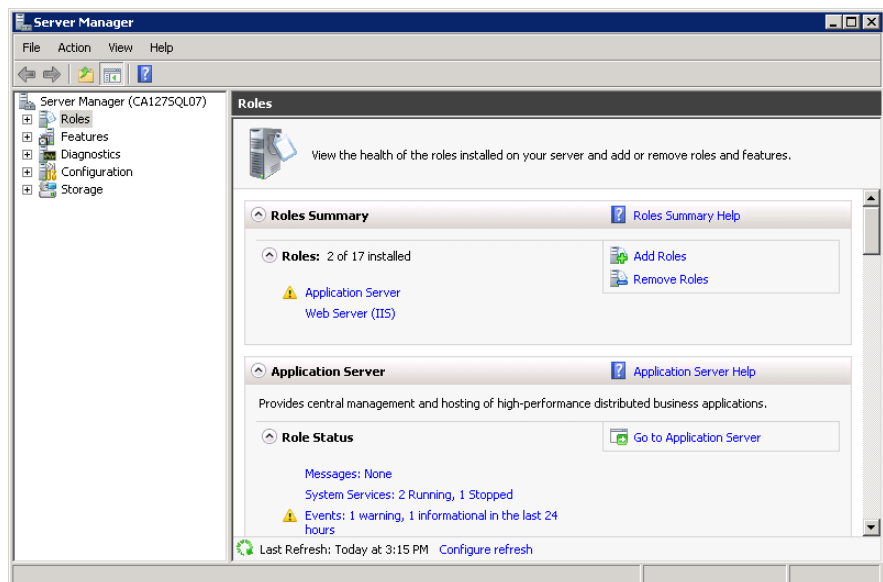
6. Select Features in the tree pane. The Features page opens in the content pane.
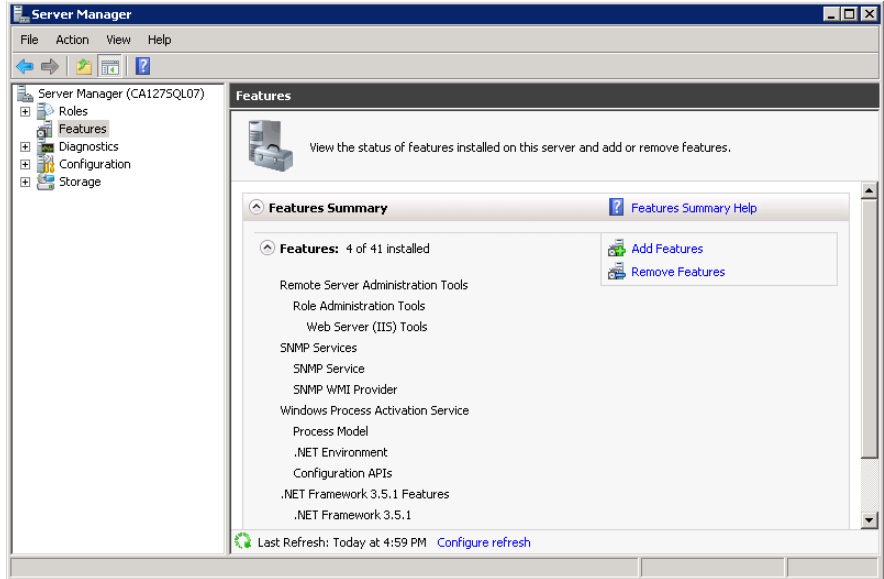
7. Click Add Features. The Add Features Wizard opens.
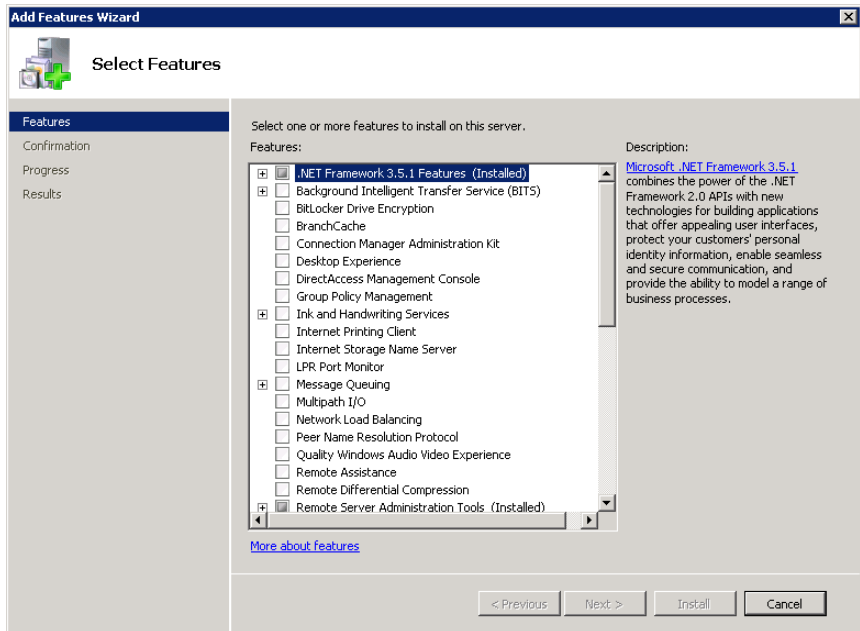
8. Do one of the following:

   • For Server 2008, ensure that .NET Framework version 3.5.1 is installed.
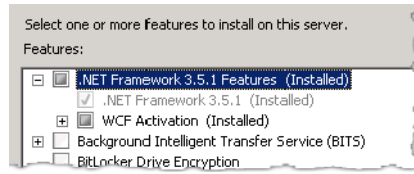
   • For Server 2012, ensure that both .NET Framework version 3.5.1 and 4.5 are installed.
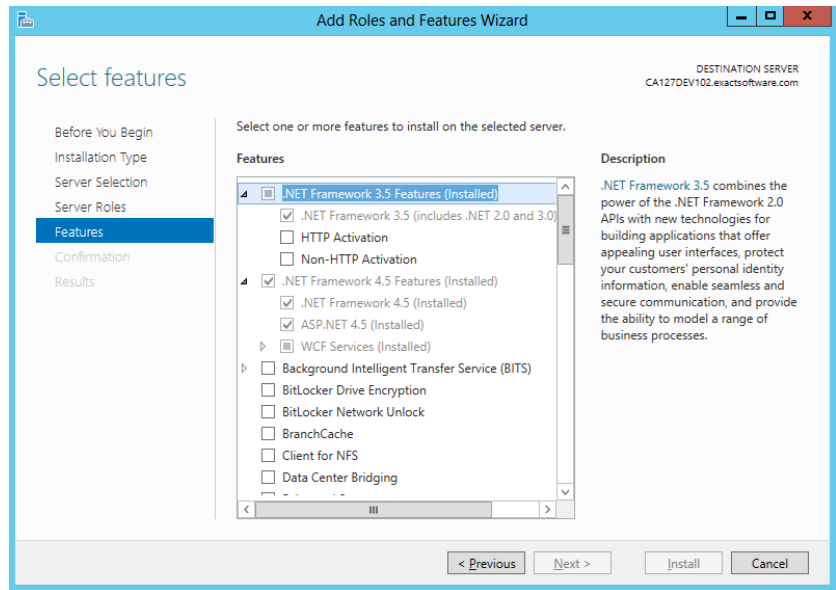
9. If **.NET** Framework is not installed, install it, and repeat these steps. If it is installed, continue to the next step.

10. Click Cancel to exit the wizard. A confirmation dialog opens.

11. Click Yes. The Server Manager dialog opens with the Features screen in view.

12. Select Roles in the tree pane. The Roles page opens in the content pane.

13. In the Roles Summary list, verify that Web Server (IIS) exists. If it does not, continue to the next step. If it does exist, continue to step 17.

14. Click Add Roles. The Add Roles Wizard opens.
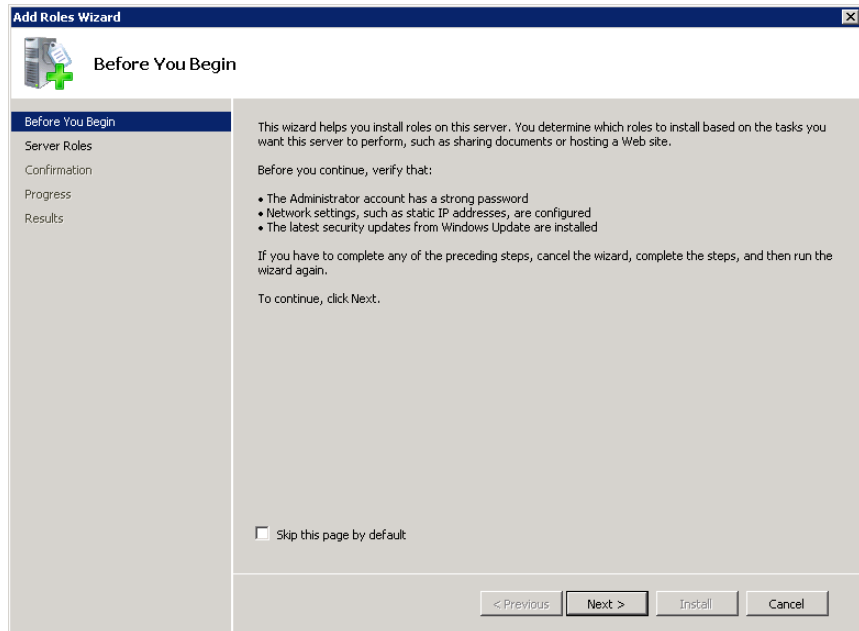
15. Click Next. The Select Server Roles page opens.
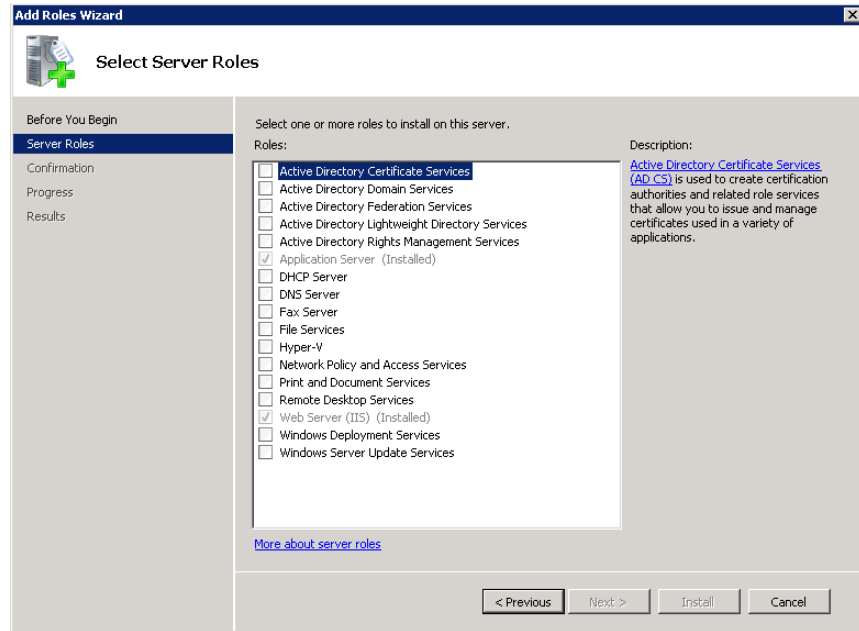
16. Install Web Server (IIS) with the following Role Services.

Common HTTP Features	Static Content
	Default Document
	Directory Browsing
	HTTP Errors
	HTTP Redirection
Application Development	ASP.NET
	CGI
	ISAPI Extensions
	ISAPI Filters
	Server Side Includes
Health and Diagnostics	HTTP Logging
	Request Monitor
Security (Installed)	Basic Authentication
	Windows Authentication
	Digest Authentication
	Request Filtering
Performance	Static Content Compression

Management Tools	IIS Management Console
	IIS Management Scripts and Tools

17. In the Server Manager dialog Roles Summary area, click Web Server (IIS). The Web Server (IIS) page opens.

18. Scroll down the page to the Role Services area.

19. Click Add Role Services.

20. Install the following items for IIS:

Common HTTP Features	Static Content
	Default Document
	Directory Browsing
	HTTP Errors
	HTTP Redirection
Application Development	ASP.NET
	CGI
	ISAPI Extensions
	ISAPI Filters
	Server Side Includes
Health and Diagnostics	HTTP Logging
	Request Monitor
Security	Basic Authentication
	Windows Authentication
	Digest Authentication
	Request Filtering
Performance	Static Content Compression
Management Tools	IIS Management Console
	IIS Management Scripts and Tools

21. When all items are installed, exit the Add Role Services wizard, and continue to "Installing program components" on page 50.

Installing program components

The installation process for program components depends on whether you are using CGI or ISAPI. To install CGI program components, continue to the next section. To install ISAPI program components, continue to "Installing ISAPI program components" on page 50.

Installing CGI program components

If you are using CGI with IPC, you must install the CGI program components.

To install the Longview CGI program components:

1. Navigate to the IIS root directory (typically C:\Inetpub\wwwroot), and open the cgi-bin directory (if this does not exist, create it).

2. Create a new directory with the same name as the Longview Identifier (LID), as specified by the SERVER_NAME parameter in the lvsrvr.cfg file, within the cgi-bin directory.

3. Copy the files located in the ...\web_bridge\ipc\iis\win directory (extracted from the .zip file) to the ...\cgi-bin\<*LID*> directory. The files are lvweb.cgi, lv_auth.dll, lv_xcry.dll, and msvcr90.dll.

4. Continue to "Configuring program components on IIS" on page 51.

Installing ISAPI program components

If you are using ISAPI with TCP, you must install the ISAPI program components.

To install ISAPI program components:

1. Navigate to the IIS root directory (typically C:\Inetpub\wwwroot), and open the cgi-bin directory (if this does not exist, create it).

2. Create a new directory with the same name as the Longview Identifier (LID), as specified by the SERVER_NAME parameter in the lvsrvr.cfg file, within the cgi-bin directory.

3. Copy the files located in the ...\web_bridge\tcp\iis\win directory (extracted from the zip file) to the ...\cgi-bin\<*LID*> directory. These files are ks_iweb.dll, lv_auth.dll, lv_xcry.dll, lvweb.xml, and msvcr90.dll.

4. Right-click the lvweb.xml file in the ...\cgi-bin\<*LID*> directory, and open it in your preferred text editor.

5. Edit the following parameters in the lvweb.xml file:

Parameter	Value
KOServer	Specify the name of the Longview application server where the Data Server component exists.
KOPort	Specify the web listener port used by the Longview Data Server on the application server. Change the **9000** value to match the port setting assigned to the **WEB_LISTENER_PORT** parameter in the lvsrvr.cfg file (as set in "Configuring your Longview system for Longview Dashboard" on page 43).
KOPoolSize	Specifies the number of threads to use with Web communications. Leave this value at **5**.

6. Save and close the lvweb.xml file.

7. Continue to "Configuring program components on IIS" on page 51.

Configuring program components on IIS

This section provides information on configuring Longview program components on an IIS server, including configuring authorizations, handler mappings, extensions, and CGI and ISAPI restrictions.

Configuring authorizations, handler mappings, and component extensions

You must configure authorizations, handler mappings, and component extensions before you can use Longview Dashboard.

To configure IIS:

1. On your Longview server, open Internet Information Services (IIS) Manager. Internet Information Services (IIS) Manager opens with the Start Page in view.
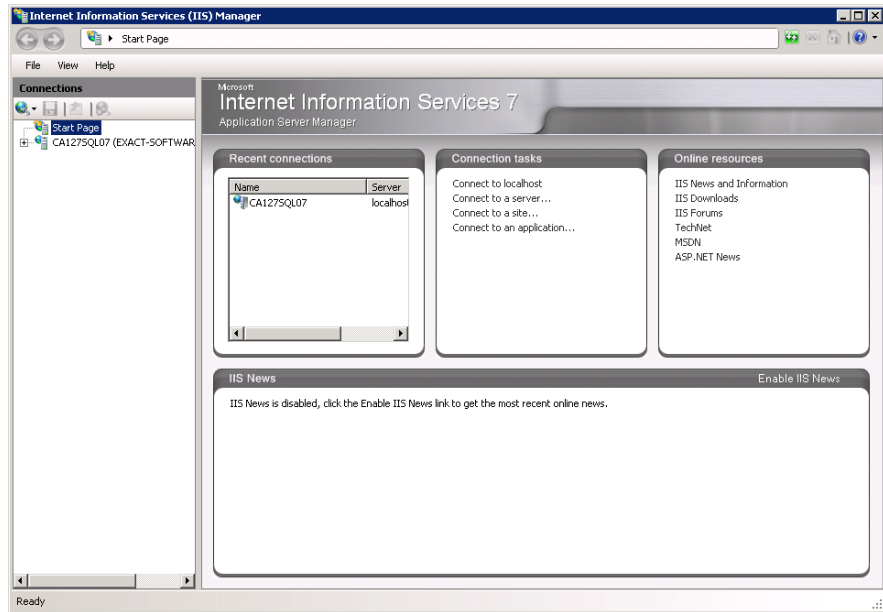
2. Select your server in the Connections pane. The server home page opens in the content pane.
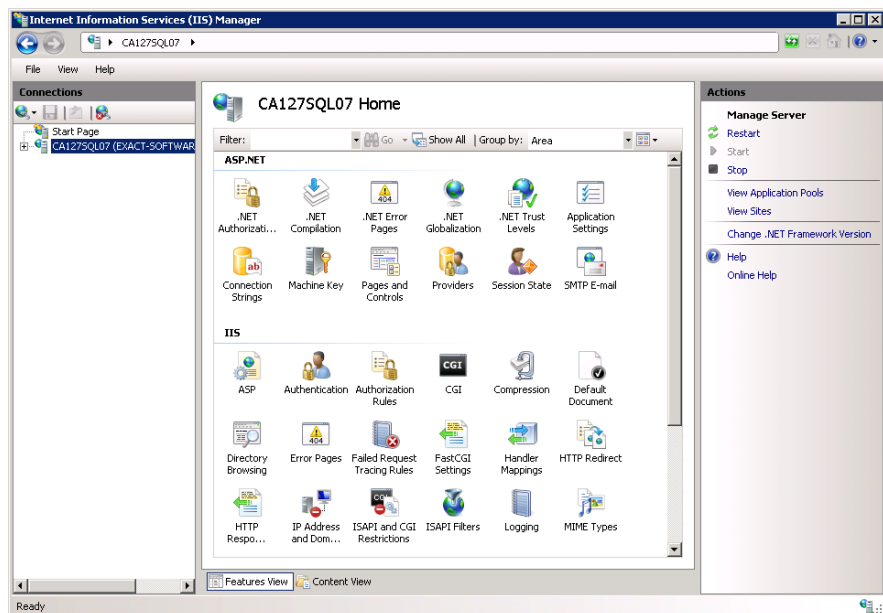
3. Double-click Authentication. The Authentication dialog opens in the content pane.
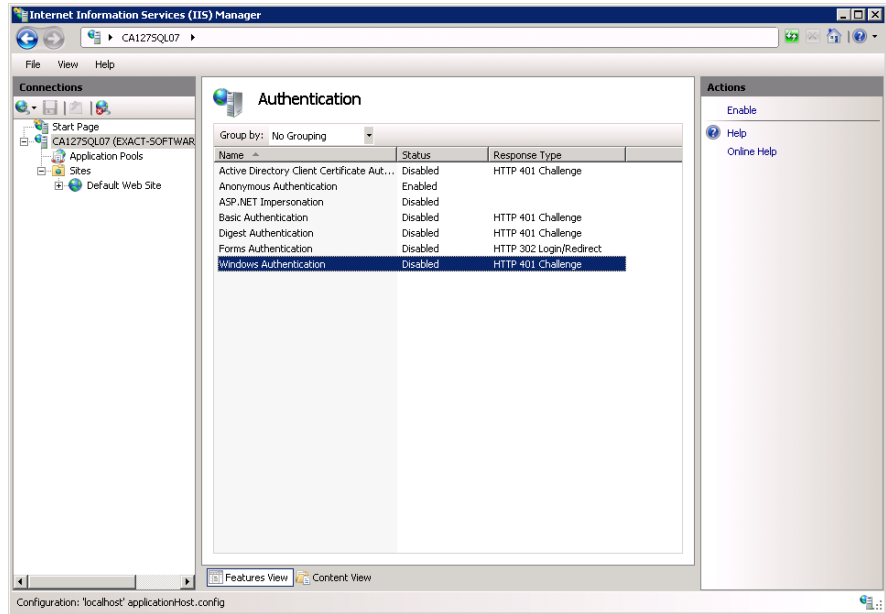
4. Select **Windows Authentication** in the list, and click Enable in the Actions pane.

5. If you plan to use Mobile Dashboard Reporting with the Apple iPad, follow these steps.

   Note   *Changes made in this section also apply to your Longview Dashboard.*

   a. In the Connections pane, expand Default Web Site, and then expand cgi-bin.

   b. Select the appropriate system directory.

   c. In the IIS area of the content pane, double-click Authentication.

   d. Select **Windows Authentication** in the list, and click Enable in the Actions pane.

   e. Select **Anonymous Authentication** in the list, and click Enable in the Actions pane.

6. Click your server name in the connections pane to return to the server home page.
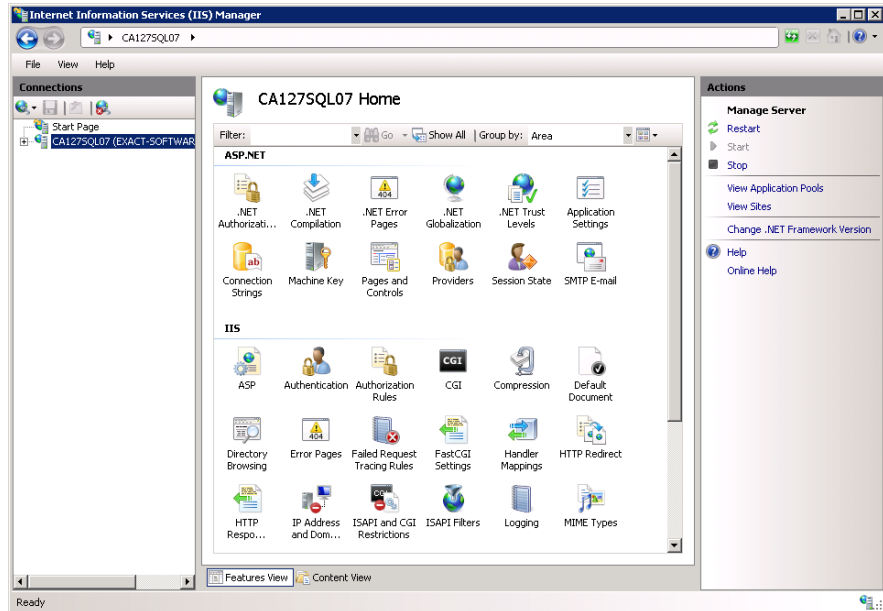
7. Double-click Handler Mappings. The Handler Mappings dialog opens in the content pane.
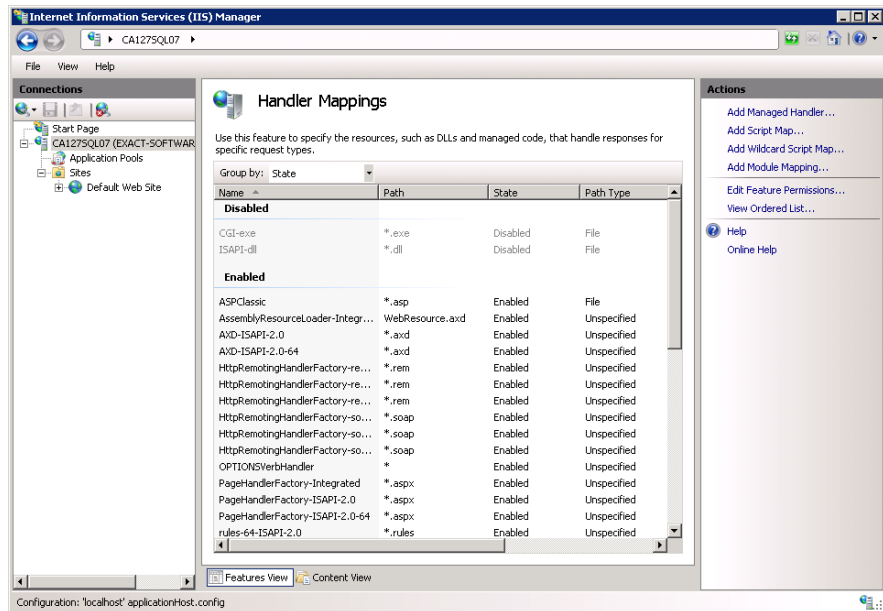
8. Do one of the following:

   - If you're using IPC/CGI, right-click CGI-exe, and select Edit Feature Permissions.

   - If you're using TCP/ISAPI, right-click ISAPI-dll, and select Edit Feature Permissions.

   The Edit Feature Permissions dialog opens.
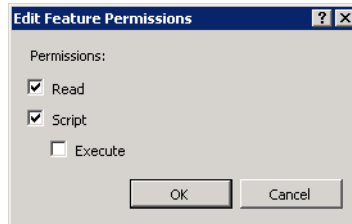
9. Select **Execute** to enable CGI-exe or ISAPI-dll, and click OK.

10. Continue to "Configuring IIS for Longview Dashboard" on page 55.

Configuring IIS for Longview Dashboard

Before you can use Longview Dashboard, you must configure extension restrictions and an http redirect, and add handler mappings.

Configuring IIS for Longview Dashboard consists of the following steps:

1. "Configuring component restrictions" on page 56

2. "Configuring a redirection for the Longview sign-on URL" on page 58

3. "Adding handler mappings" on page 60 (IPC only)

Configuring component restrictions

Before you can use Longview Dashboard, you must configure component restrictions.

To configure restrictions:

1. On your Longview web server, start Internet Information Services (IIS) Manager. Internet Information Services (IIS) Manager opens with the Start Page in view.
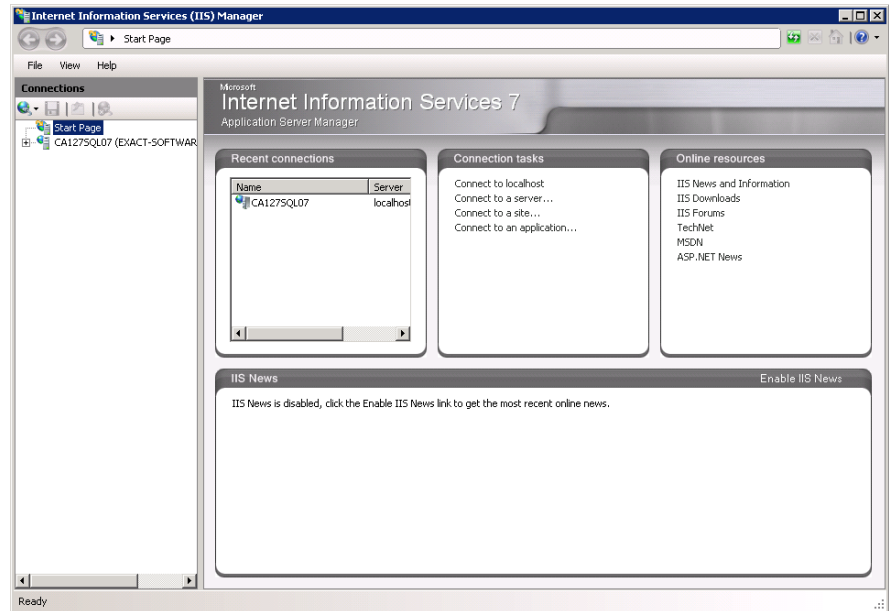
2. Select your server in the Connections pane. The server home page opens in the content pane.
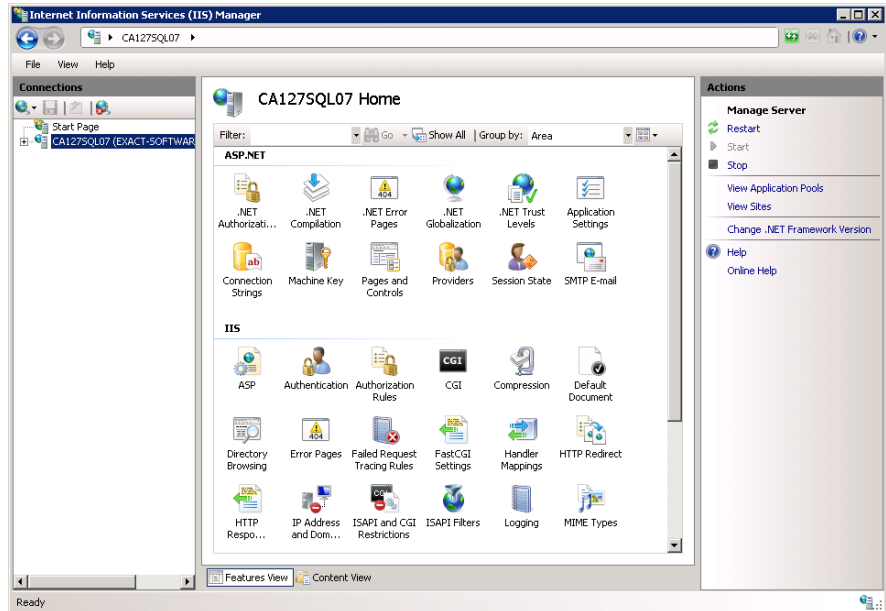
3. Double-click ISAPI and CGI Restrictions. The ISAPI and CGI Restrictions page opens in the content pane.
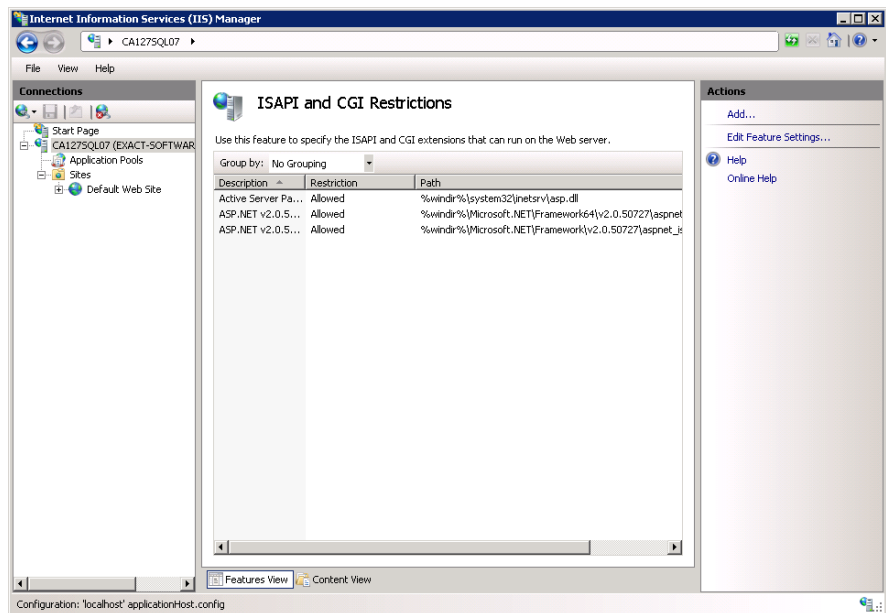
4. Select **Edit Feature Settings** in the Actions pane. The Edit ISAPI and CGI Restrictions Settings dialog opens.
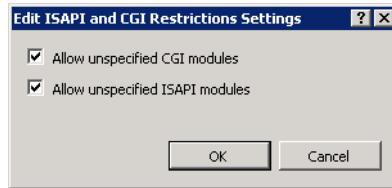
5. Do one of the following:

   • For IPC, select **Allow unspecified CGI modules**, and click OK.

   • For TCP, select **Allow unspecified ISAPI modules**, and click OK.

6. Click your server in the Connections pane to return to the server home page.

7. Continue to "Configuring a redirection for the Longview sign-on URL" on page 58.

Configuring a redirection for the Longview sign-on URL

In order to provide your users with a simple URL to sign on to Longview Dashboard, Longview Solutions suggests that you create a redirection. Once you have configured a redirection, users can access the sign on page from http://<Server-Host>/<*LID*> instead of having to use the full URL.

To configure a redirection:

1. Navigate to the IIS root directory (typically C:\Inetpub\wwwroot), and create a new directory with the same name as the Longview Identifier (LID), as specified by the SERVER_NAME parameter in the lvsrvr.cfg file.

2. In Internet Information Services (IIS) Manager, select the new directory located under Default Web Site.
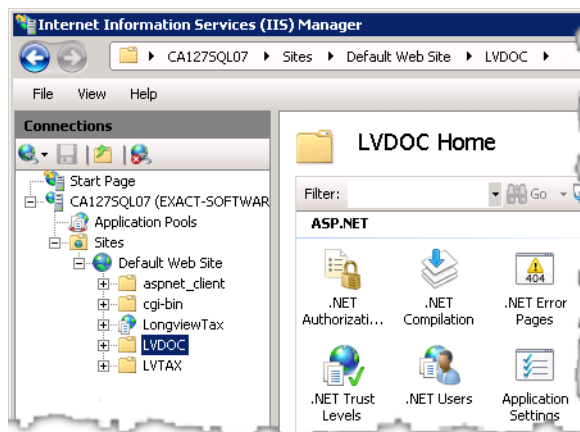
3. Double-click HTTP Redirect. The HTTP Redirect page opens in the content pane.
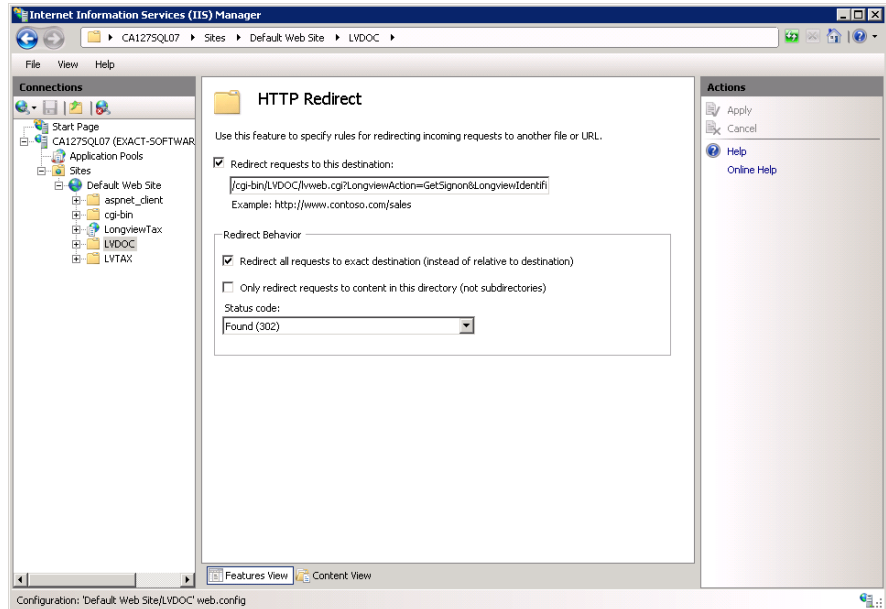
4. Select **Redirect requests to this destination** and the appropriate URL into the field.

   - For IPC, enter /cgi-bin/*<LID>*/lvweb.cgi?LongviewIdentifier=*<LID>*& LongviewAction=GetSignon& LongviewLangCode=EN& LongviewClien-tID=*<LID>*&LongviewAuthMode=*<AuthMode>*

   - For TCP, enter /cgi-bin/*<LID>*/ks_iweb.dll?LongviewIdentifier=*<LID>*& LongviewAction=GetSignon& LongviewLangCode=EN& LongviewClien-tID=*<LID>*&LongviewAuthMode=*<AuthMode>*

   where:

   <LID> is the Longview Identifier for your system.

   <AuthMode> is optional and is the default authentication method. Specify WinAuth for Windows Authentication, LVAuth for Longview authentication, or 3rdAuth for third-party web authentication.

5. Click Apply in the Actions pane.

6. If you are using IPC, continue to "Adding handler mappings" on page 60. If you are using TCP, continue to the next step.

7. Restart IIS.

8. The web portion is complete. To test the configuration, open Internet Explorer, and navigate to http://*<ServerHost>*/*<LID>*.

9. Continue to "Installing Longview Smart Client" on page 63.

Adding handler mappings

This section applies to IPC only.

To add handler mappings:

1. Click your web server in the Connections pane to return to the server home page.
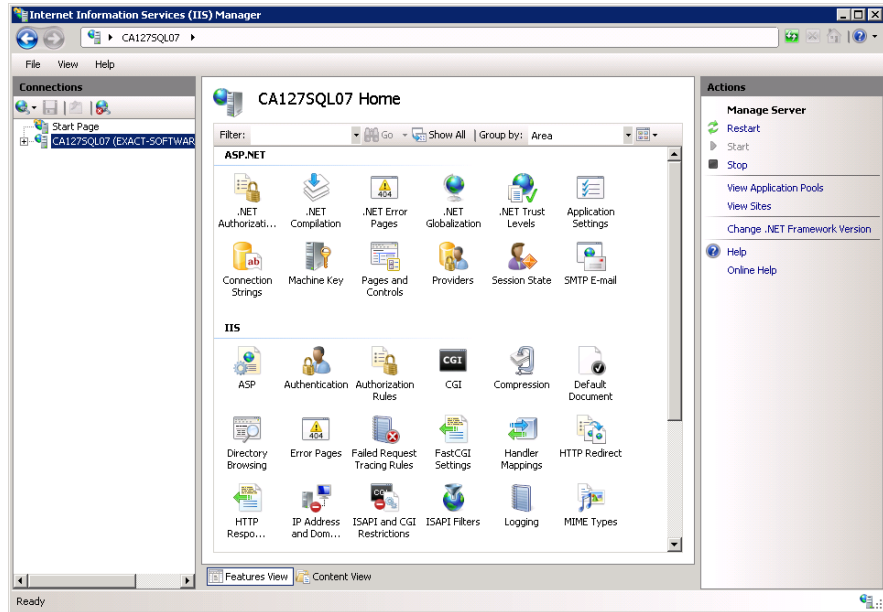
2. On your server home page, double-click Handler Mappings. The Handler Mappings page opens in the content pane.
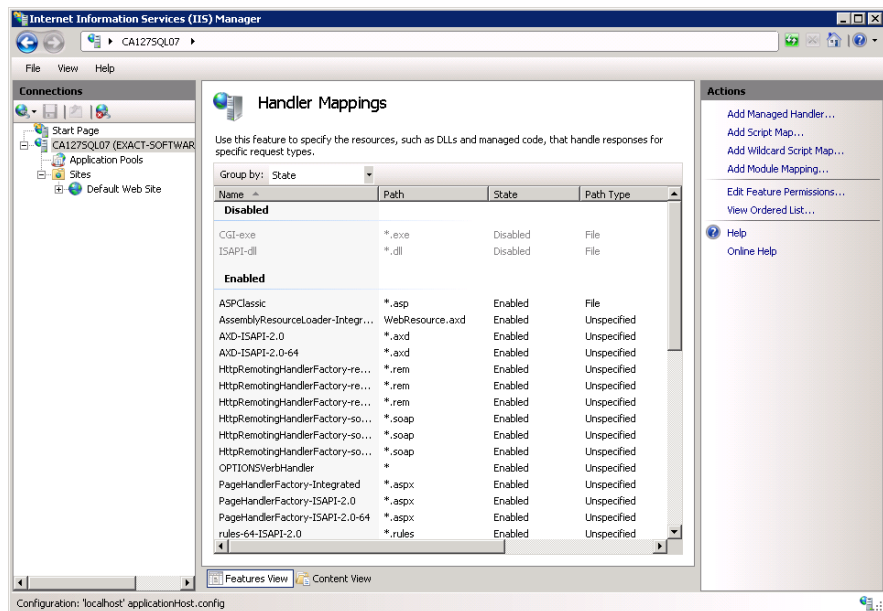
3. Click **Add Module Mapping** in the Actions pane. The Add Module Mapping dialog opens.
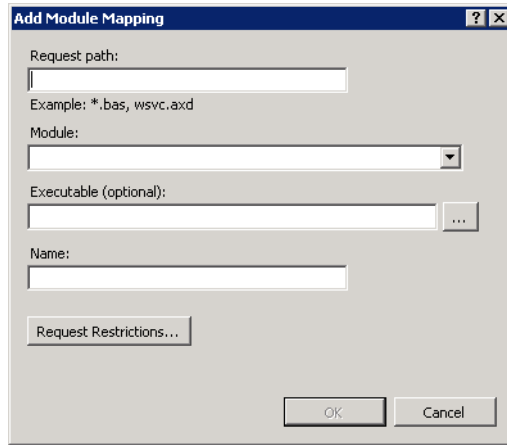
4. Complete the following fields:

Field	Value
Request path	Enter "*.cgi".
Module	Select CgiModule from the drop-down list.
Executable (optional)	Leave this field empty.
Name	Enter "Longview CGI".

5. Click Request Restrictions. The Request Restrictions dialog opens with the Mapping page in view.
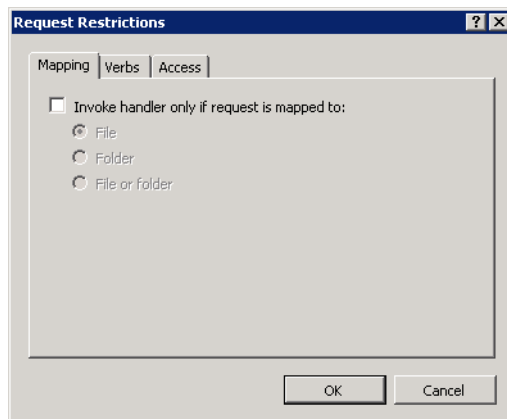
6. Click the Access tab.
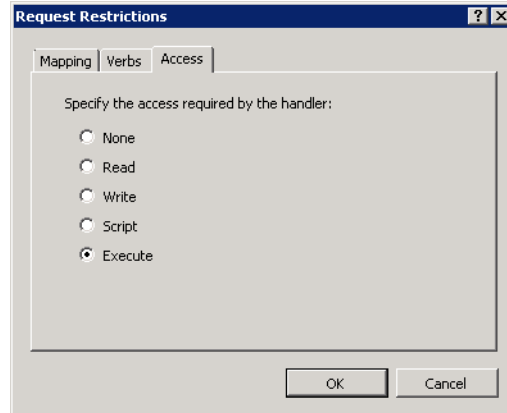
7. Select Execute, and click OK.

8. In the Add Module Mapping dialog, click OK. Longview CGI is added to the list of enabled Handler Mappings.

9. Click your web server in the Connections pane to return to the server home page.
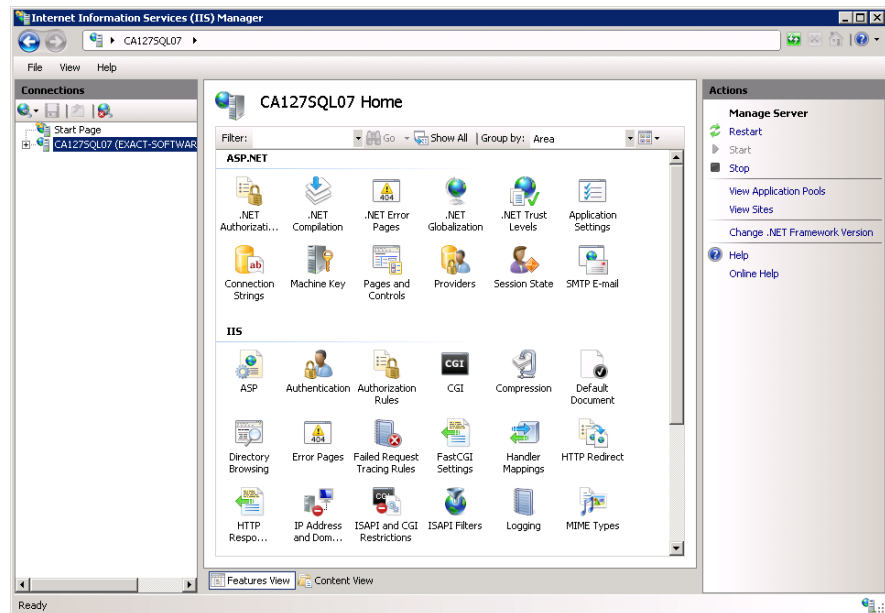
10. Restart IIS.

11. The web portion is complete. To test the configuration, open Internet Explorer, and navigate to http://<ServerHost>/<LID>.

12. Continue to "Installing Longview Smart Client" on page 63.

Installing Longview Smart Client

Longview Apps are based on Windows Presentation Foundation (WPF) application technology. The integrated system of WPF technology, along with the following components, is referred to as the Longview Smart Client.

- Longview Application Framework
- Longview API layer
- .NET-based user interface
- HTML

The first time end users access Longview Apps through Longview Dashboard, the system downloads the Smart Client framework to the user's local machine. After initial deployment of the Longview App, all subsequent interaction between the Longview App and the Longview Servers is handled by Longview Application Framework through the Longview API layer.

Before users can run any Longview Apps, you must install the Smart Client to the Web server.

Note   *If you are using Longview Tax, you do not have to install Smart Client unless you plan to launch Apps from the Longview Dashboard.*

To install Longview Smart Client:

1. Obtain the Smart Client-7.3 (Build *xxxx*).zip from the location provided by Longview Support Services.

2. Unzip the file to the directory referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file, overwriting files if necessary. For example, C:\inetpub\www-root\cgi-bin\Longview.

3. Continue to "Installing tools and editors" on page 63.

Installing tools and editors

You can install the following tools and editors together by completing the steps in this section:

- the Data Locks tool
- the User Submissions tool
- the Events tool
- the Events Status tool
- the Mappings editor
- Longview Designer
- Longview Performance Manager

Data Locks and User Submissions tools   Users can use the Data Locks and User Submissions tools to view information about locks and user submissions in the system. They can also use the Data Locks tool to delete their own locks, and, if they have the appropriate permissions, to delete locks created by other users.

Events and Events Status tools   Users can use the Events and Events Status tools to view the status of events that have been triggered in the system, and other information related to events. If they have the appropriate permissions, they can also use the Events tool to delete event information.

Mapping editor   Users can use the Mappings editor to create, delete, and modify maps and mappings.

Longview Designer   Users can use Longview Designer to create, delete, and modify data import apps.

Longview Performance Manager   Users can use Longview Performance Manager to access Longview reports, Longview Apps, and other components in one interface.

Note   *Longview Performance Manager requires implementation by Professional Services.*

You can install these tools and editors on your web server and then depending on your system, you can make these tools and editors available to users through Longview Performance Manager, or make them available to users through Longview Dashboard panels.

For security purposes, you can configure your Longview Application Framework/ Smart Client sessions to connect to the Data Server using HTTP proxy. This allows users to connect via Longview Dashboard, Longview Apps, or Longview Tax through a secure https:// connection. To do so, you must first install the HTTP Proxy Server. For more information, see "Installing Longview HTTP Proxy Server" on page 66.

Note   *If you are using Longview Tax, you do not have to install tools and editors unless you plan to launch them from the Longview Dashboard.*

To install tools and editors:

1. Download the appropriate versions for the following .zip files from the location specified by Longview Support Services:

   • CPM Client-Longview 7.3 (Build *xxxx*).zip

   • CPM Client Applications-Longview 7.3 (Build *xxxx*).zip

2. Unzip the files to the following locations:

File	Location
CPM Client–Longview 7.3 (Build *xxxx*).zip	Web bridge directory as referenced by the `WEB_SERVER_BRIDGE` parameter in the `lvsrvr.cfg` file. For example, `C:\inetpub\wwwroot\cgi-bin\Longview`.
CPM Client Applications–Longview 7.3 (Build *xxxx*).zip	Server machine Data Server working directory. For example, `C:\Longview\DataServers\Longview`.

Note   *For CPM systems, once you have installed Longview Client Components, you must add the* `Display_Locks`*,* `User_Submission_Status`*,* `Events`*,* `Events_Status`*,* `Mappings`*, and* `Longview_Designer` *system panels to the desired pages in Longview Dashboard Designer. For information on adding a panel to a page, see the Longview Dashboard Designer Guide. These panels are already assigned to the appropriate preconfigured pages in Longview Tax.*

3. Continue to "Installing Longview Report Viewer" on page 65.

Installing Longview Report Viewer

Longview Report Viewer is a ClickOnce-deployed application that enhances the rendering of reports on screen and report printing. Reports launched from Longview Dashboard, Longview Performance Manager, and Longview Tax Provision open using Report Viewer. Mobile Dashboard reporting does not use Report Viewer.

Note   *To open HTML-based reports, you can modify the value for* USE_REPORT_VIEWER. *For more information, see "Appendix A: The Server Configuration File" on page 189*

To install Longview Report Viewer:

1. Obtain the `Longview Report Viewer–7.3 (Build *xxxx*).zip` file from the location provided by Longview Support Services.

2. Unzip the file to the directory referenced by the `WEB_SERVER_BRIDGE` parameter in the `lvsrvr.cfg` file, overwriting files if necessary. For example, `C:\inetpub\wwwroot\cgi-bin\Longview`.

3. Continue to "Installing Longview HTTP Proxy Server" on page 66.

Installing Longview HTTP Proxy Server

For security purposes, you can configure your Longview system to connect to the Data Server using HTTP proxy. This allows users to connect client components through a secure https:// connection. To do so, you must first install the HTTP Proxy Server.

If you are using Longview HTTP Proxy Server, or any other proxy server, you must set the WEB_IP_SECURITY parameter to FALSE.

Installing HTTP Proxy Server consists of the following steps:

1. "Obtaining the files" on page 66
2. "Configuring Longview HTTP Proxy Server" on page 66
3. "Creating a Windows service for Longview HTTP Proxy Server" on page 68
4. "Configuring the application request routing extension for IIS" on page 69
5. "Configuring the IIS URL rewrite for HTTP proxy connections" on page 69
6. "Configuring Longview Data Server to use Longview HTTP Proxy Server" on page 71

Obtaining the files

Before you can configure an HTTP proxy connection, you must obtain the proxy server .zip file. This file is available, by prior arrangement, on CD-ROM or from the Longview Solutions FTP site.

To obtain the HTTP Proxy Server files:

1. Obtain the Longview HttpProxy-7.3 (Build *xxxx*).zip file from the location provided by Longview Support Services.
2. Navigate to the C:\Longview directory on your Longview Application Server machine.
3. If it does not already exist, create a directory called ProxyServers.
4. In the new ProxyServers directory, create a directory with the Longview Identifier of the system that should connect using the proxy. This directory will be the HTTP Proxy working directory.
5. Unzip the Longview HttpProxy-7.3 (Build *xxxx*).zip file to the C:\Longview\ProxyServers*<LID>* folder.
6. Continue to "Configuring Longview HTTP Proxy Server" on page 66.

Configuring Longview HTTP Proxy Server

Before you install the HTTP Proxy Server, you must configure connection and logging information.

To configure Longview HTTP Proxy Server

1. In the C:\Longview\ProxyServers\<*LID*> directory, right-click the Longview.Http-ProxyServer.exe.config file, and open it in your preferred text editor.

2. Specify values for the following parameters:

DataServerHost	Specify the Data Server host for the HTTP proxy. For example: <add key="DataServerHost" value="srvr1201sql01"/>
DataServerListenerPort	Specify the Data Server client (listener) port. For example: <add key="DataServerPort" value="28000"/>
DataServerAdminPort	Specify the Data Server Admin port. For example: <add key="DataServerPort" value="27999"/>
HttpProxyServerListenerPort URL	Specify the listener port URL for the HTTP Proxy Server. For example: <add key="HttpProxyServerURL" value="http://srvr1201sql01:8080/listenerportproxy/"/> This URL must be unique for HTTP Proxy Servers connecting to the same Data Server.
HttpProxyServerAdminPortURL	Specify the listener port URL for the HTTP Proxy Server. For example: <add key="HttpProxyServerURL" value="http://srvr1201sql01:8080/adminportproxy/"/> This URL must be unique for HTTP Proxy Servers connecting to the same Data Server.
Logging	Specify whether to use logging for the HTTP Proxy Server. You can specify one of the following values: • TRUE—Turns on logging for the HTTP Proxy Server. • FALSE—Turns off logging for the HTTP Proxy Server. For example: <add key="Logging" value="TRUE"/>
LogMaxSize	Specify the maximum log file size in kilobytes. If a log file reaches or exceeds the maximum file size, it is automatically archived. For example: <add key="LogMaxSize" value="10240"/>

MaxPollingInterval	This parameter applies to admin port requests for Longview Application Administrator and Longview Server Manager.
	Specify the maximum wait time, in seconds, before connected clients poll for the status of the original request.
	Longview Solutions recommends using an integer between 1 and 60.
	For example:
	<add key="MaxPollingInterval" value="60"/>
LogFileName	Specify the name for the log file. For example:
	<add key="LogFileName" value="HttpProxySrvr.log"/>
	By default, this log file is saved to the directory containing the Longview.HttpProxyServer.exe.config file.

3. Save the Longview.HttpProxyServer.exe.config file.

4. Continue to "Creating a Windows service for Longview HTTP Proxy Server" on page 68.

Creating a Windows service for Longview HTTP Proxy Server

Longview Solutions recommends that you create a Windows service for Longview HTTP Proxy server.

To create a Windows service for Longview HTTP Proxy Server:

1. Open the command line using administrative privileges.

2. Navigate to the location to the C:\Longview\ProxyServers\<*LID*> directory.

3. Run the following command:

    Longview.HTTPProxyServer.exe –install *ServiceName* [*WorkDir*]

    where:

    ServiceName is the name to append to Longview_ as the service name. For example, if you type Proxy, the service name is Longview_Proxy.

    WorkDir is the working directory created in "Obtaining the files" on page 66 (C:\Longview\ProxyServers\<*LID*>).

    The new service is created.

4. Open the Component Services dialog.

5. Expand the Services (Local) category.

6. Right-click the new service, and select Properties. The Service Properties dialog opens.

7. For Startup type, select **Automatic**.

8. Click OK. The services list comes into view.

9. Right-click the new service, and select Start. The HTTP Proxy Server starts as a Windows service.

10. Continue to "Configuring the application request routing extension for IIS" on page 69.

Configuring the application request routing extension for IIS

Before you can use Longview HTTP Proxy Server, you must install and configure Microsoft's Application Request Routing extension for IIS.

To configure the application request routing extension for IIS:

1. On the DMZ web server, install Microsoft's Application Request Routing extension for IIS. You can download this extension from:

    http://www.iis.net/downloads/microsoft/application-request-routing

2. On the DMZ web server, open Internet Information Services (IIS) Manager.

3. In the Connections pane, navigate to, and select, the appropriate web server.

4. In the content pane, double click Application Request Routing Cache.

5. In the Actions pane, right-click Server Proxy Settings.

6. In the content pane, select **Enable proxy**.

7. In the Actions pane, click Apply.

8. Continue to "Configuring the IIS URL rewrite for HTTP proxy connections" on page 69.

Configuring the IIS URL rewrite for HTTP proxy connections

Before you can use Longview HTTP Proxy Server, you must configure the IIS URL rewrite, which is responsible for sending requests to Longview HTTP Proxy Server.

To configure the IIS URL rewrite:

1. On the DMZ web server, install Microsoft's URL rewrite extension for IIS. You can download this extension from:

    http://www.iis.net/download/URLRewrite

2. On the DMZ web server, open Internet Information Services (IIS) Manager.

3. Navigate to, and select, the appropriate web site.

4. In the content pane, double-click URL Rewrite.

5. In the Action pane, click Add Rule. The Add Rule(s) dialog opens.

6. In the Inbound Rules category, double-click Blank rule.

7. Specify a **Name** for the new rule.

> *Note*   *Longview Solutions recommends that you prepend your inbound rule*
> *names with the Longview Identifier for the system. For example,*
> *LongviewCPM.*

8. Add a rule that rewrites client requests to the Longview HTTP Proxy Server by completing these fields:

Pattern	Specify the string to match. For example, (listenerportproxy/ .*). This string should match the end portion of the HttpProxyServerListenerPortURL.
Rewrite URL	Specify the rewrite URL for the rule. For example, http:// srvr1201sql01:8080/listenerportproxy/{R:1}. This string should match the HttpProxyServerListenerPortURL appended with /{R:1}.
Stop processing of subsequent rules	Select this option.

9. When you are finished, click Apply.

10. Click Back to Rules.

11. In the Action pane, click Add Rule. The Add Rule(s) dialog opens.

12. In the Inbound Rules category, double-click Blank rule.

13. Specify a **Name** for the new rule.

> *Note*   *Longview Solutions recommends that you prepend your inbound rule*
> *names with the Longview Identifier for the system. For example,*
> *LongviewCPM.*

14. Add a rule that rewrites admin requests to the Longview HTTP Proxy Server by completing these fields:

Pattern	Specify the string to match. For example, (adminportproxy/ .*). This string should match the end portion of the HttpProxyServerAdminPortURL.
Rewrite URL	Specify the rewrite URL for the rule. For example, http:// srvr1201sql01:8080/adminportproxy/{R:1}. This string should match the HttpProxyServerAdminPortURL appended with /{R:1}.
Stop processing of subsequent rules	Select this option.

15. When you are finished, click Apply.

16. Click Back to Rules.

17. In the Action pane, click Add Rule. The Add Rule(s) dialog opens.

18. In the Inbound Rules category, double-click Blank rule.

19. Specify a **Name** for the new rule.

> *Note*   *Longview Solutions recommends that you prepend your inbound rule names with the Longview Identifier for the system. For example, LongviewCPM.*

20. Add a rule that rewrites requests to the internal Longview Web server.

Pattern	Specify the string to match. For example, (cgi-bin/*<LID>*/)(.*), where *<LID>* is the Longview Identifier for your system.
Rewrite URL	Specify the rewrite URL for the rule. For example, http://longviewtax.corp/{R:0}.

21. When you are finished, click Apply.

22. Continue to "Configuring Longview Data Server to use Longview HTTP Proxy Server" on page 71.

Configuring Longview Data Server to use Longview HTTP Proxy Server

You must modify the Longview server configuration file to specify that your system should use HTTP proxy connections.

To configure your Longview system to use HTTP proxy connections:

1. On your Application Server, navigate to the ...\DataServers*<LID>* directory, right-click the lvsrvr.cfg file, and open it in your preferred text editor.

2. Set the CLIENT_HTTP_PROXY parameter to the secure listener port URL (HttpProxyServerListenerPortURL) for your HTTP Proxy Server. For example, https://srvr1201sql01/listenerportproxy/.

> *Note*   *The end of the URL must match the pattern string used in "Configuring the IIS URL rewrite for HTTP proxy connections" on page 69.*

3. Set the ADMIN_HTTP_PROXY parameter to the secure admin port URL (HttpProxyServerAdminPortURL) for your HTTP Proxy Server. For example, https://srvr1201sql01/adminportproxy/.

4. Stop the Longview Data Server.

5. Start the Longview Data Server.

> *Note*   *From this point forward, you must use the https protocol for your Longview Dashboard links.*

6. Continue to "Installing Longview Grid" on page 72.

Installing Longview Grid

This step is optional. If you are not using Longview Grid, continue to "Installing the Data Server Web Service" on page 75.

For information on the requirements for Longview Grid, see "Longview Grid Server" on page 23.

Longview 7 systems on Windows platforms have the ability to run the math portion of restatements across a grid computing network. This feature introduces a markedly enhanced degree of scalability to restatement functionality by allowing several computers to participate in the calculation process, which greatly increases performance.

Before you can set up grid nodes, you must set some parameters in the Longview Server configuration file. These parameters are:

- USE_GRID_PROCESSING
- GRID_SERVICE_NAME
- GRID_PROCESSING_TYPE
- GRID_LISTENER_PORT
- GRID_CURSORS_MAX

For more information on setting up a grid processing environment, see the *Longview Server Manager Guide.*

Note   *32 bit grid nodes are not supported. In addition, the server combination of Windows Server 2012 - 64 bit and Oracle 11g Release 2 - 64 bit is not supported for Longview Grid.*

Installing Longview Grid consists of the following steps:

1. "Obtaining the files" on page 72
2. "Installing and configuring node software" on page 73

Obtaining the files

Before you can use a grid computing network, you must obtain the appropriate files from Longview Solutions and extract them to each grid node machine.

To obtain the files:

1. Obtain one of the following files from Longview Solutions:

SQL Server version	Native Client version	File
2008	10.0	Grid_Nodes_sq08wi(x64)-7.3 (Build *xxxx*).zip

SQL Server version	Native Client version	File
2012	11.0	Grid_Nodes_sq12wi(x64)–7.3 (Build *xxxx*).zip
2014	11.0	Grid_Nodes_sq14wi(x64)–7.3 (Build *xxxx*).zip

2. On the grid node, create the following directory structure:

    ...\Longview\<*LID*>

    > *Note* *The Longview Identifier, or LID, used should be the same as the host system. For example, if this node is connecting to a system named* lvdev*, the LID used should also be* lvdev*.*

3. Extract the **.zip** file, that you downloaded in "Obtaining the files" on page 72, into the <*LID*> directory. The directories extracted to your system include:

    *   the node binaries (located in ...\Longview\<*LID*>\software\servers\current)

    *   the batch file scripts to install and run the node software (located ...\Longview\<*LID*>\scripts\defaultsetup)

    *   the log files directory (...\Longview\<*LID*>\logs)

4. In the ...\Longview\<*LID*> directory, create a directory with the name "tmp".

5. Repeat step to step 4 for each node that should participate in the grid.

6. Continue to "Installing and configuring node software" on page 73.

Installing and configuring node software

Once you have obtained the grid node files, you must install and configure the node software on each grid node.

To install and configure node software:

1. Open the **setenv.bat** file located in the ..\Longview\<*LID*>\scripts folder in your preferred text editor.

2. Locate the following string:

    KHALIXSERVERPATH=C:\Longview\<*LID*>\software\servers\current

3. Set the path variables to point to the current version of the node software binaries.

    C:\Longview\<*LID*> with the correct path to ...\ Longview\<*LID*>; for example, E:\Longview\lvdev

4. Save the **setenv.bat** file.

5. Open the **installGridservice.bat** file in your preferred text editor, and edit the batch file to point to the correct paths within the node directory structure.

    lvgrid –install <*ServiceName*> <*WorkDirectory*> <*BinaryDirectory*> <*RemoteHost*> <*RemotePort*> <*LID*> <*MathServers*> <*TempDirectory*>

where:

<ServiceName> is the name of the service to identify. Longview Solutions recommends that you set this value to _*LID*GridNode. For example, _lvdevGridNode if the Longview Identifier is lvdev.

<WorkDirectory> is the ...\Longview*<LID>* directory location.

<BinaryDirectory> is the location of the node binaries in ...\Longview*<LID>*\software\servers\current.

<RemoteHost> is the master or host application server. This can be the IP address or NetBIOS name.

<RemotePort> is the GRID_LISTENER_PORT parameter set in the lvsrvr.cfg file of the host application server. The value should be the same for all nodes for the same system.

<LID> is the SERVER_NAME parameter set in the lvsrvr.cfg file of the host application server.

<MathServers> is the amount of math processors to dedicate to the node. This should be a multiple of the number of CPUs to dedicate to the node for math processing. Longview Solutions recommends that you set this value to one per dedicated CPU.

<TempDirectory> is the ...\Longview*<LID>*\tmp directory location.

6. Save the installGridservice.bat file.

7. Double-click the installGridservice.bat file. It first invokes the setenv.bat file to locate the path to the binaries, and then installs the node software as a service. In the Windows service panel, there should now be a Longview_*<LID>*GridNode service.

8. If your Data Server is not running, start it.

9. Start the service to start the node software.

Note   *A node can also run through a DOS prompt window instead of a background service. This requires an active user login to run the node as an Administrator. Please contact Longview Support for instructions if running a node through a DOS prompt window.*

10. Repeat this procedure for every grid node.

11. You can run the GET NODE CONNECTED command in the Longview Server Administration Console to verify that all nodes are connected to the server. For more information on this command, see the *Longview Server Manager Guide*.

12.

Installing the Data Server Web Service

This step is optional. If you do not need the Data Server Web Service, continue to "Configuring Longview Data Server for tiered systems" on page 81.

The Data Server Web Service software enables users to work with web services.

Web services allow organizations to communicate data with each other and with clients, without deep knowledge of each other's IT systems behind the firewall. The web service provider defines a format for requests for its service and the response the service will generate. A computer then makes a request for the web services across the network. The web service performs an action, and sends the response back.

In Longview 7, web services cover the basic operations of symbols, hierarchies, and data. All web services support Longview authentication. For more information on web services, see the *Longview Integration Guide.*

This section provides information on how to install, upgrade, and uninstall the Longview Data Server Web Service on Windows.

The following prerequisites must be met to install the Data Server Web Service:

- JRE version 1.8.0_*xx* must be installed

- The JRE_HOME environment variable must be set

Note   *If you have multiple versions of JRE installed, the latest version of JRE must be first in the Path environment variable. For example, if you have JRE 1.8 and JRE 1.7 installed, JRE 1.8 must be before JRE 1.7 in the variable.*

For more information on system requirements, see "Supported server platforms" on page 21.

To install the Data Server Web Service:

1. Double-click the Longview Data Server Web Service Setup–7.3 (Build *xxxx*).exe file received from Longview Solutions.

    Note   *Depending on your system, a User Account Control dialog may prompt you to allow the installer to make changes to the computer. Click Yes.*

2. The Longview Data Server Web Service Installation wizard opens.
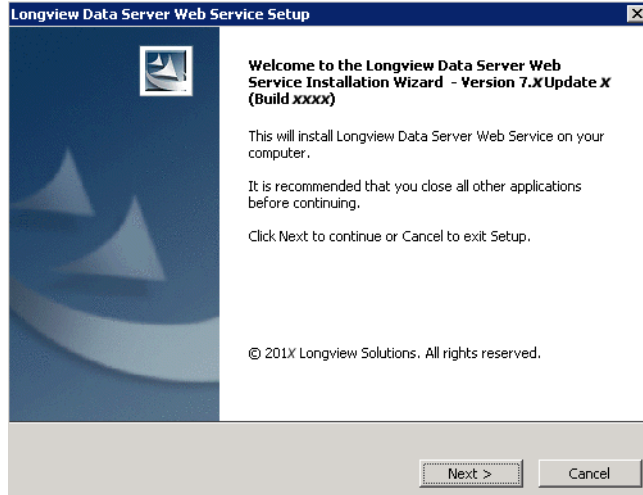
3. Click Next. The Check for Prerequisites page opens, indicating the success or failure of the installer to locate required resources.
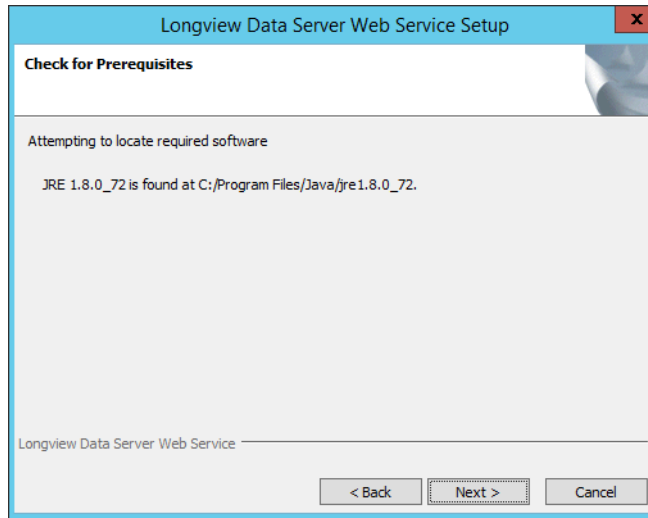
4. Click Next. The Specify Installation Details screen opens.
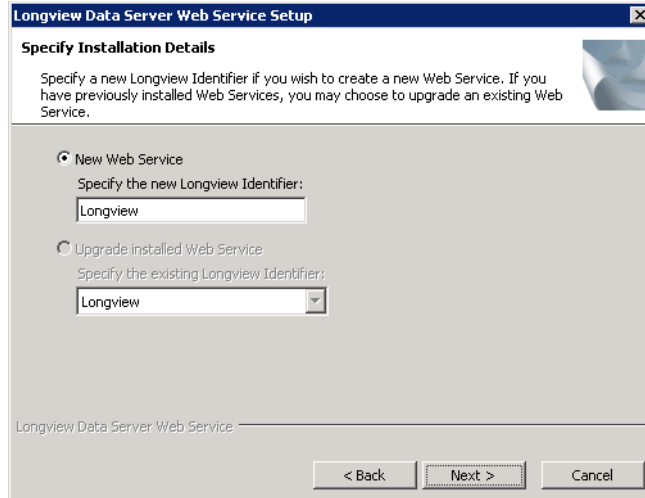
5. Select **New Web Service** and specify the Longview Identifier (LID) for the Data Server Web Service.

   Note   *Only one Data Server Web Service can be installed for each Longview Identifier (LID).*

6. Click Next. The Configure Data Server Web Service page opens.
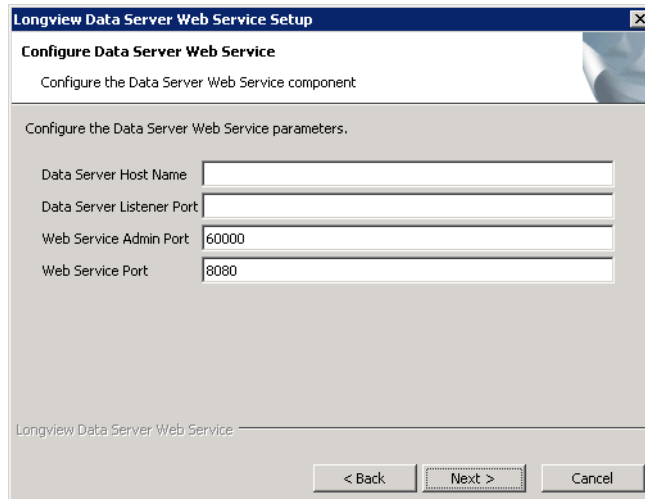
7. Complete the following fields.

Field	Description
Data Server Host Name	Specify the Data Server host name.
Data Server Listener Port	Specify the Data Server Listener port. Ports can be set to a value from 1000 to 65535.

Field	Description
Web Service Admin Port	Specify the Admin port to use for the Web Service. By default, the Web Service Admin port is 60000. Ports can be set to a value from 1000 to 65535.
Web Service Port	Specify the port to use for the Web Service. This is the port that Apache Tomcat will run on. By default, the Web Service port is 8080. Ports can be set to a value from 1000 to 65535.

8. Click Next. The Choose Destination Location page opens.
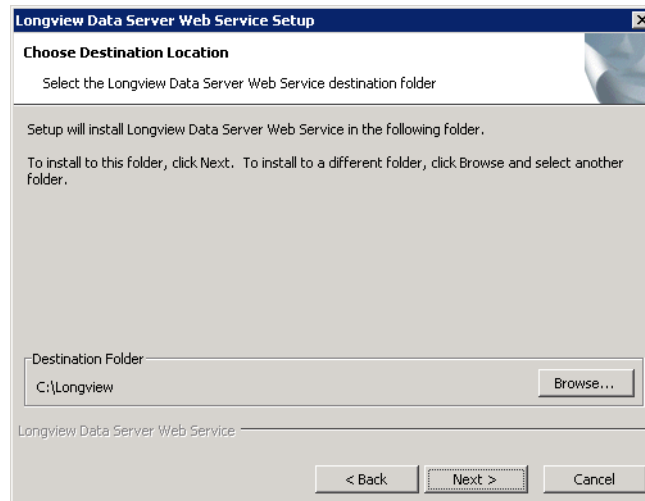
9. By default, the Longview Data Server Web Services installs in the C:\Longview directory. To select an alternate destination folder, follow these steps.

   a. Click Browse. The Browse for Folder dialog opens.

   b. Navigate to the new destination folder in the tree pane, and select it.

   > *Note*   *Click Make New Folder to create a new folder within a directory.*

   c. Click OK.

10. Click Next. The Start Copying Files page opens.
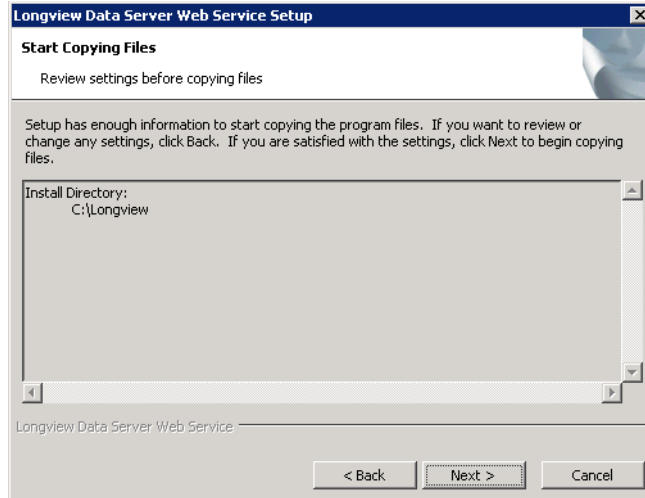
11. Review the settings, and then click Next. The Installing page opens, displaying the progress of the installation process.
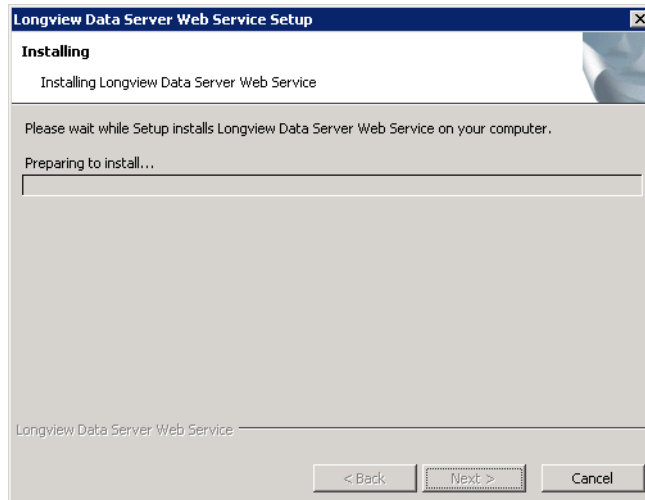
12. After the installation process is complete, the Completing Install page opens.
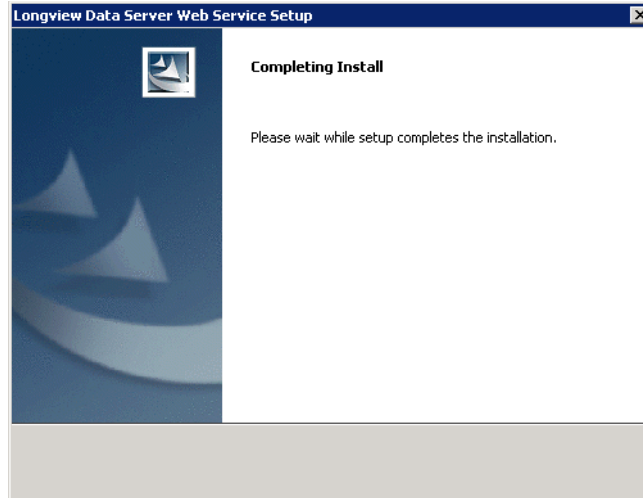
13. When the install is complete, the Longview Data Server Web Service Setup Complete page opens.
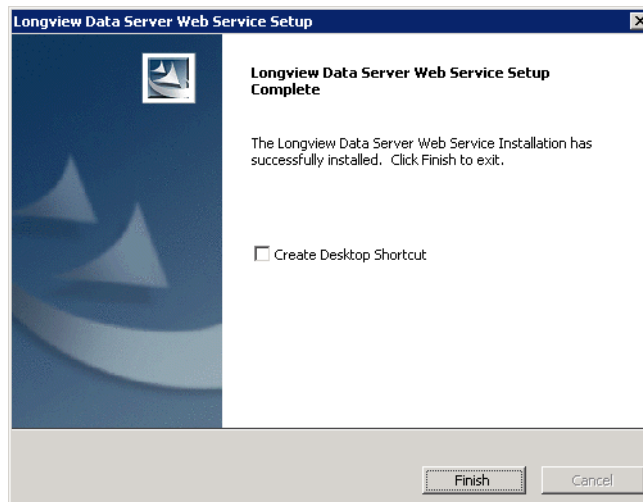
14. Click Finish to exit the wizard.

15. Continue to "Configuring Longview Data Server for tiered systems" on page 81.

Configuring Longview Data Server for tiered systems

If you are using a tiered system (your Data Server and database are on separate host machines), you must perform some additional configuration steps to accommodate the connection between the Data Server and the database.

1. Navigate to your server machine Data Server working directory. For example, C:\Longview\DataServers\Longview.

2. Copy the existing lvsrvr.cfg file, and save it with a new name.

3. Open the lvsrvr.cfg file in your preferred text editor.

4. In the Primary Server Parameters section, review the following parameters:

APPLICATION_SERVER	Specify the host name of the Data Server that the Longview Smart Client or Longview Tax should connect to. The GetSessionInfo web action returns this parameter to the Longview Smart Client or to Longview Tax.
	This parameter is automatically populated by the installer; however, if your Data Server is not on the same machine as your database, you should update this parameter before you start your servers.
WEB_SERVER	Specify the host name of the Web Server that the Longview Smart Client or Longview Tax should connect to.
	This parameter is automatically populated by the installer; however, if your Web Server is not on the same machine as your database, you should update this parameter before you start your servers.

5. In the Restatement/Import/Export Parameters section, modify the following parameter:

RECALC_FILES	If you're using a tiered system (the Data Server and database are on separate host machines) with SQL Server, you must set this parameter to the following network share value:
	"*DataServer**ShareName**Path*", where
	DataServer is the name of the Data Server.
	ShareName is the name of the network share to grant access to.
	Path is the path from the network share to the folder where the files are saved.
	For more information on tiered systems, see "Preparing for a tiered system" on page 27.

6. When you are finished, save and close the lvsrvr.cfg file.

7. Continue to "Configuring database OS authentication" on page 82.

Configuring database OS authentication

If your company prefers to use an OS-authenticated Database Owner, you can configure OS authentication.

When you are using an OS-authenticated Database Owner, the following apply:

• You must set up an OS-authenticated Database Owner set up for your SQL or Oracle database before you configure OS authentication.

• All Longview tables, indexes, and procedures must be owned by the user who is signed in.

To configure OS authentication:

1. Stop your Longview Data Server.

2. Stop the Longview_*LID* service.

3. Right-click the Longview_*LID* service, and click Properties.

4. Click the Log On tab.

5. Select **This Account**, and then type the name of the OS authenticated user.

6. For **Password**, type the password for the OS authenticated user.

7. Start the Longview_*LID* service.

8. Navigate to your server machine Data Server working directory. For example, C:\Longview\DataServers\LongviewCPM.

9. If you haven't already done so, copy the existing lvsrvr.cfg file, and save it with a new name.

10. Open the lvsrvr.cfg file in your preferred text editor.

11. In the General System Parameters section, modify the following parameters as follows:

DATABASE_DBO	Type system.
DATABASE_PWD	Clear the password entry.

12. Save and close the lvsrvr.cfg file.

13. Start your Longview Data Server.

14. In Longview Application Administrator, create a new user with the ID of the Windows-authenticated user that you specified during installation in step 18 on page 35. For more information on creating users, see the *Longview Application Administrator's Guide.*

15. Grant this user authorization to start and stop the server.

16. If you want your Start.bat file to start the servers, complete the following steps:

    a. In your server machine Data Server working directory, right-click the Start.bat file, and open it in your preferred text editor.

    b. Update the file to use system for the User name. For example, lvmgrl "bind localhost 3548" "user system" "start"

    c. Save the file.

    d. Repeat step a to step c for the Stop.bat file.

17. Update your ODBC Driver to use integrated Windows authentication.

18. Continue to "Installing Longview client components" on page 85.

Configuring Single Sign-On (Web)

Longview supports a sign on method called Single Sign-On (Web). This form of authentication relies on external software to authorize access to the Longview Web Server.

When a user successfully authenticates, the external software injects a specific HTTP header into a web request. Longview recognizes this header variable within the web request and establishes a Longview session.

The setup procedure for Single Sign-On depends on whether your company uses on-premise servers, or Longview Cloud Service.

Configuring Single Sign-On (Web) for on-premise servers

Single Sign-On (Web) can be configured with on-premise servers using customer specific security software.

1. Navigate to your server machine Data Server working directory. For example, C:\Longview\LVCPM\DataServers\LVCPM.

2. Right click the lvsrvr.cfg file, and open it in your preferred text editor.

3. In the GENERAL SYSTEM PARAMETERS section, set the following parameters to the specified values:

Parameter	Value
USE_THIRD-Party_Auth	TRUE
THIRD-PARTY_HTTP_VARIABLE	LONGVIEW_SSO_USER
	Note This value must match the HTTP header in step 10.

4. Once you are finished making changes, save and close the lvsrvr.cfg file.

5. Stop and Start your Data Server.

6. Locate the .cgi or the .dll file serving as the communication bridge between the Web Server and the Data Server.

7. Create a new copy of the communication file using the same name and extension, and append "_SSO" to the end of the file name. For example, if the communication bridge file was bridge.dll, name the new copy bridge_SSO.dll.

8. In the Sign On URL, locate the .cgi or the .dll communication file name and append "_SSO" to the end of the file name. For example, if the Sign On URL is http://www.LongviewTest.com/bridge.dll/signon, change it to http://www.Longview-Test.com/bridge_SSO.dll/signon.

9. In the Sign On URL, you can optionally add the web variable LongviewAuthOptions and assign it a value to specify the authentication options to display on the Sign On page. For more information, see "Understanding Web variables" in the *Longview Dashboard Guide.*

10. Configure your security software that protects this URL to inject an HTTP header that matches the THIRD-PARTY_HTTP_VARIABLE parameter value in the lvsrvr.cfg file.

11. To verify the configuration, access the correct Sign On page by connecting to the modified URL.

Configuring Single Sign-On (Web) for Longview Cloud Service

Note Currently, only SAML 2.0 SP-Initiated SSO is supported

Configuring Single Sign-On (Web) for Longview Cloud Service is done on an individual basis by the Longview Support Team because it is a customer dependant process.

1. Contact Longview Support Services and provide them with your entity ID and Metadata XML document.

2. Optionally, you can provide Longview with your Identity provider sign-off URL.

Installing Longview client components

Installing client components consists of the following steps:

1. "Choosing a deployment method" on page 85
2. "Installing Longview Component Manager" on page 86 or "Installing Longview Launcher" on page 101
3. "Installing Add-Ins for Microsoft Excel" on page 103
4. "Installing Longview Web Controls" on page 115

Choosing a deployment method

Longview Solutions provides two methods for client component deployment:

- Longview Component Manager deployment—Allows you to provide an installer that deploys client components on the user's computer.

  Note   *The person running the installer must have elevated privileges for that machine.*

- Longview Launcher deployment—Allows you to deploy client components to users via Longview Launcher through the Launch Center in Longview Dashboard or the My Components list in Longview Tax.

  Note   *If you choose this method and you want to install Longview for Excel, you must use the Longview for Excel stand-alone installer. For more information, see "Installing Longview for Excel" on page 107.*

Use the following table to help you determine the appropriate deployment method for your company.

Implementation considerations	Client deployment method
Are you using Longview Cloud?	Longview Launcher
Are elevated privileges for your users restricted or unavailable?	Longview Launcher
Are you planning to use Longview Desktop?	Longview Component Manager
Do you need Input Templates available offline?	Longview Component Manager
Do you need client components for all users and not only the current users?	Longview Component Manager

Once you have determined the appropriate deployment method for your company, continue to "Installing Longview Component Manager" on page 86, "Installing Longview Launcher" on page 101, or "Installing Longview for Excel" on page 107.

Installing Longview Component Manager

In order to access the applications, the client software must be installed on the user's local computer.

Installing Longview Component Manager consists of the following steps:

1. "Obtaining the files" on page 86
2. "Creating a custom installer for Longview Component Manager" on page 87
3. "Installing Longview Component Manager on end-user machines" on page 88
4. "Deploying client components" on page 94
5. "Preparing MIME file associations" on page 96
6. "Configuring deployment policy" on page 100

Obtaining the files

Before you can install Longview Component Manager, you must obtain the appropriate .zip file. This file is available, by prior arrangement, on CD-ROM or from the Longview Solutions FTP site.

To obtain Longview Component Manager files:

1. Depending on your desired component language, obtain one of the following files from the location provided by Longview Support Services:
   - For English—Client Install-7.3 (Build *xxxx*)_EN.zip
   - For French—Client Install-7.3 (Build *xxxx*)_FR.zip
2. Unzip the contents of the zip file to a local directory.
3. Continue to "Creating a custom installer for Longview Component Manager" on page 87.

Creating a custom installer for Longview Component Manager

You can create a custom installer (.msi) file that you can distribute to your users to facilitate the process of installing Longview Component Manager or to use during a silent installation.

You can create a custom installer in two ways. For more information, see:

- "Creating a custom installer using a shortcut" on page 87
- "Creating a custom installer using the command line" on page 87

Creating a custom installer using a shortcut

Longview Solutions provides an executable file that creates an installer package for Longview Component Manager. You can alter this executable file to include the Longview Identifier of the system you are installing, which makes the Start menu items more intuitive for users.

To create a custom .msi file using a shortcut:

1. Navigate to the directory where you extracted the files in "Obtaining the files" on page 86.

2. Right-click lvmkmsi.exe, and select Create Shortcut. The shortcut appears in the directory.

3. Right-click the new shortcut, and click Properties. The Shortcut Properties dialog opens.

4. For **Target**, keep the default and append the Longview Identifier of the new system (as specified in the lvsrvr.cfg file).

5. Click Apply.

6. Click OK to exit the dialog.

7. Double-click the new shortcut. A new .msi file with the system identifier is created and appears in the directory with the installation files.

8. Continue to "Installing Longview Component Manager on end-user machines" on page 88.

Creating a custom installer using the command line

If you are familiar with the command line, you can use it to create a custom .msi file for Longview Component Manager.

To create a custom .msi file using the command line:

1. Open a command prompt.

2. Navigate to the local directory where you unzipped the Component Manager installation files.

3. In the command window, type lvmkmsi *identifier*, where *identifier* is the name of the Longview system to which the client software is to connect.

4. Press Enter to execute the command. A new .msi file with the system identifier is created and appears in the directory with the installation files.
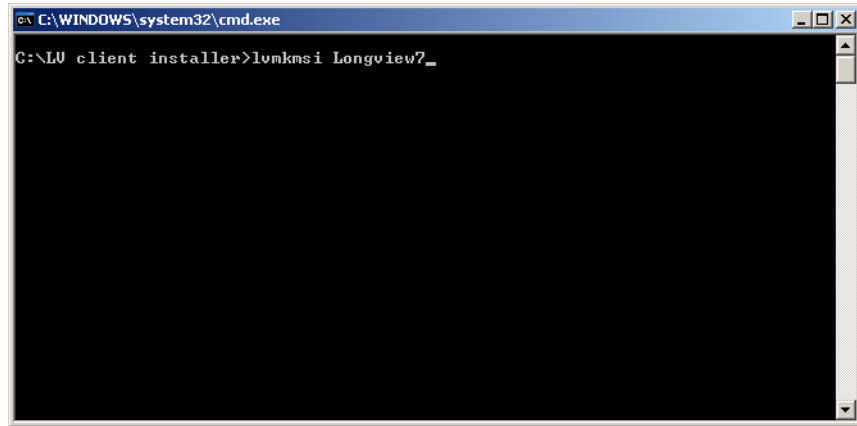
5. Type exit, and press Enter to close the command window.
6. Continue to "Installing Longview Component Manager on end-user machines" on page 88.

Installing Longview Component Manager on end-user machines

You can install Longview Component Manager on end-user machines in the following ways:

*   by running the installation wizard. For more information, see "Running the Component Manager Setup Wizard" on page 88.
*   through a silent installation. For more information, see "Performing a silent installation of Longview Component Manager" on page 93.

Running the Component Manager Setup Wizard

Once you have created an .msi file, you can provide it to users so that they can install Longview Component Manager using the wizard.

Note   *You must provide users with the entire folder of supporting installation files and the* .msi *file.*

To install Longview Component Manager using the wizard:

1. Double-click the .msi file that you created. The Component Manager Setup Wizard opens.
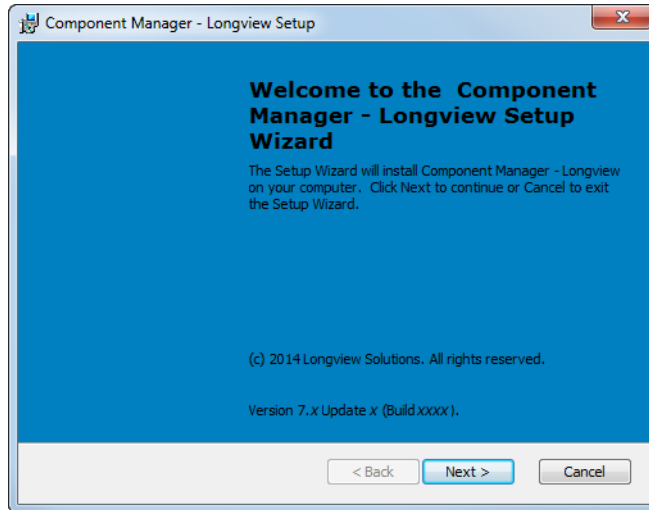
2. Click Next. The Choose Installation Type page opens.
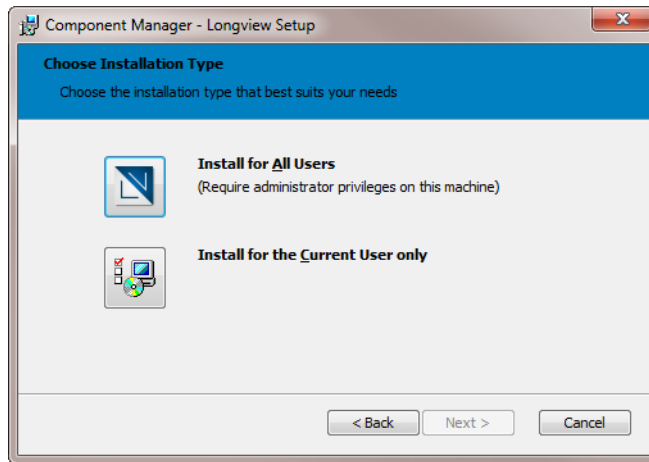
3. Do one of the following:

   • If you want to install Longview Client components for all users of the computer, click the Install For All Users icon. You can install for all users only if you have administrative privileges for the machine.

   • If you want to install Longview Client components only for the user that is currently logged in to the computer, click the Install For the Current User only icon. You must have elevated privileges for the machine to install Longview Component Manager.

4. The Longview System Information page opens.
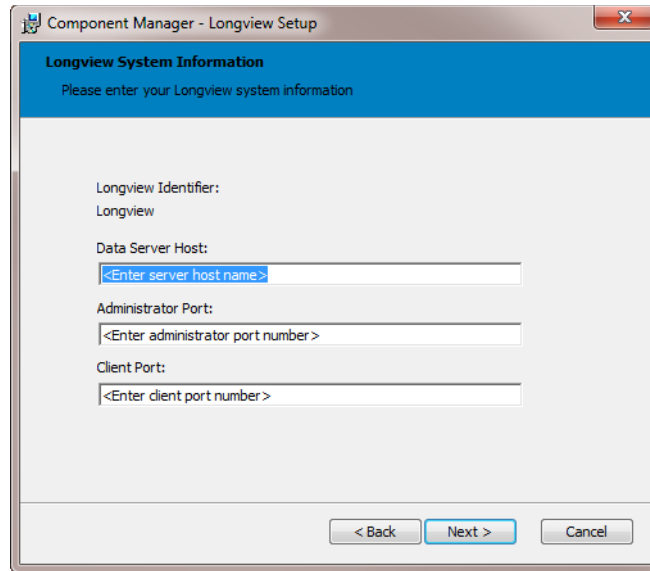
5. Complete these fields:

Data Server Host	Specify your Longview Server host machine name. This value should be provided by your Longview System Administrator.
Administrator Port	Specify the port number that your Longview System Administrator specified as the **Administrator Port** when setting up the system.
Client Port	Specify the port number that your Longview System Administrator specified as the **Listener Port** when setting up the system.

6. Click Next. The Choose Setup Type page opens.
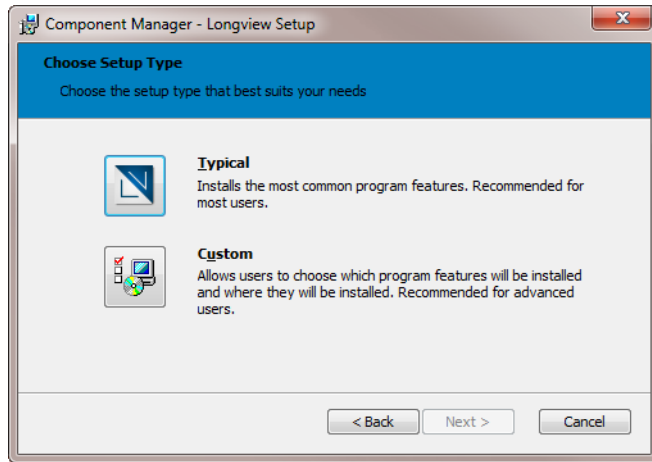
7. Do one of the following:

   - To install the most common program features, click the Typical Installation icon, and continue to step 10.

   - To choose the components that you want to install, click the Custom Installation icon. The Custom Setup page opens. Continue to the next step.

8. Select the components that you want to install.

9. Click Next. The Ready to Install page opens.
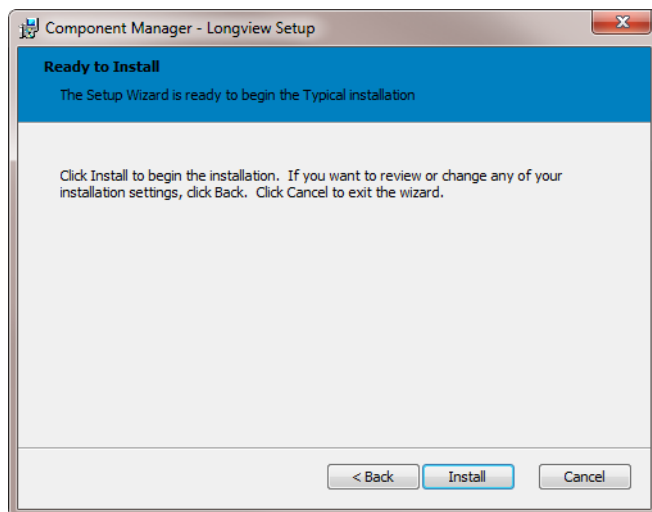
10. Click Install. A progress page opens informing you of the status of the installation process.
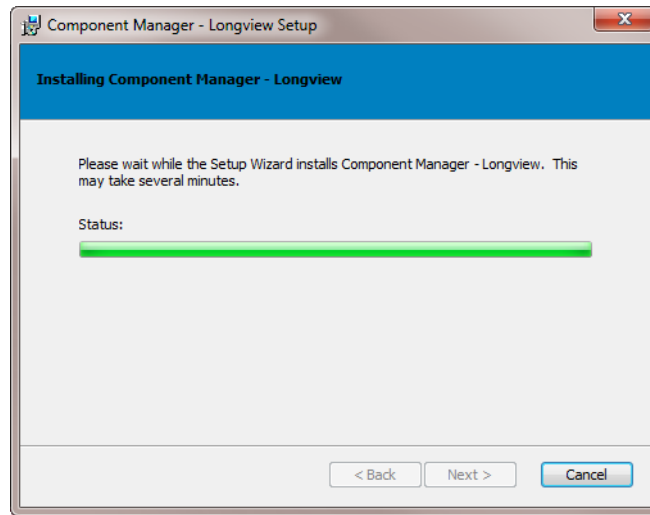
11. When the process is complete, the Completing Component Manager Setup Wizard page opens.
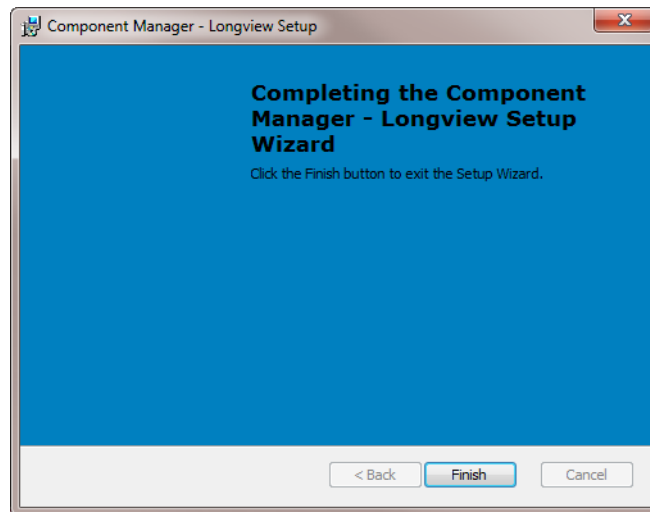
12. Click Finish to exit the wizard.

13. Continue to "Deploying client components" on page 94.

Performing a silent installation of Longview Component Manager

A silent install eliminates the need to key in parameters during the installation process and can be useful when pushing software to multiple users.

To perform a silent installation of Longview Component Manager:

1. Open your preferred text editor, and create a .bat file with the following syntax:

   lvcmgr–*LID*.msi /qr [InstallLevel=*level*] [AllUsers=*users*] [IdentifierDir="*path*"] KhalixHost=*host* KhalixPort=*port* AdminPort=*adminport* | ProxyURL="*proxypath*"

   where:

   LID is the name for the specific Longview instance you are installing. Ensure that you have an .msi with this name in the same directory as your .bat file

   users can be one of the following:

   > 1—Specify this option to install for all users. You can install for all users only if you have administrative privileges for the machine.

   > 2—Specify this option to install Longview Component Manager only for the user that is currently logged in to the computer. You must have elevated privileges for the machine to install Longview Component Manager.

   level can be one of the following:

   > 2—Specify this option to install the files on the local hard drive. This is the default level.

   > 3—Specify this option to install from the local .kar file.

   path is the folder path to the Software and Documentation folders. By default, these folders are created in C:\Program Files\Longview Solutions*LID*. You can specify these folder paths independently of each other using the BinDir and DocDir parameters, in which case, this parameter is ignored.

   host is the Data Server host to connect to.

   port is the port number that was specified as the **Listener Port** when setting up the system.

   adminport is the port number that was specified as the **Administrator Port** when setting up the system.

   proxypath is the URL to the HTTP proxy server. Use this option if you are using an HTTP proxy server for your client components. If this is the case, you do not need to specify a KhalixHost, KhalixPort, or AdminPort. The value for *proxypath* should match the HttpProxyServerListenerPort URL parameter in the HTTP proxy configuration file. For more information, see "Configuring Longview HTTP Proxy Server" on page 66.

2. If you want to use alternate folders for certain directories, you can add the following syntax to your .bat file, as necessary:

   [AppDir="*applicationpath*"] [CacheDir="*cachepath*"] [DataDir="*datapath*"] [TempDir="*tempfolderpath*"] [BinDir="*binpath*"] [DocDir ="*docpath*"]

   where:

   applicationpath is the folder path to the application directory. By default, this directory is created in C:\ProgramData\Longview Solutions*LID*.

   cachepath is the folder path to the cache directory. By default, this directory is created in C:\ProgramData\Longview Solutions*LID*.

   datapath is the folder path to the data directory. By default, this directory is created in C:\ProgramData\Longview Solutions*LID*.

   binpath is the folder path to the software directory. By default, this directory is created in C:\Program Files\Longview Solutions*LID*.

   docpath is the folder path to the temp directory. By default, this directory is created in C:\Program Files\Longview Solutions*LID*.

3. Package and distribute the following files in the method appropriate for your IT infrastructure:

   • the silent install .bat file

   • the custom installer file (lvcmgr-*LID*.msi)

   • all supporting files from the Client Install-7.3 (Build *xxxx*)_*language*.zip

4. Continue to "Deploying client components" on page 103.

Deploying client components

The application must now access the server to download other files that are crucial to the application. Continue with these steps to complete the process.

Note   *Longview Solutions recommends that you sign on as an administrative user with full access the first time you sign on in order to download all the necessary files that a user needs for their specific permissions.*

To deploy client components:

1. Choose Start > Programs > Longview Solutions > Longview Component Manager - *LID*, where *LID* is the identifier for the system. The Sign On dialog opens.
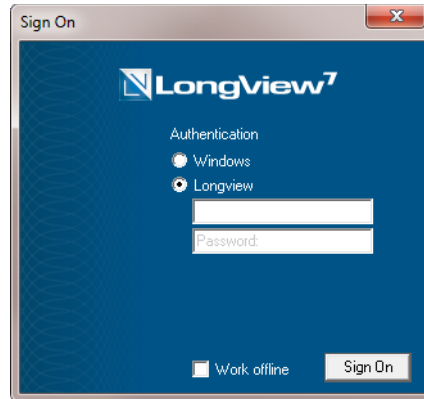
The program downloads and upgrades the required files.

2. When the download and upgrade process is complete, Longview Component Manager opens. You can now click the appropriate icon to open and work with Longview components.

Note   *Only the applications you have access to are available.*
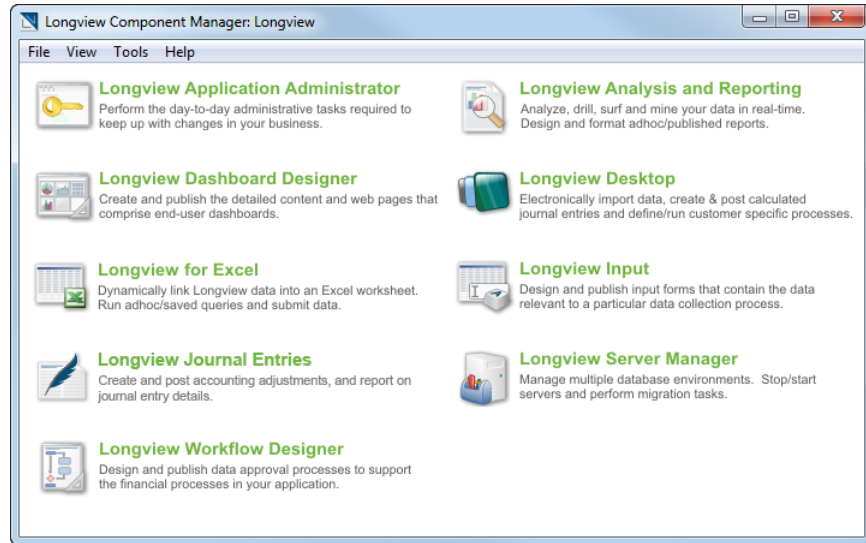
3. Continue to

Preparing MIME file associations

You can prepare file associations for files with a special Longview file name extension (lv), eliminating the need to display the main Longview dialog.

Multipurpose Internet Mail Extension (MIME) is a standard system for identifying the type of data contained in a file, based on its file name extension.

For example, when you double-click a file with a file name extension pdf, Windows automatically opens Adobe Acrobat Reader, assuming Acrobat Reader has been installed on the computer. Similarly, you can prepare MIME file name extensions for Longview extensions to automatically open the Longview Component Manager and launch particular Longview components.

When Longview Component Manager is started from a MIME associated file, Longview Component Manager interprets the contents of the file and launches the particular Longview component, provided the MIME type is registered on the computer.

Preparing MIME file associations consists of the following steps:

1. "Configuring Longview Component Manager file parameters" on page 97
2. "Creating a MIME associated file" on page 99
3. "Activating a MIME associated file" on page 99

Configuring Longview Component Manager file parameters

When Longview Component Manager is installed using the Microsoft Installer, the file name extension, lv, is registered to be associated with Longview Component Manager.

When a Web browser opens a file with the lv file name extension, it launches Longview Component Manager as a helper application to interpret the data stored in the file. The file is a text file (ASCII) containing a string of parameter values that dictate how the Longview Component Manager launches the chosen application.

A list of all possible parameters is shown below. All parameters are string values unless otherwise specified. Parameters that use long file or folder names require double quotation marks enclosing the value.

All the associated files are represented visually by the Longview icon in Windows Explorer or on the desktop.

Parameter	Description
–Dlaunch	Specifies the name of application to launch. –Dlaunch="*component*" where: *component* can be one of the following: • Longview Input • Longview Analysis and Reporting • Longview Application Administrator • Longview Dashboard Designer • Longview Desktop • Longview for Excel • Longview Server Manager • Longview Workflow Designer • Longview Journal Entries • lvcmgr Component names can be viewed in the Component configuration file (lvcomp.cfg).
–DID	Longview Identifier
–Duser	user ID
–Dpassword	password

Parameter	Description
–Dhost	host name or IP address
–Dport	port
–Dsoftwaredir	software folder
–Ddocdir	documentation folder
–Dcachedir	cache folder
–Dtempdir	temporary folder
–Ddatadir	data folder
–Ddatarole	data role
–Dlangcode	language code
–Dautosignon	bypass Sign on dialog true | false (default false) In addition to –Dautosignon=true, all of the following parameters must also be specified to prevent the Sign on dialog from appearing: 　　–DID 　　–Duser 　　–Dpassword 　　–Dhost 　　–Dport
–Dusewinauth	Use Windows authentication true | false (default false)
–Drunproc	Use to run a Procedure when launching Longview Desktop. proc1[,proc2,proc3]
–Dopenfile	Use to open a file when launching Longview for Excel. You can reference any file accessible to the user on a local disk or shared network drives, using the following syntax: 　　"\\app00004\dev\temp\test.xls" 　　"C:\data\dev\temp\test.xls" You can also use to open a published template when launching Longview Analysis and Reporting or Longview Input (only for Report Users and Input Contributors), using the following syntax: –Dopenfile="lv://template.kit"
–Doffline	Work offline true | false (default false)
–Dhelpdir	Help folder
–Dusergroup	user group name

In addition to the parameters in the table, you can also include application-specific parameters in the list. For example, –Dfolder is an argument specific to the Longview client.

If you add –Dfolder=lvtest to the example, Longview Component Manager recognizes that it was not in its list of known parameters and therefore would append it to the launch command for the Longview client. The Longview client recognizes this parameter and would start with the lvtest folder already opened.

When resolving parameter duplication between user specified values (specified in the MIME file) and the launch command (specified in the Component configuration file (lvcomp.cfg)), the user's settings take precedence.

When you are finished configuring file parameters, continue to "Creating a MIME associated file" on page 99.

Creating a MIME associated file

If you want users to be able to double-click an lv file, to automatically open a particular Longview component, you must create a MIME associated file.

To create a MIME associated file:

1. Using a text editor of your choice, create a file called test.lv.

2. Type the following parameter string. Functionality will not be affected by additional spaces between parameters, multiple newline characters, or the sequence in which the parameters are entered.

   –DID=production –Dhost=LV000505 –Dport=9800
   –Dlaunch="Longview Dashboard Designer"
   –Dusewinauth=true –Dautosignon=true

3. Save the file to any folder.

4. Continue to "Activating a MIME associated file" on page 99.

Activating a MIME associated file

Activating the MIME associated file in the example in "Creating a MIME associated file" on page 99 instructs the Longview Component Manager to connect to the Longview servers and launch the Longview component while bypassing the Sign On dialog, since all the necessary sign on parameters have been addressed.

The event appears seamless but in fact, the Longview Component Manager is executing in a manner identical to how it would process a sign on and launch request through the login dialog and the main manager panel. This includes performing the necessary self-updates and software patches to the launching application. However, one of the main differences is that for the MIME case, once the application is invoked, the Longview Component Manager itself exits. This differs from the standard case where the main Longview dialog remains opened after a user launches an application.

Users can activate the associated file in several ways:

Method	Description
Through a Web browser	Create an HTML page with a hypertext link to the **test.lv** file. Open the page with a Web browser and click on the link. A dialog appears prompting you to either save or open the file. Choose to open the file. The associated file is automatically activated.
Through a shortcut	Create a shortcut to the **test.lv** on the desktop and then double-click on the icon.
Through Windows Explorer	Double-click the **test.lv** icon from Windows Explorer.

Users can launch Longview components from a Longview Web page only if Longview Component Manager has been installed on the computer.

If you choose to activate the associated file through a Web browser, a dialog opens.

To avoid seeing this dialog every time you activate the associated file, clear **Always ask before opening this type of file**.

Configuring deployment policy

After your system has been in use for a while, you may need to update the software components. Depending on the value of the CLIENT_DEPLOYMENT_POLICY in the Server configuration file (lvsrvr.cfg), patching tasks occur in different ways. The value of this parameter determines whether updates are automatic or optional.

This parameter has the following states:

OFF	Existing versions of Longview components will never be updated, and new Longview components will not deploy.
ALWAYS	When users sign on to Longview Component Manager, existing and new Longview components are updated to the newest available version.
PROMPT	When users sign on to Longview Component Manager, they are prompted to accept or decline the update.

As System Administrator, you must ensure you select the correct value for the needs of your company and users. If you need to change any of the items you specified during the original install of the Longview Component Manager, you can do so using the repair process. For more information, see "Repairing Longview Component Manager" on page 173.

When you are finished, continue to "Installing the Longview Add-In for Office" on page 105.

Installing Longview Launcher

You can set up your Longview system so that users can download client components via ClickOnce links from the Launch Center in Longview Dashboard or the My Components list in Longview Tax. For information on choosing this deployment method, see "Choosing a deployment method" on page 85.

Obtaining the files

Before you can configure your system for Longview Launcher, you must obtain the Longview Launcher-7.3 (Build *xxxx*).zip file. This file is available, by prior arrangement, on CD-ROM or from the Longview Solutions FTP site.

To obtain the Longview Launcher files:

1. Download the appropriate versions for the Longview Launcher-7.3 (Build *xxxx*).zip file from the location specified by Longview Support Services.

2. Unzip the file to the Web bridge directory as referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. Typically, C:\inetpub\www-root\cgi-bin*LID*, where *LID* is the Longview Identifier for your system.

3. Continue to "Configuring your system to use Longview Launcher" on page 101.

Configuring your system to use Longview Launcher

You can configure your system so that links to components in the Launch Center in Longview Dashboard or the My Components list in Longview Tax deploy client components using Longview Launcher.

> *Warning*   ***Incorrectly modifying some parameters may result in not being able to start your server or may prevent features from functioning. Use with caution.***

To configure your system to deploy client components using Longview Launcher:

1. Navigate to your server machine Data Server working directory (typically, C:\Longview\DataServers*LID*, where *LID*, is the Longview Identifier of your system).

2. Copy the existing lvsrvr.cfg file and save it with a new name.

3. Open the lvsrvr.cfg file in your preferred text editor.

4. In the Application Logic section, set the USE_WEB_DEPLOYMENT parameter to TRUE.

5. Stop and Start your Data Server.

6. Continue to "Creating links to administrative components" on page 102.

Creating links to administrative components

During initial installation, you must create links so that you can install the following administrative components:

• Longview Server Manager

• Longview Application Administrator

• Longview Dashboard Designer

These links are for administrators only; once you set up Longview Dashboard for your users, they can download their components through the Longview Launch Center or from the My Components list in Longview Tax. Because you need to start and stop the servers, and set up your company's Longview Dashboard page, Longview Solutions provides preconfigured links for this purpose.

You can create URL links to administrative components using the following syntax:

https://*ServerHost*/cgi-bin/*LID*/Longview.ComponentLauncher.Application?
LongviewIdentifier=*LID*&LongviewWebBridge=/cgi-bin/*LID*/*WebFile*&
LongviewComponentName=*Component*&LongviewLangCode=*Language*

where:

ServerHost is the Web Server host machine.

LID is the Longview Identifier for your system.

WebFile is one of the following:

• For IPC, lvweb.cgi

• For TCP, ks_iweb.dll

Component is one of the following:

• ApplicationAdministrator

• ServerManager

• DashboardDesigner

Language is one of the following:

- EN for English
- FR for French

Once you have created the appropriate links, continue to "Deploying client components" on page 103.

Deploying client components

This section applies to CPM systems only. If you are installing a Longview Tax system, you will install the preconfigured My Components list during the Tax installation process. For more information, see "Installing Longview Tax" on page 119.

Once you have created administrative links, you can use them to install the required administrative components, which you can then use to provide users with a Longview Dashboard page that includes the Longview Launch Center.

To deploy client components:

1. Click the links you created in "Creating links to administrative components" on page 102 to install the required components.

2. Create a page in Longview Dashboard Designer that includes the Longview_Launch_Center panel, and assign it to the appropriate users. For more information, see the *Longview Dashboard Designer Guide.*

3. Continue to "Installing Add-Ins for Microsoft Excel" on page 103.

Installing Add-Ins for Microsoft Excel

Longview Solutions provides two Add-Ins for Microsoft Excel:

- The Longview Add-In for Office
- Longview for Excel

These Add-Ins can be installed alongside one another or independently. Your user base can install either Add-In as required; however, since the workbooks for these Add-Ins are configured differently, you must provide your users with workbooks that are specific to the Add-In they will use.

Note   *Longview recommends connecting to one Add-In at a time.*

You should choose the Add-In to use depending on the task that you are using the Add-In for. You can use the following table to determine the Add-In to use for specific tasks.

Task...	Use...	Notes
Querying base, symbol, or attribute data from the data server	Longview Add-In for Office	• Includes the ability to specify multiple roots for active dimensions. • Results are formatted differently and appear in different column order than in Longview for Excel. • For attribute data, Separate NUM and STR columns are not provided.
Performing enhanced analysis on data query results using Data Drill, Reorient, and Analyze functionality	Longview Add-In for Office	
Customizing data query formatting using cell styles	Longview Add-In for Office	
Querying attribute data from the data server	Longview Add-In for Office	
Using Longview functions for any of the following: • Querying attribute data • Querying single cell values • Querying dimensions or symbols • Querying current user or identifier information • Defining sections of the Longview data server repository to be locked or submitted • Inserting a Symbol Selector into a worksheet cell	Longview Add-In for Office	• Uses Excel's built-in Insert Function dialog. • See the *Supplementary Upgrade Instructions* document for additional information on changes to functions.
Converting Longview functions to static values	Longview Add-In for Office	The method for saving a workbook as values only is different than Longview for Excel.

Task...	Use...	Notes
Locking data and submitting data to the data server	Longview Add-In for Office	Longview Add-In for Office uses LVLOCK and LVSUBMIT functions.
Accessing the Data Locks and User Submissions tools	Longview Add-In for Office	
Opening workbooks with the last saved values	Longview Add-In for Office	
Querying server rule, journal entry, or intercompany transaction data	Longview for Excel	
Querying data in PivotTable format	Longview for Excel	
Querying schedule data	Longview for Excel	
Creating data queries tied to KlxSymbolLookup functionality	Longview for Excel	
Retrieving comments when querying data	Longview for Excel	
Hiding zeros in data query results	Longview for Excel	
Rerunning queries using QTAGs, LTAGs, STAGs, or ATAGs	Longview for Excel	
Using Longview utilities (KF Function counts, KfCell details)	Longview for Excel	
Generating input workbooks for data submission	Longview for Excel	
Using Longview APIs	Longview for Excel	

Installing the Longview Add-In for Office

Once the system has been created and deployed, your users can install the Longview Add-In for Office locally on their computers.

You can install the Longview Add-In for Office only using ClickOnce deployment. After you install the Longview Add-In for Office, it will launch automatically whenever you start Excel.

The Longview Add-In for Office can be installed by any of the following methods:

- from a Longview Dashboard link
- from a link in Tax Provision or Longview Performance Manager
- from the LongviewAddIn.Office.application file (for a stand-alone installation. Use this method if users do not require access to other Longview 7 components).

Note   *Ensure that the Compatibility mode and Privilege Level fields are cleared in the Compatibility tab of the Microsoft Excel Properties dialog. If either of these fields are selected, the Longview Add-In for Office will not install correctly.*

Installing the Longview Add-In for Office consists of the following steps:

1. Obtaining the Longview Add-In for Office files
2. Deploying the Longview Add-In for Office

Obtaining the Longview Add-In for Office files

Before you can deploy the Longview Add-In for Office, you must obtain the Longview Add-In for Office-7.3 (Build *xxxx*).zip file. This file is available, by prior arrangement, on CD-ROM or from the Longview Solutions FTP site.

To obtain the Longview Add-In for Office files:

1. Download the appropriate versions for the Longview Add-In for Office-7.3 (Build *xxxx*).zip file from the location specified by Longview Support Services.
2. Unzip the file to the Web bridge directory as referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. Typically, C:\inetpub\www-root\cgi-bin*LID*, where *LID* is the Longview Identifier for your system.

   If you are installing the Longview Add-In for Office as a stand-alone installation, unzip the file to a local directory and proceed to "Deploying the Longview Add-In for Office" on page 107.

3. If you want users to deploy the Longview Add-In for Office from a Longview Dashboard link, create a page in Longview Dashboard Designer that includes the Longview_Launch_Center panel, and assign it to the appropriate users. For more information, see the *Longview Dashboard Designer Guide.*

   Note   *To install the Longview Add-In for Office with this method, you must use Longview Launcher deployment. For more information, see "Choosing a deployment method" on page 85.*

4. Continue to "Deploying the Longview Add-In for Office" on page 107.

Deploying the Longview Add-In for Office

After you have obtained the Longview Add-In for Office files, you can deploy the Longview Add-In for Office by clicking a link from the web, or by double-clicking the Longview Add-In for Office application file (if you are using a stand-alone installation). The location of the link depends on whether you are using Longview Dashboard, Tax Provision, or Longview Performance Manager.

To deploy the Longview Add-In for Office:

1. The initial deployment step is dependent on the installation method that you are using:

    • If you are using Longview Dashboard, click the Longview Add-In for Office link in your Launch Center panel.

    • If you are using Tax Provision or Performance Manager, click Longview Add-In for Office in the appropriate category.

    • If you are using a stand-alone installation, double-click the `LongviewAddIn.Office.application` file (in your local directory, as specified in step 2 on page 106).

2. Depending on your security settings, the Application Run - Security Warning dialog may appear. Click Run.

3. A Downloading LongviewAddIn.Office dialog opens, informing you of the status of the download.

    Once the download is complete, a Longview Add-In for Office dialog opens, informing you of the status of the installation. Once the installation is complete, Excel launches.

    Note   *The installer will detect whether you are running a 32-bit or a 64-bit operating system, and will install the correct Add-In version accordingly.*

4. Continue to "Installing Longview for Excel" on page 107.

Installing Longview for Excel

Once the system has been created and deployed, your users can install Longview for Excel locally on their computers.

Longview Solutions provides the following methods of installing Longview for Excel:

• through Longview Component Manager

• using the stand-alone installer

This section provides information on installing Longview for Excel using the stand-alone installer. Use this method if you intend for users to use only Longview for Excel or if you choose Longview Launcher as the deployment method.

If you want users to have access to other Longview 7 components as well, install Longview for Excel through Longview Component Manager. For more informa-

tion, see "Installing Longview Component Manager" on page 86 or "Installing Longview Launcher" on page 101.

Installing Longview for Excel consists of the following steps:

1. Creating the .msi file for Longview for Excel
2. Running the Longview for Excel Setup Wizard

Creating the .msi file for Longview for Excel

You must create the .msi file before you can install Longview for Excel.

To create the .msi file:

1. Obtain the Longview for Excel Install-7.3 (Build *xxxx*)_EN.zip file from the location provide by Longview Support Services.
2. Unzip the contents of the .zip file to a local directory.
3. Open a command prompt.
4. Navigate to the directory where the Longview for Excel installation files have been unzipped.
5. In the command prompt, type lvmkmsi identifier, where identifier is the name of the Longview system to which Longview for Excel is to connect.

   Note   *The system identifier can contain only alphanumeric characters and underscores (_). The system identifier cannot be* Longview.

6. Press Enter to execute the command. A new .msi file with the system identifier is created and appears in the directory with the installation files.
7. Type exit, and press Enter to close the command window.
8. Continue to "Running the Longview for Excel Setup Wizard" on page 108.

Running the Longview for Excel Setup Wizard

Once you have created a .msi file, you can install Longview for Excel on your computer using the wizard.

For more information on creating the .msi file, see "Creating the .msi file for Longview for Excel" on page 108.

To install Longview for Excel:

1. Navigate to the folder where the .msi file with the system identifier as part of its name was created, and double-click it. The Longview for Excel Setup Wizard opens.
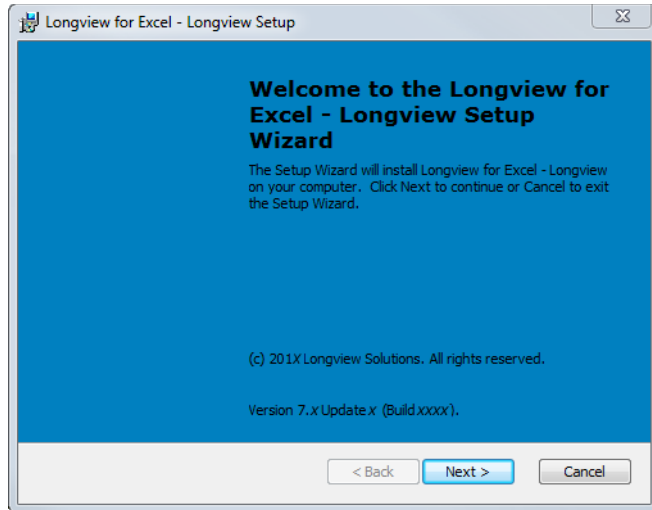
2. Click Next. The Choose Installation Type page opens.
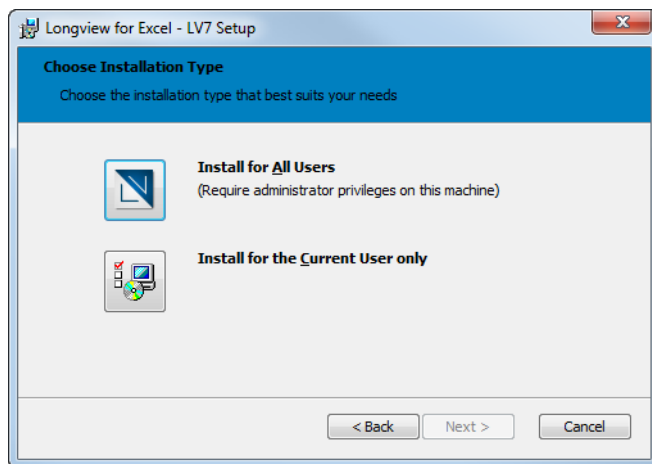
3. Do one of the following:

   • If you want to install Longview for Excel for all users of the computer, click the Install for All Users icon. You can install for all users only if you have administrative privileges for the machine.

   • If you want to install Longview for Excel for only the user that is currently logged in to the computer, click the Install for the Current User only icon.

4. The Longview Connection Type Selection page opens.
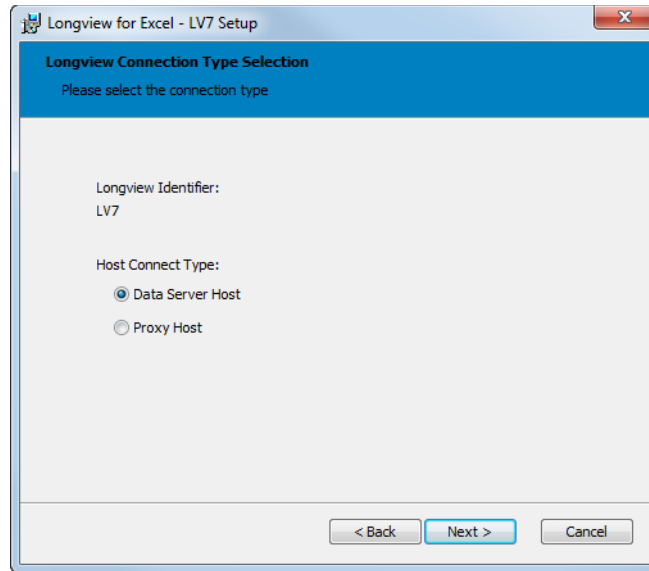
Select one of the following options:

Data Server Host	Select this option to connect Longview for Excel directly to the Data Server.
Proxy Host	Select this option to connect Longview for Excel to the Data Server through a proxy server. Select this option only if you have installed the Longview HTTP Proxy Server. For more information, see "Installing Longview HTTP Proxy Server" on page 66.

5. Click Next.

 • If you selected **Data Server Host**, continue to step 6.

 • If you selected **Proxy Host**, continue to step 8.

6. The Longview System Information page opens.
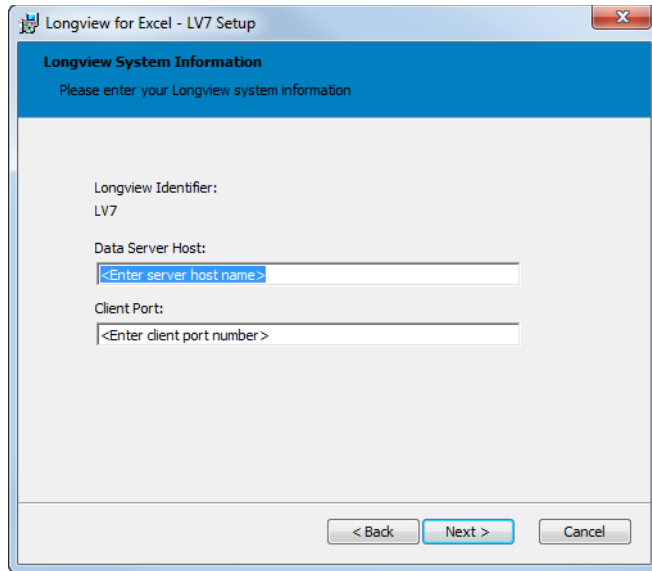
Complete these fields:

Data Server Host	Specify your Longview Server host machine name. This value should be provided by your Longview System Administrator.
Client Port	Specify the port number that your Longview System Administrator specified as the **Listener Port** when setting up the system.

7. Click Next. Continue to step 9.

8. The Longview Proxy Host URL page opens.
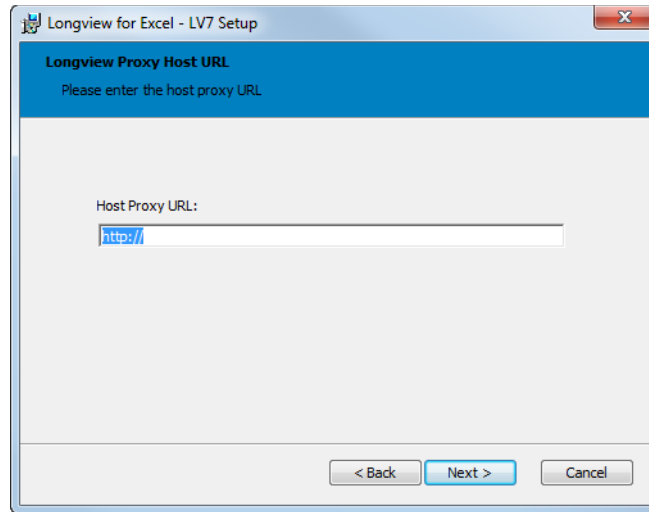
Enter the URL that you specified for the CLIENT_HTTP_PROXY parameter in the Server configuration file (lvsrvr.cfg). For more information, see "Configuring Longview Data Server for tiered systems" on page 81.

9. Click Next. The Choose Setup Type page opens.
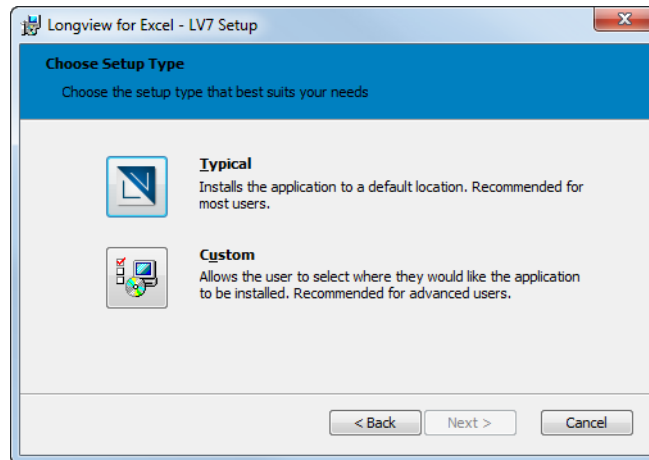
10. Do one of the following:

    • To install the program features to the default locations, click the Typical icon. Continue to step 13.

    • To choose the locations to install the program features to, click the Custom icon. Continue to the next step.

11. The Custom Setup page opens.
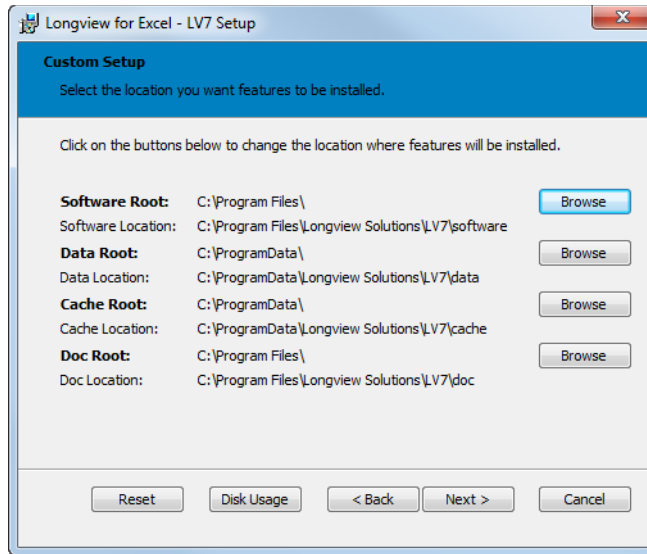
For each location that you want to change, click Browse to select a new desti-
nation folder for the corresponding feature.

*   Click Reset to return all feature locations to the defaults.
*   Click Disk Usage to check if you have enough disk space available to
    install Longview for Excel.

12. When you are finished choosing locations, click Next. Continue to the next
     step.

13. The Ready to Install page opens.
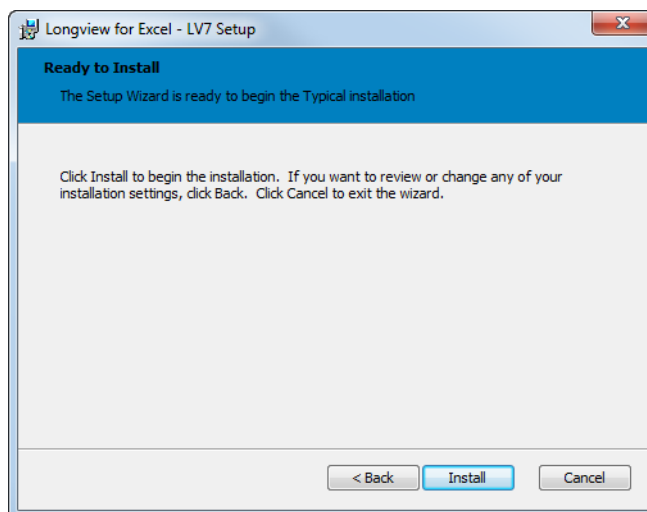
14. Click Install. A progress page opens informing you of the status of the installation process.
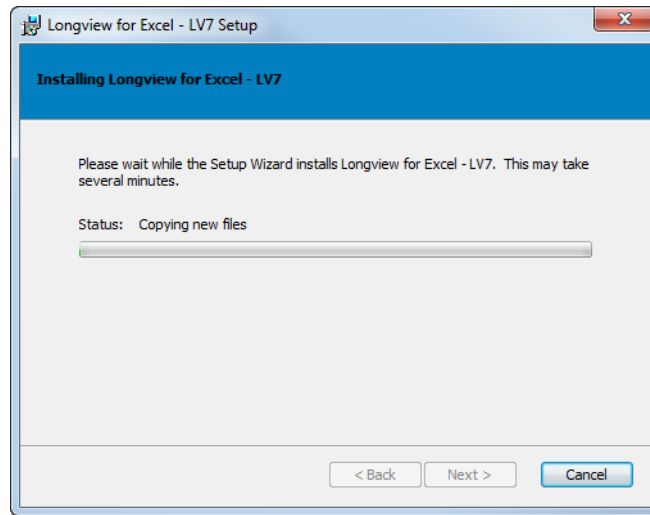
15. When the process is complete, the Completing the Longview for Excel Setup Wizard page opens.
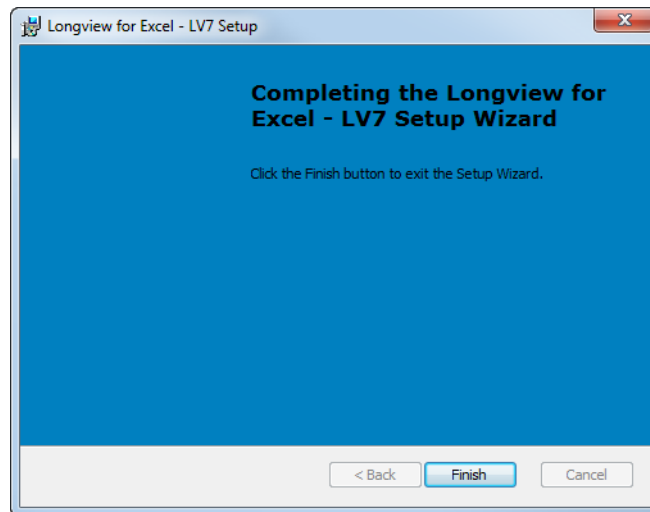
16. Click Finish to exit the wizard.
17. Continue to "Installing Longview Web Controls" on page 115.

Installing Longview Web Controls

If your corporate IT policy does not allow users to install ActiveX®, you must install Longview Web Controls on end-user machines in order to use the following functionality:

- export to Excel
- quick print in Web Input and Web Reporting templates

If this scenario does not apply to your company, continue with the installation process. If you are installing Longview Tax, continue to "Installing Longview Tax" on page 119. Otherwise, your Longview system is ready for use.

You can install Longview Web Controls using one of the following methods:

- Running the Longview Web Controls setup wizard
- Installing Longview Web Controls in silent mode

Running the Longview Web Controls setup wizard

Longview Solutions provides an installer file that you can use to manually install Web Controls on each end user's machine. If you want to push out the installation to many machines at once, see "Installing Longview Web Controls in silent mode" on page 117.

To install Longview Web Controls using the setup wizard:

1. Double-click the Longview Web Controls Installer–7.3 (Build *xxxx*).msi. The Longview Web Controls Installer opens, with the Setup page in view.
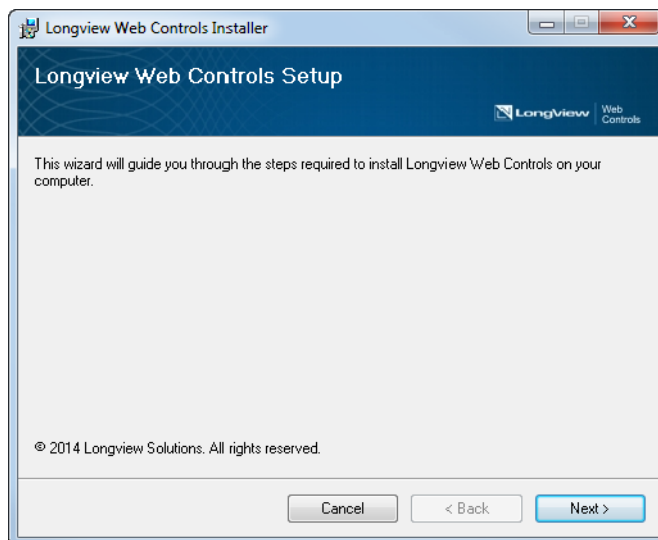
2. Click Next. The Installation Folder page opens.
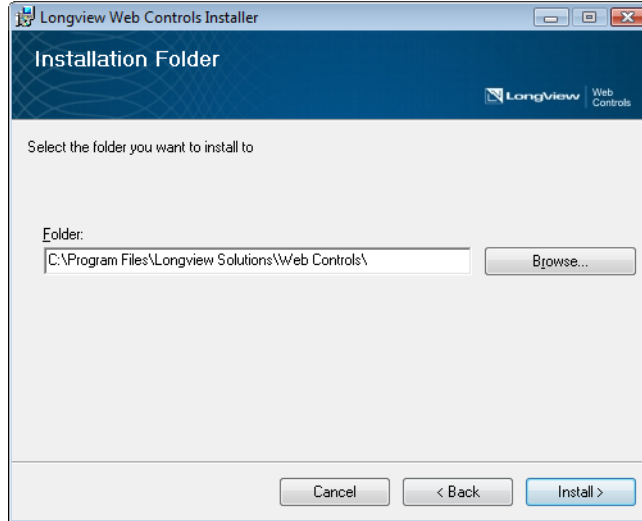
3. To change the installation folder, type the new path in the Folder field, or click Browse.

4. Click Install. The Installing Longview Web Controls page appears, indicating the progress of the installation.
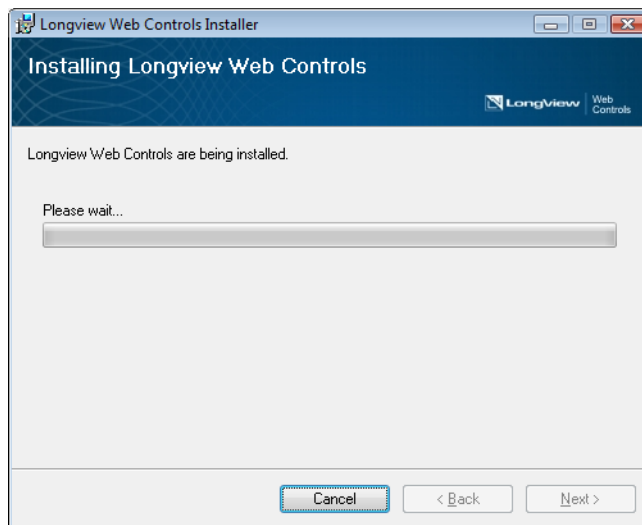
5. When the installation is complete, the Installation Complete page opens. Click Close.
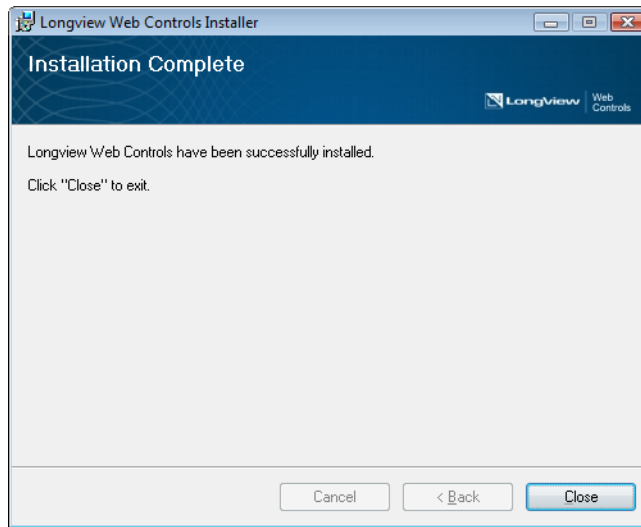
6. If you are installing Longview Tax, continue to "Installing Longview Tax" on page 119. Otherwise, your Longview system is ready for use.

Installing Longview Web Controls in silent mode

Installing Longview Web Controls in silent mode carries out the installation process in the background, without any user input. Use this method to push out the installation to multiple machines. If you want to manually install Longview Web Controls, see "Running the Longview Web Controls setup wizard" on page 115.

In silent mode, the web controls are installed either to the default folder (C:\Program Files\Longview Solutions\Web Controls\), or the path as specified in the command line.

To install Longview Web Controls in silent mode:

1. Run the Windows command prompt as a System Administrator.

2. Change the path to the folder where you have saved the Longview Web Controls Installer-7.3 (Build *xxxx*).msi.

3. Type the following command into the command line:

   msiexec /quiet /i "Longview Web Controls Installer-7.3 (Build *xxxx*).msi"

   Longview Web Controls are installed in silent mode.

   Note   *The* /quiet *parameter is optional. If you omit the* /quiet *parameter, the Longview Web Controls Installer dialog appears, and you can continue the installation from step 1 on page 115.*

4. If you are installing Longview Tax, continue to "Installing Longview Tax" on page 119. Otherwise, your Longview system is ready for use.

Installing Longview Tax

The Longview Tax Suite includes the following components:

- Tax Provision
- Task Management
- Global Transparency

These components must be purchased under separate licenses. If your company has purchased one or more of the Longview Tax components, there are a few extra installation steps required.

Before you follow any installation instructions in this chapter, make sure you do the following:

1. Install Longview Platform. For more information, see "Installing Longview Platform" on page 27.

2. Install Longview client components. For more information, see "Installing Longview client components" on page 85.

Use the following table to determine the procedures to follow in this chapter:

If you have purchased...	*Follow these instructions*
Only Tax Provision	"Configuring your Data Server for Tax Provision" on page 122
	"Installing Tax Provision" on page 128
	"Choosing a Longview Tax database" on page 130
	"Importing the Longview Tax database" on page 131
	"Initializing your Longview Tax database for Tax Provision" on page 133
	"Configuring Data Area Monitoring" on page 137
	"Verifying version information" on page 139

If you have purchased...	Follow these instructions
Only Task Management	"Configuring your Data Server for Task Management" on page 124
	"Installing Task Management" on page 129
	"Choosing a Longview Tax database" on page 130
	"Importing the Longview Tax database" on page 131
	"Initializing your Longview Tax database for Task Management" on page 134
	"Verifying version information" on page 139
Tax Provision and Task Management	"Configuring your Data Server for Tax Provision" on page 122
	"Installing Tax Provision" on page 128
	"Installing Task Management" on page 129
	"Installing the Tax Suite Add-On" on page 129
	"Choosing a Longview Tax database" on page 130
	"Importing the Longview Tax database" on page 131
	"Initializing your Longview Tax database for Tax Provision" on page 133
	"Initializing your Longview Tax database for Task Management" on page 134
	"Initializing your Longview Tax database for Tax Suite" on page 135
	"Configuring Data Area Monitoring" on page 137
	"Verifying version information" on page 139

If you have purchased...	Follow these instructions
Tax Provision and Global Transparency	"Configuring your Data Server for Tax Provision" on page 122
	"Installing Tax Provision" on page 128
	"Installing Global Transparency" on page 130
	"Choosing a Longview Tax database" on page 130
	"Importing the Longview Tax database" on page 131
	"Initializing your Longview Tax database for Tax Provision" on page 133
	"Initializing your Longview Tax database for Global Transparency" on page 136
	"Configuring Data Area Monitoring" on page 137
	"Verifying version information" on page 139

Note   *If you are already a Tax Provision customer and you are installing Task Management or Global Transparency, you must follow the Tax Provision upgrade process before you install the new product. For more information, see "Upgrading Longview Tax" on page 163.*

Configuring your Data Server for Longview Tax

Your Longview Tax system requires certain configuration settings to function as designed. During the installation process, you must modify these settings.

Configuration instructions differ depending on the components you have purchased. Use the following table to determine the instructions to follow:

If you have purchased...	Follow these instructions
Only Tax Provision	"Configuring your Data Server for Tax Provision" on page 122
Only Task Management	"Configuring your Data Server for Task Management" on page 124
Tax Provision and Task Management	"Configuring your Data Server for Tax Provision" on page 122
Tax Provision and Global Transparency	"Configuring your Data Server for Tax Provision" on page 122

Configuring your Data Server for Tax Provision

Your Tax Provision system requires certain configuration settings to function as designed. During the installation process, you must modify these settings.

Warning   *Unless otherwise specified, the configuration settings for your system must match the values in this section. If required settings do not match, your system may not function as designed.*

To configure your Data Server for Tax Provision:

1. On your client machine, start and sign in to Longview Component Manager as an administrative user.

2. Click Longview Server Manager.

3. Right-click the server, and select Server Configuration on the context menu. The Configuration dialog opens with the General page in view.

4. On the General page, complete these fields.

Setting	Value
Application Server	Specify the host name or address of the Data Server that Longview Tax should connect to. The GetSessionInfo web action returns this parameter to Longview Tax.
Web Server	Specify the host name or address of the Web Server that Longview Tax should connect to.
Agent Idle Timeout	This value must match the value for **Web Idle Timeout** and should be set to the recommended value of 720.

5. In the Server Configuration pane, select Application. The Application page opens.

6. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Foreign Exchange (TRN)	Cleared
Intercompany Eliminations (Elim)	Cleared
Journal Entries	Cleared
Model Rules	Selected
Query Rules	Selected
Rollup Rules	Selected
Use Long Component Names	Selected
File Attachments	Selected
Perform Calculations on Delta Values	Selected (Recommended)

Setting	Value
Use Inclusion Method for Rollup Rules	Cleared
Session Locks	Selected
Data Audit Trail	Selected You must reset the Data Audit tables after you enable this setting. For more information, see the *Longview Application Administrator Guide.*
Data Event Sequencing	Selected

Note　　　*There are many settings on the Application page; however, the settings in the above table are those required or recommended for Tax Provision.*

7. In the Server Configuration pane, select Extra. The Extra page opens.

8. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Use Event Rules	Selected
Default Actions Time Interval	0:05
Database Reconnect Timeout	10
Database Initiation Timeout	10

9. In the Server Configuration pane, select Web. The Web page opens.

10. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Web Idle Timeout	This value must match the value for **Agent Idle Timeout** and should be set to the recommended value of **720**.
Web Idle Timeout Warning	10 or higher (Recommended)

11. In the Server Configuration pane, select Security. The Security page opens.

12. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Web Cookie Security	Selected
Web Use ActiveX	Selected (Recommended)

13. In the Server Configuration pane, select Performance. The Performance page opens.

14. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Maximum Sessions	2000
Maximum Persistent Event Rules	999
Range Conversion Limit	0 (Recommended)
Maximum Active Data Events	999

15. In the Server Configuration pane, select Diagnostics. The Diagnostics page opens.

16. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Event Profiling	Cleared

17. Click OK, and then click Close to close the Configuration dialog.

18. Stop and Start your Data Server.

19. Continue to "Obtaining Longview Tax files" on page 126.

Configuring your Data Server for Task Management

Your Task Management system requires certain configuration settings to function as designed. During the installation process, you must modify these settings.

Warning   **Unless otherwise specified, the configuration settings for your system must match the values in this section. If required settings do not match, your system may not function as designed.**

To configure your Data Server for Task Management:

1. On your client machine, start and sign in to Longview Component Manager as an administrative user.

2. Click Longview Server Manager.

3. Right-click the server, and select Server Configuration on the context menu. The Configuration dialog opens with the General page in view.

4. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Agent Idle Timeout	This value must match the value for **Web Idle Timeout** and should be set to the recommended value of 720.

5. In the Server Configuration pane, select Application. The Application page opens.

6. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Use Long Component Names	Selected
File Attachments	Selected
Perform Calculations on Delta Values	Selected (Recommended)

7. In the Server Configuration pane, select Web. The Web page opens.

8. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Web Idle Timeout	This value must match the value for **Agent Idle Timeout** and should be set to the recommended value of 720.
Web Idle Timeout Warning	10 or higher (Recommended)

9. In the Server Configuration pane, select Security. The Security page opens.

10. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Web Cookie Security	Selected
Web Use ActiveX	Selected (Recommended)

11. Click OK, and then click Close to close the Configuration dialog.

12. Stop and Start your Data Server.

13. Continue to "Obtaining Longview Tax files" on page 126.

Obtaining Longview Tax files

Longview Support Services has provided you with one or more links which you can visit to download the files that relate to the components you have purchased.

Use the following table to determine the files to download:

If you have purchased...	Download these files...
Only Tax Provision	• Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip • Longview Tax 7.3 (Build *xxxx*) Client.zip • Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Provision.zip
Only Task Management	• Longview Tax 7.3 (Build *xxxx*) Server Logic Task Management.zip • Longview Tax 7.3 (Build *xxxx*) Client.zip • Longview Tax 7.3 (Build *xxxx*) Install Scripts Task Management.zip

If you have purchased...	Download these files...
Tax Provision and Task Management	• Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip
	• Longview Tax 7.3 (Build *xxxx*) Server Logic Task Management.zip
	• Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Suite Add-On.zip
	• Longview Tax 7.3 (Build *xxxx*) Client.zip
	• Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Provision.zip
	• Longview Tax 7.3 (Build *xxxx*) Install Scripts Task Management.zip
	• Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Suite Add-On.zip
Tax Provision and Global Transparency	• Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip
	• Longview Tax 7.3 (Build *xxxx*) Server Logic Global Transparency.zip
	• Longview Tax 7.3 (Build *xxxx*) Client.zip
	• Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Provision.zip
	• Longview Tax 7.3 (Build *xxxx*) Install Scripts Global Transparency.zip

Installing Longview Tax files

Installation instructions differ depending on the components you have purchased. Use the following table to determine the instructions to follow:

If you have purchased...	Follow these instructions
Only Tax Provision	"Installing Tax Provision" on page 128
Only Task Management	"Installing Task Management" on page 129
Tax Provision and Task Management	"Installing Tax Provision" on page 128
	"Installing Task Management" on page 129
	"Installing the Tax Suite Add-On" on page 129
Tax Provision and Global Transparency	"Installing Tax Provision" on page 128
	"Installing Global Transparency" on page 130

Installing Tax Provision

If your company has purchased Tax Provision, you must install the appropriate files in various locations on your Longview Data Server, Client, and Web Server machines.

To install Tax Provision:

1. Unzip the Longview Tax release files, obtained in "Obtaining Longview Tax files" on page 126, to the following locations:

File	Location
Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip	Server machine Data Server working directory. For example, C:\Longview\DataServers\LongviewTax.
Longview Tax 7.3 (Build *xxxx*) Client.zip	Web bridge directory as referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\LongviewTax.
Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Provision.zip	Server machine Data Server working directory in the Application Framework folder. For example, C:\Longview\DataServers\LongviewTax\lvaf.

2. Restart IIS.

3. If you have also purchased Task Management, continue to "Installing Task Management" on page 129. Otherwise, continue to "Choosing a Longview Tax database" on page 130.

Installing Task Management

Before you can use Task Management, you must install the appropriate files in various locations on your Longview Data Server, Client, and Web Server machines.

To install Task Management:

1. Unzip the Task Management release files to the following locations:

   Note   *If you have already unzipped the* Longview Tax 7.3 (Build *xxxx*) Client.zip *as part of the Tax Provision installation, you can skip this file.*

File	Location
Longview Tax 7.3 (Build *xxxx*) Server Logic Task Management.zip	Server machine Data Server working directory. For example, C:\Longview\DataServers\LongviewTax.
Longview Tax 7.3 (Build *xxxx*) Client.zip	Web bridge directory as referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\LongviewTax.
Longview Tax 7.3 (Build *xxxx*) Install Scripts Task Management.zip	Server machine Data Server working directory in the Application Framework folder. For example, C:\Longview\DataServers\LongviewTax\lvaf.

2. Restart IIS.

3. If you have purchased both Tax Provision and Task Management, continue to "Installing the Tax Suite Add-On" on page 129. Otherwise, continue to "Choosing a Longview Tax database" on page 130.

Installing the Tax Suite Add-On

Follow the instructions in this section only if you have purchased both Tax Provision and Task Management.

To install the Tax Suite Add-On:

1. Unzip the Tax Suite Add-On release files to the following locations:

File	Location
Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Suite Add-On.zip	Server machine Data Server working directory. For example, C:\Longview\DataServers\LongviewTax.
Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Suite Add-On.zip	Server machine Data Server working directory in the Application Framework folder. For example, C:\Longview\DataServers\LongviewTax\lvaf.

2. Continue to "Choosing a Longview Tax database" on page 130.

Installing Global Transparency

Before you can use Global Transparency, you must install the appropriate files in various locations on your Longview Data Server machine.

To install Global Transparency:

1. Unzip the Global Transparency release files to the following locations:

File	Location
Longview Tax 7.3 (Build *xxxx*) Server Logic Global Transparency.zip	Server machine Data Server working directory. For example, C:\Longview\DataServers\LongviewTax.
Longview Tax 7.3 (Build *xxxx*) Install Scripts Global Transparency.zip	Server machine Data Server working directory in the Application Framework folder. For example, C:\Longview\DataServers\LongviewTax\lvaf.

2. Continue to "Choosing a Longview Tax database" on page 130.

Choosing a Longview Tax database

The Longview Tax databases are preconfigured for specific tax standards. Before you can import a database, you must choose the database to import based on whether your company plans to use the ASC or IAS tax standard.

Note   *Though the tax standard is not currently used for Task Management, you must still choose the database that is relevant to your company's accounting standard.*

To choose a Longview Tax database:

1. In Windows Explorer, navigate to the server machine Data Server working directory, and open the recalc folder.

2. Depending on the tax standard your company uses, do one of the following:

   • For ASC systems, open the ASC folder.

   • For IAS systems, open the IAS folder.

   Warning   ***Once you import the database, you cannot reverse your decision without replacing the entire database with the new one.***

3. Copy the following files:

   • exp_cntl.lv

   • exp_data.0001

4. Paste the files at the top level of the recalc folder.

Name ▲	Date modified	Type	Size
ASC	8/8/2014 2:28 PM	File folder	
IAS	8/8/2014 2:28 PM	File folder	
exp_cntl.lv	8/8/2014 8:10 AM	LV File	13 KB
exp_data.0...	8/8/2014 8:10 AM	0001 File	4,062 KB

5. Delete the ASC and IAS folders.

6. Continue to "Importing the Longview Tax database" on page 131.

Importing the Longview Tax database

The database contains all the Longview Tax symbols, users, and user groups for your system. Before you import the database into your system, make sure that your system has 8 base dimensions, 3 schedule dimensions, and 1 partition.

Warning   ***Do not import the database if you have previously installed any Longview Tax product (Tax Provision or Task Management). Doing so overwrites all existing data in your database. Instead, skip this section and complete the steps in "Initializing your Longview Tax database" on page 132.***

To import the Longview Tax database:

1. In Longview Server Manager, choose Tools > Import. The Import dialog opens.
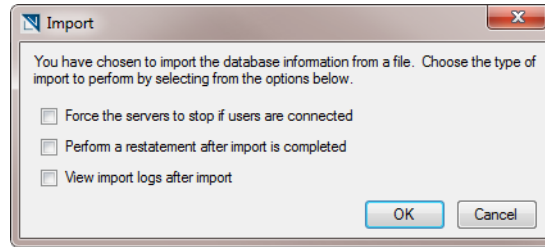
2. Select the following options:

   • **Force the servers to stop if users are connected**

   • **Perform a restatement after import is completed**

   • **View import logs after import**

3. Click OK. The Import - Status dialog opens.

4. When the import is complete, click OK. The Recalculate dialog opens.

5. In the Partitions to Recalculate area, select P0.

6. Click OK. When the restatement is complete, an information dialog opens.

7. Click OK.

8. Login to Longview Component Manager as the TAXADMIN user.

9. Click Tools, and then click Change Password.

10. Complete these fields:

Old Password	Type your original password.
New Password	Type a new password for the TAXADMIN user that complies with your company's security policies.
Confirm Password	Type the new password again.

Initializing your Longview Tax database

Longview Solutions provides scripts that initialize the Longview Tax database for the components you have purchased. Before your database is ready for use, you must run these scripts.

Use the following table to determine the instructions to follow:

If you are doing a first-time install of...	Follow these instructions
Only Tax Provision	"Initializing your Longview Tax database for Tax Provision" on page 133
Only Task Management	"Initializing your Longview Tax database for Task Management" on page 134
Tax Provision and Task Management	"Initializing your Longview Tax database for Tax Provision" on page 133
	"Initializing your Longview Tax database for Task Management" on page 134
	"Initializing your Longview Tax database for Tax Suite" on page 135
Tax Provision and Global Transparency	"Initializing your Longview Tax database for Tax Provision" on page 133
	"Initializing your Longview Tax database for Global Transparency" on page 136

Initializing your Longview Tax database for Tax Provision

Longview Solutions provides scripts that you can use to initialize your database for Tax Provision. You must initialize your database before you can use the system.

To initialize your database for Tax Provision:

1. In Windows Explorer, navigate to the server machine Data Server working directory, and open the lvaf\LV73 Install\Tax Provision folder.

2. Right-click the StartInstall.bat file, and open it with your preferred text editor.

3. Make the following changes:

Replace all instances of...	with...
<Longview Server working directory>	Your server machine Data Server working directory path as set by the WORK_DIRECTORY parameter in the lvsrvr.cfg file (without the surrounding quotation marks). For example, C:\Longview\DataServers\LongviewTax.
<LID>	The Longview Identifier as set in the SERVER_NAME parameter in the lvsrvr.cfg file. For example, LongviewTax.
<Host>	The host machine of the Longview Data Server. For example, localhost.

Replace all instances of...	with...
<Port>	The client port number of the Longview Server as set in the LISTENER_PORT parameter in the lvsrvr.cfg file. For example, 28000.
<TaxAdmin User>	The user name for the tax administrative user.
<TaxAdmin pwd>	The password for the tax administrative user.

4. Save the batch file, and then run it.

5. Navigate to the lvaf\LV73 Install\Tax Provision\tmp folder, and open and review the INSTALL_HISTORY.out file to validate all procedures have run successfully.

6. Do one of the following:

    •   If you have also purchased Task Management, continue to "Initializing your Longview Tax database for Task Management" on page 134.

    •   If you have also purchased Global Transparency, continue to "Initializing your Longview Tax database for Global Transparency" on page 136.

    •   Otherwise, continue to "Configuring Data Area Monitoring" on page 137.

Initializing your Longview Tax database for Task Management

Longview Solutions provides scripts that you can use to initialize your database for Task Management. You must initialize your database before you can use the system.

To initialize your database for Task Management:

1. Depending on your RDBMS, do one of the following:

    •   In SQL Server Management Studio, select the Longview Tax database, and run the Task Management SQL.sql script found in the server machine Data Server working directory in the lvaf\LV73 Install\Task Management\SQL Server folder.

    •   In Oracle, run the Task Management Oracle.sql script, found in the server machine Data Server working directory in the lvaf\LV73 Install\Task Management\Oracle folder, on the Longview Tax database.

2. In Windows Explorer, navigate to the server machine Data Server working directory, and open the lvaf\LV73 Install\Task Management folder.

3. Right-click the StartInstall.bat file, and open it with your preferred text editor.

4. Make the following changes:

Replace all instances of...	with...
<Longview Server working directory>	Your server machine Data Server working directory path as set by the WORK_DIRECTORY parameter in the lvsrvr.cfg file (without the surrounding quotation marks). For example, C:\Longview\DataServers\LongviewTax.
<LID>	The Longview Identifier as set in the SERVER_NAME parameter in the lvsrvr.cfg file. For example, LongviewTax.
<Host>	The host machine of the Longview Data Server. For example, localhost.
<Port>	The client port number of the Longview Server as set in the LISTENER_PORT parameter in the lvsrvr.cfg file. For example, 28000.
<TaxAdmin User>	The user name for the tax administrative user.
<TaxAdmin pwd>	The password for the tax administrative user.

5. Save the batch file, and then run it.

6. Navigate to the lvaf\LV73 Install\Task Management\tmp folder, and open and review the INSTALL_HISTORY.out file to validate all procedures have run successfully.

7. If you have purchased both Tax Provision and Task Management, continue to "Initializing your Longview Tax database for Tax Suite" on page 135. Otherwise, continue to "Verifying version information" on page 139

Initializing your Longview Tax database for Tax Suite

If you have purchased both Tax Provision and Task Management, you must run an additional script that initializes your database so that it can be used for both components.

To initialize your database for Tax Suite:

1. Navigate to the server machine Data Server working directory, and open the lvaf\LV73 Install\Tax Suite Add-On folder.

2. Right-click the StartInstall.bat file, and open it with your preferred text editor.

3. Make the following changes:

Replace all instances of...	with...
<Longview Server working directory>	Your server machine Data Server working directory path as set by the WORK_DIRECTORY parameter in the lvsrvr.cfg file (without the surrounding quotation marks). For example, C:\Longview\DataServers\LongviewTax.
<LID>	The Longview Identifier as set in the SERVER_NAME parameter in the lvsrvr.cfg file. For example, LongviewTax.
<Host>	The host machine of the Longview Data Server. For example, localhost.
<Port>	The client port number of the Longview Server as set in the LISTENER_PORT parameter in the lvsrvr.cfg file. For example, 28000.
<TaxAdmin User>	The user name for the tax administrative user.
<TaxAdmin pwd>	The password for the tax administrative user.

4. Save the batch file, and then run it.

5. Navigate to the lvaf\LV73 Install\Tax Suite Add-On\tmp folder, and open and review the INSTALL_HISTORY.out file to validate all procedures have run successfully.

6. Continue to "Configuring Data Area Monitoring" on page 137.

Initializing your Longview Tax database for Global Transparency

Longview Solutions provides scripts that you can use to initialize your database for Global Transparency. You must initialize your database before you can use the system.

To initialize your database for Global Transparency:

1. Depending on your RDBMS, do one of the following:
   • In SQL Server Management Studio, select the Longview Tax database, and run the Global Transparency SQL.sql script found in the server machine Data Server working directory in the lvaf\LV73 Install\Global Transparency\SQL Server folder.

   • In Oracle, run the Global Transparency Oracle.sql script, found in the server machine Data Server working directory in the lvaf\LV73 Install\Global Transparency\Oracle folder, on the Longview Tax database.

2. In Windows Explorer, navigate to the server machine Data Server working directory, and open the lvaf\LV73 Install\Global Transparency folder.

3. Right-click the StartInstall.bat file, and open it with your preferred text editor.

4. Make the following changes:

Replace all instances of...	with...
<Longview Server working directory>	Your server machine Data Server working directory path as set by the WORK_DIRECTORY parameter in the lvsrvr.cfg file (without the surrounding quotation marks). For example, C:\Longview\DataServers\LongviewTax.
<LID>	The Longview Identifier as set in the SERVER_NAME parameter in the lvsrvr.cfg file. For example, LongviewTax.
<Host>	The host machine of the Longview Data Server. For example, localhost.
<Port>	The client port number of the Longview Server as set in the LISTENER_PORT parameter in the lvsrvr.cfg file. For example, 28000.
<TaxAdmin User>	The user name for the tax administrative user.
<TaxAdmin pwd>	The password for the tax administrative user.

5. Save the batch file, and then run it.

6. Navigate to the lvaf\LV73 Install\Global Transparency\tmp folder, and open and review the INSTALL_HISTORY.out file to validate all procedures have run successfully.

7. Continue to "Configuring Data Area Monitoring" on page 137.

Configuring Data Area Monitoring

For certain features to function in Tax Provision, you must configure Data Area Monitoring settings.

To configure Data Area Monitoring:

1. On your client machine, start and sign in to Longview Component Manager as an administrative user.

2. Click Longview Server Manager.

3. Right-click the server, and select Server Configuration on the context menu. The Configuration dialog opens with the General page in view.

4. On the General page, complete these fields.

Setting	Value
Events Log Files Location	Match this parameter to the path in which log files are created, as determined by the **AZAFELGPTH** attribute.
	Based on the default value for the attribute, set this path to "C:\Longview\DataServers*LID*\AppFrmWrk\Logs" where *LID* is the Longview Identifier for the system.
Events Error Files Location	Match this parameter to the path in which error files are created, as determined by the **AZAFERRPTH** attribute.
	Based on the default value for the attribute, set this path to "C:\Longview\DataServers*LID*\AppFrmWrk\Errors" where *LID* is the Longview Identifier for the system.
Events History Files Location	Match this parameter to the path in which error files are created, as determined by the **AZAFHISPTH** attribute. If you are not logging history files, which is the case by default, leave this parameter blank.
	If you are logging history, set this to "C:\Longview\DataServers*LID*\AppFrmWrk\History" where *LID* is the Longview Identifier for the system.

5. In the Server Configuration pane, select Application. The Application page opens.

6. Make sure **Data Area Monitoring** is selected.

7. In the Server Configuration pane, select Extra. The Extra page opens.

8. Make sure the settings in your system match the values specified in the following table:

Setting	Value
Data Area Monitoring Dimensions	Accounts,TimePer,Entities,Details,Currency, Segments,Elements (Recommended)
Data Area Status Dimension	Entities

9. Stop and Start your Data Server.

10. Continue to

Verifying version information

You can use the About dialog in Longview Tax to verify the versions for the components you installed during the installation process. After you install Longview Tax, you should verify that all versions in the About Longview dialog match.

To verify version information:

1. In Longview Tax, click About. The About Longview dialog opens.

2. Verify that all the components you have purchased are installed and have the correct version number:

Component	Related installation file
Longview Tax	Longview Tax 7.3 (Build *xxxx*) Client.zip
Tax Provision - Application Logic	Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip
	Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Provision.zip
Tax Provision - Calculation Logic	Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip
	Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Provision.zip
Task Management	Longview Tax 7.3 (Build *xxxx*) Server Logic Task Management.zip
	Longview Tax 7.3 (Build *xxxx*) Install Scripts Task Management.zip
Global Transparency	Longview Tax 7.3 (Build *xxxx*) Server Logic Global Transparency.zip
	Longview Tax 7.3 (Build *xxxx*) Install Scripts Global Transparency.zip
Tax Suite	Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Suite Add-On.zip
	Longview Tax 7.3 (Build *xxxx*) Install Scripts Tax Suite Add-On.zip
Web Bridge	Web(x64)-7.3 (Build *xxxx*).zip
Data Server	Longview Server Setup-7.3 (Build *xxxx*).exe

Upgrading Longview Platform

This chapter contains instructions on upgrading your system from Longview 7.2 Update 4 to Longview 7.3. If you are on a Longview 7 platform earlier than Longview 7.2 Update 4, you must upgrade to Longview 7.2 Update 4 in its entirety first. For information on upgrading previous versions, see the *Longview 7 Installation Guide* as well as the 7.*x*.*x* Upgrade to Longview 7.*x.x* file released with the version you are upgrading to.

Upgrading Longview Platform consists of the following steps:

1. "Upgrading Longview Data Server" on page 141
2. "Upgrading Longview Optix" on page 148
3. "Upgrading Longview Dashboard" on page 149
4. "Upgrading Longview Smart Client" on page 150
5. "Upgrading tools and editors" on page 151
6. "Upgrading Longview Report Viewer" on page 153
7. "Upgrading Longview HTTP Proxy Server" on page 153
8. "Upgrading Longview Grid" on page 154
9. "Upgrading the Data Server Web Service" on page 154

Upgrading Longview Data Server

The Longview Data Server upgrade process is similar to the procedure followed for a new installation. During the upgrade process, previously-installed components are upgraded. If you choose to upgrade any components that were not previously installed, they are installed as for a new installation.

Upgrading Longview Platform consists of the following steps:

1. "Backing up Longview 7 files" on page 142
2. "Running the Longview Server Setup wizard" on page 142
3. "Upgrading your Longview 7 database" on page 148

Backing up Longview 7 files

Before you upgrade Longview 7, back up your Longview Database using the Export functionality in Longview Server Manager. For more information, see the *Longview Server Manager Guide.*

In addition, you must back up the directory in which your Data Server is installed. For example, C:\Longview*<LID>*\, where *<LID>* is the Longview Identifier for your system.

Many of the files and folders are overwritten during the upgrade process. To preserve any custom modifications, create backups for the applications folder in the Server machine Data Server working directory (for example, C:\Longview\DataServers\LongviewCPM).

Running the Longview Server Setup wizard

Longview Solutions provides a server setup executable to upgrade your Longview Server.

To upgrade Longview Server using the installer:

1. Stop your Longview Servers.

   Note   *Longview Solutions also recommends that you stop the Longview_LID service after you have stopped the servers.*

2. Double-click the Longview Server Setup – 7.3 (Build *xxxx*).exe file received from Longview Solutions. The Longview Server Setup wizard opens.

   Note   *Depending on your system, a User Account Control dialog may prompt you to allow the installer to make changes to the computer. Click Yes.*
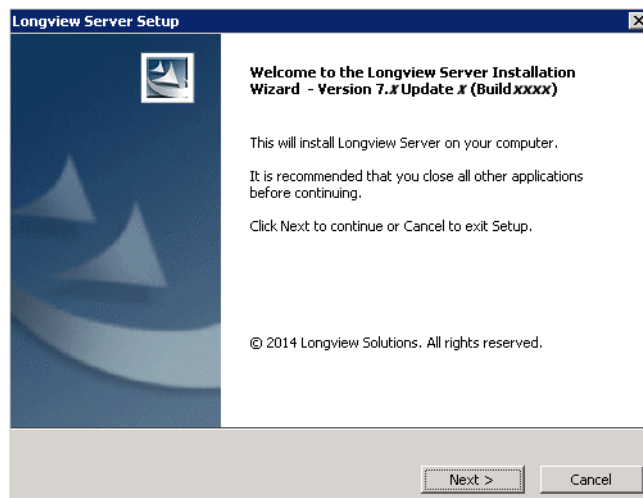
3. Click Next. The Specify Installation Details page opens.
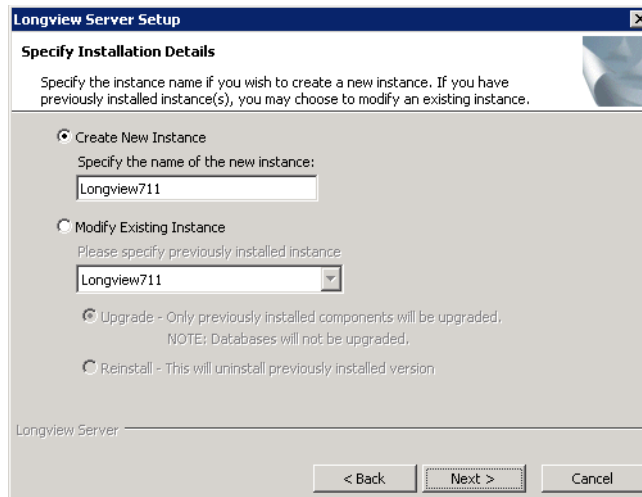
4. Complete these fields:

Modify Existing Instance	Select this option, and select the appropriate instance in the drop-down list.
Upgrade	Select this option.

5. Click Next. The Upgrade Setup Type page opens.
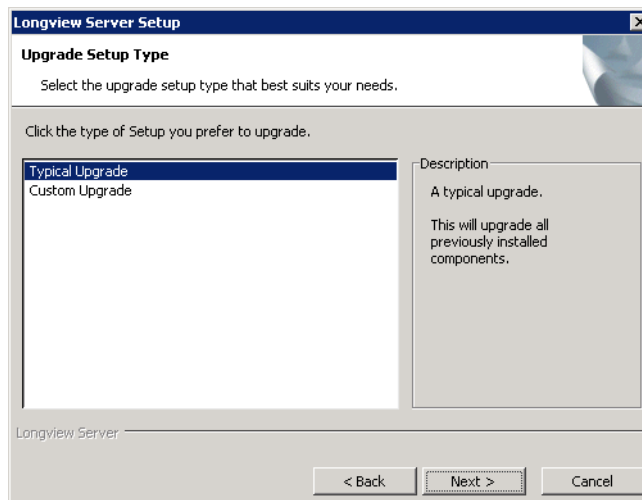
6. Do one of the following:
   - To upgrade all components, select Typical Upgrade, and continue to step 9.

     Note   *Choosing Typical Upgrade upgrades all previously installed components, even if your previous installation was a custom installation.*

   - To upgrade specific components or to install new components during the upgrade, select Custom Upgrade, and continue to the next step.

7. Click Next. The Select Components page opens.
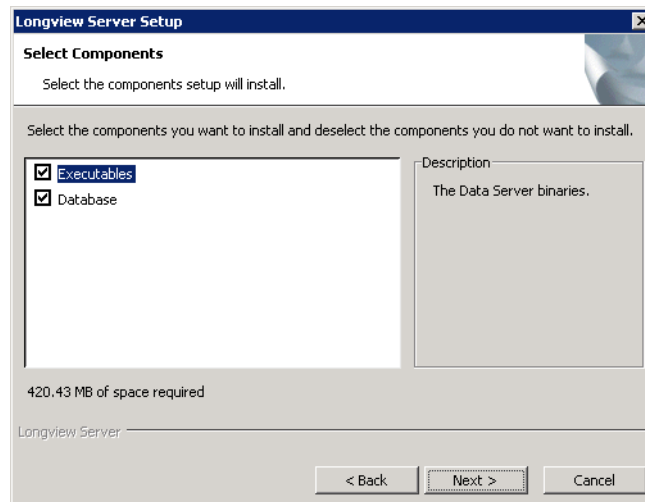
8. Select the components that you want to upgrade.

Executables	Upgrades the Data Server binaries.
Database	Upgrades the Longview Database.

9. Click Next. The Check Installed Servers page opens and checks the status of the server.

10. When the status of the server is verified, the Check for Prerequisites page opens.
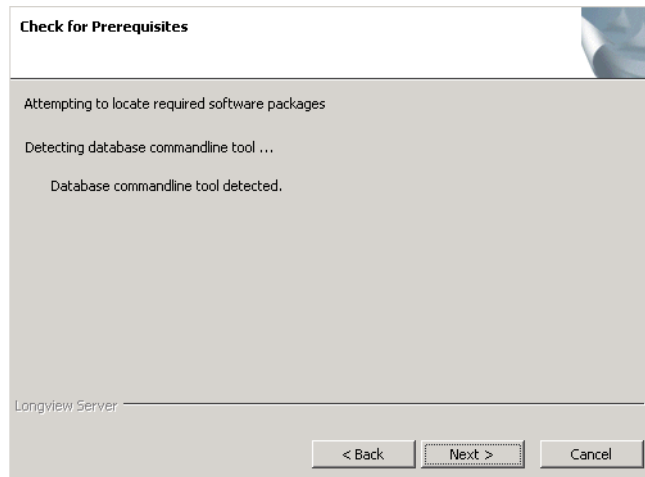
11. Click Next. The Start Copying Files page opens. Review the settings before you continue to the next step.
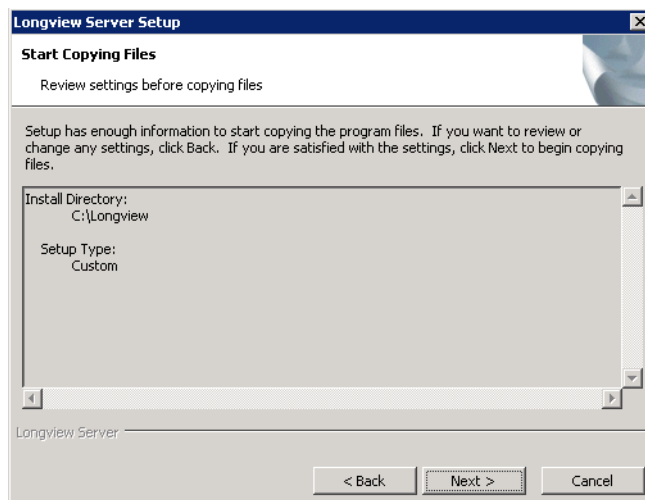
12. Click Next. The Installing page opens.
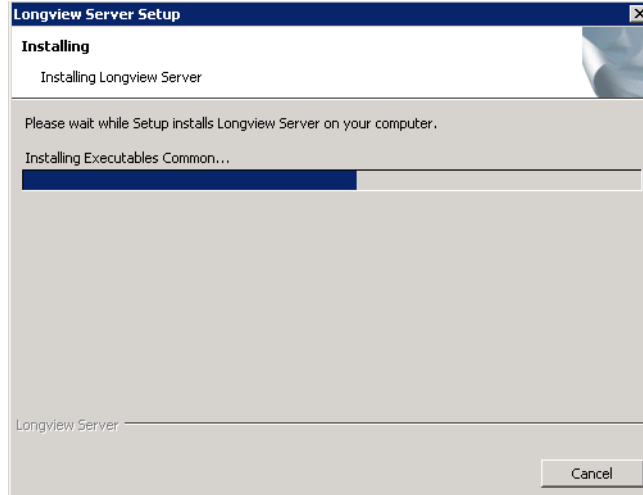
When the process is complete, the Set up Longview Server page opens.
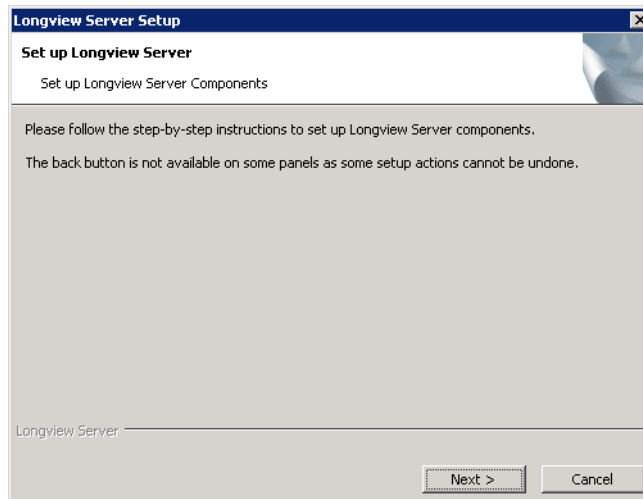
13. Click Next. The Configuration Complete page opens.
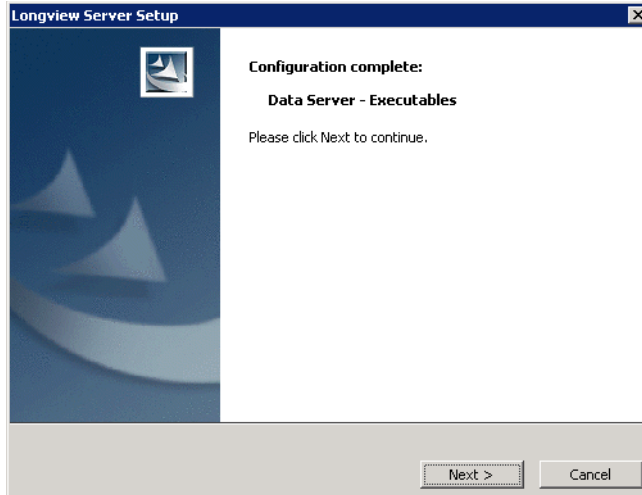
14. Click Next. The Completing Install page opens.
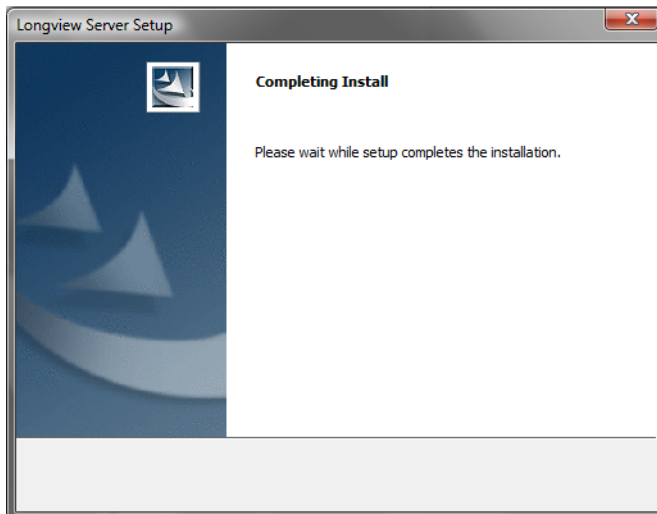
15. When the installation is complete, the Longview Server Setup Complete page opens.
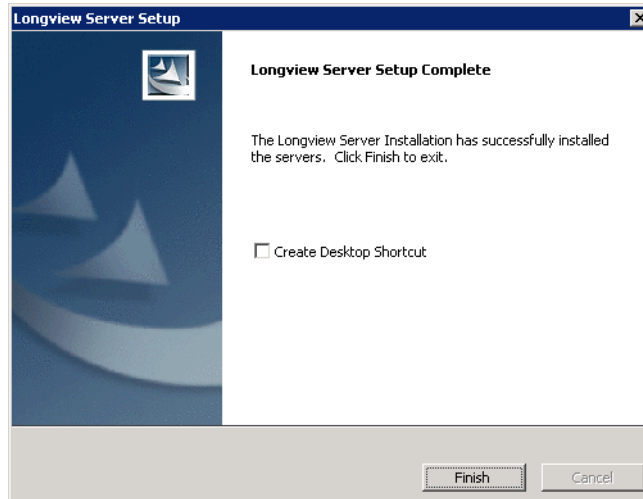
16. Click Finish to exit the wizard.

17. Continue to "Upgrading your Longview 7 database" on page 148.

Upgrading your Longview 7 database

Upgrading Longview 7 often requires you to upgrade your Longview 7 database. Longview Solutions provides scripts to facilitate this process. For more information, see the Longview 7.2.4 Upgrade to Longview 7.3.pdf found in the Longview 7.3 Upgrade Scripts.zip provided by Longview Support Services.

After you complete the steps in the "Upgrading the Repository" section, continue to "Upgrading Longview Optix" on page 148.

Upgrading Longview Optix

If your company has purchased a license for Longview Optix, you can upgrade it. If your company is not using Longview Optix, continue to "Upgrading Longview Dashboard" on page 149.

To upgrade Longview Optix:

1. Follow the steps in "Installing Longview Optix" on page 42, merging the folders and overwriting files as necessary.

2. Continue to "Upgrading Longview Dashboard" on page 149.

Upgrading Longview Dashboard

Upgrading Longview Dashboard consists of the following steps:

Obtaining the files

Obtain the Web(x64)-7.3 (Build *xxxx*).zip file from Longview Solutions. This file is available, by prior arrangement, on CD-ROM or from the Longview Solutions FTP site. Once the .zip file has been copied from the CD-ROM or downloaded from the FTP site, move it to a temporary directory, and unzip it.

Upgrading program components

The upgrade process for program components depends on whether you are using CGI or ISAPI.

To upgrade program components:

1. On your Web server, find the directory that is referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file (for example, cgi-bin/Longview/lvweb.cgi). This directory is your Web server bridge location.

2. Do one of the following:

TCP connection bridge	a. Stop IIS. b. In your Web server bridge location, rename the lvweb.xml file to lvweb.old. c. In your Web server bridge location, delete all the .dll files in the directory except for the lvweb.old file.
IPC connection bridge	Delete the .dll and .cgi files in your Web server bridge location.

5. In the web_bridge directory, find the directory that is applicable to your system, and copy those files into your Web server bridge location.

6. Do one of the following:

TCP connection bridge	a. In your Web server bridge location, modify the lvweb.xml file to contain the correct server and port parameters from the lvweb.old file. b. Restart IIS.
IPC connection bridge	Proceed to step 7.

7. Delete the temporary directory created in step 3.
8. Continue to "Upgrading Longview Smart Client" on page 150.

Upgrading Longview Smart Client

When users click an upgraded Longview App through the Longview Dashboard, the system downloads the Smart Client framework to the user's local machine. After initial deployment of the Longview App, all subsequent interaction between the app and the Longview Servers is handled by Longview Application Framework through the Longview API layer.

To upgrade Longview Smart Client:

1. Navigate to the directory referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\Longview.
2. Delete the Longview.ApplicationSmartClient.application file.
3. Open the Application Files folder.
4. Delete the Longview.ApplicationSmartClient_72_x_xxxx_x folder.
5. Obtain the Smart Client-7.3 (Build xxxx).zip from the location provided by Longview Support Services.
6. Unzip the file to the directory referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\Longview, merging the folders and overwriting files as necessary.
7. Restart IIS.
8. To verify the Smart Client version, open a Longview App.
9. Press Ctrl + F1. The About Longview dialog opens.

10. Review version information for the following:
    - Longview Client
    - Web Bridge
    - Data Server

    Note   To copy version information to your Windows clipboard, click Copy info
    to clipboard.

11. When you are finished, click OK to close the About Longview dialog.

12. Continue to "Upgrading tools and editors" on page 151.

Upgrading tools and editors

You can upgrade the following tools and editors by completing the steps in this
section:

- the Data Locks tool
- the User Submissions tool
- the Events tool
- the Events Status tool
- the Mappings editor
- Longview Designer
- Longview Performance Manager

Data Locks and User Submissions tools   Users can use the Data Locks and
User Submissions tools to view information about locks and user submissions in
the system. They can also use the Data Locks tool to delete their own locks, and, if
they have the appropriate permissions, to delete locks created by other users.

Events and Events Status tools   Users can use the Events and Events Status
tools to view the status of events that have been triggered in the system, and other
information related to events. If they have the appropriate permissions, they can
also use the Events tool to delete event information.

Mapping editor   Users can use the Mappings editor to create, delete, and
modify maps and mappings.

Longview Designer   Users can use Longview Designer to create, delete, and
modify data import apps.

Longview Performance Manager   Users can use Longview Performance
Manager to access Longview reports, Longview Apps and other components in
one interface.

Note   Longview Performance Manager requires implementation by Professional
Services.

You can install these tools and editors on your web server and then depending on your system, you can make these tools and editors available to users through Longview Performance Manager, or make them available to users through Longview Dashboard panels. For information on Longview Performance Manager, see the "Maintaining Performance Manager" section in the *Longview Developer's Guide.* For information on adding a panel to a page, see the *Longview Dashboard Designer Guide.*

To upgrade tools and editors:

1. Navigate to the directory referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\Longview.

2. Delete the Longview.CPMClient.application and setup.exe files.

3. Open the Application Files folder.

4. Delete the Longview.CPMClient_72_*x_xxxx_x* folder.

5. Return to the original directory, and open the Help folder.

6. Delete the LVDesigner, LVEvents, LVEventsStatus, LVLocks, LVMappings, LVPerformanceManager, LVUserSubmissions, and LVWebApp folders.

7. Download the appropriate versions for the following .zip files from the location specified by Longview Support Services:

   • CPM Client – Longview 7.3 (Build *xxxx*).zip

   • CPM Client Applications – Longview 7.3 (Build *xxxx*).zip

8. Unzip the files to the following locations, merging folders and overwriting files as necessary:

   Warning   **Ensure you have backed up your applications folder including all .lvclient and .lvmodule files, particularly if Longview Performance Manager has been implemented. For more information, see "Backing up Longview 7 files" on page 142.**

File	Location
CPM Client – Longview 7.3 (Build *xxxx*).zip	Web bridge directory as referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\Longview.
CPM Client Applications – Longview 7.3 (Build *xxxx*).zip	Server machine Data Server working directory. For example, C:\Longview\DataServers\Longview.

9. Restart IIS.

10. Continue to "Upgrading Longview Report Viewer" on page 153.

Upgrading Longview Report Viewer

If Longview Solutions releases a new version of Longview Report Viewer, you can upgrade your existing system.

To upgrade Longview Report Viewer:

1. Navigate to the directory referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\Longview.

2. Delete the Longview.ReportViewer.application file.

3. Open the Application Files folder.

4. Delete the Longview.ReportViewer_72_*x_xxxx_x* folder.

5. Return to the original directory, and open the Help folder.

6. Delete the LVReportViewer folder.

7. Obtain the Longview Report Viewer-7.3 (Build *xxxx*).zip file from the location provided by Longview Support Services.

8. Unzip the file to the directory referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\Longview.

9. To verify the Report Viewer version, open a report.

10. Press Ctrl + F1. The About Longview dialog opens.

11. Proceed to "Upgrading Longview HTTP Proxy Server" on page 153.

Upgrading Longview HTTP Proxy Server

If Longview Solutions releases a new version of HTTP Proxy Server, you can upgrade your existing system.

To upgrade the HTTP Proxy Server files:

1. Stop the HTTP Proxy Service.

2. Navigate to the C:\Longview\ProxyServers*<LID>* folder on your Longview Application Server machine, and copy the .config file to a temporary directory.

3. Delete the contents of the C:\Longview\ProxyServers*<LID>* folder.

4. Obtain the Longview HttpProxy – 7.3 (Build *xxxx*).zip from the location provided by Longview Support Services.

5. Unzip the Longview HttpProxy – 7.3 (Build *xxxx*).zip file to the C:\Longview\ProxyServers*<LID>* folder.

6. Copy the .config file from your temporary directory into the C:\Longview\ProxyServers*<LID>* folder.

7. Start the HTTP Proxy Service.

8. Continue to "Upgrading Longview Grid" on page 154.

Upgrading Longview Grid

If Longview Solutions releases a new version of Longview Grid, you can upgrade your existing system.

To upgrade the Longview Grid files:

1. Obtain one of the following files from Longview Solutions:

SQL Server version	Native Client version	File
2008	10.0	Grid_Nodes_sq08wi(x64)-7.3 (Build *xxxx*).zip
2012	11.0	Grid_Nodes_sq12wi(x64)-7.3 (Build *xxxx*).zip
2014	11.0	Grid_Nodes_sq14wi(x64)-7.3 (Build *xxxx*).zip

2. Stop the Grid Node Service.

3. Navigate to the *<LID>* directory on the grid node, and delete its contents.

   Note   *The Longview Identifier, or LID, used should be the same as the host system. For example, if this node is connecting to a system named* lvdev*, the LID used should also be* lvdev*.*

4. Extract the .**zip** file, that you downloaded in step 1, into the *<LID>* directory on the grid node. The directories extracted to your system include:

   • the node binaries (located in ...\Longview*<LID>*\software\servers\current)

   • the batch file scripts to install and run the node software (located ...\Longview*<LID>*\scripts\defaultsetup)

   • the log files directory (...\Longview*<LID>*\logs)

5. In the ...\Longview*<LID>* directory, create a directory with the name "tmp".

6. Start the Grid Node Service.

7. Repeat step 3 to step 6 for each node that should participate in the grid.

8. Continue to "Upgrading the Data Server Web Service" on page 154.

Upgrading the Data Server Web Service

If Longview Solutions releases a new version of the Data Server Web Service, you can upgrade to the latest version.

To upgrade the Data Server Web Service:

1. Double-click the Longview Data Server Web Service Setup-7.3 (Build *xxxx*).exe file received from Longview Solutions.

> *Note*   *Depending on your system, a User Account Control dialog may prompt you to allow the installer to make changes to the computer. Click Yes.*

2. The Longview Data Server Web Service Installation wizard opens.
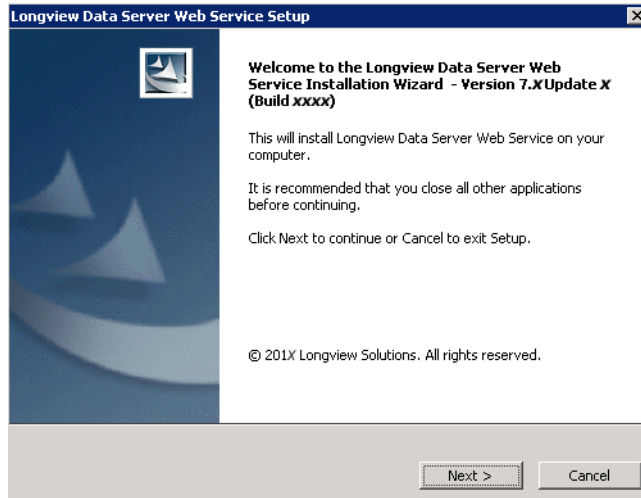
3. Click Next. The Check for Prerequisites page opens, indicating the success or failure of the installer to locate required resources.
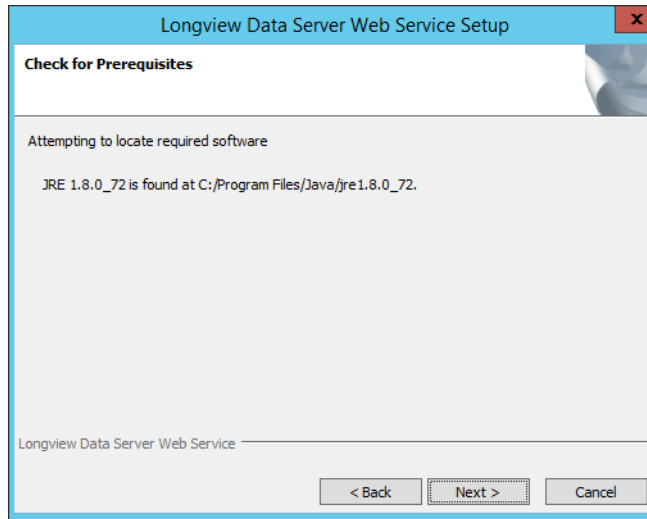
4. Click Next. The Specify Installation Details screen opens.
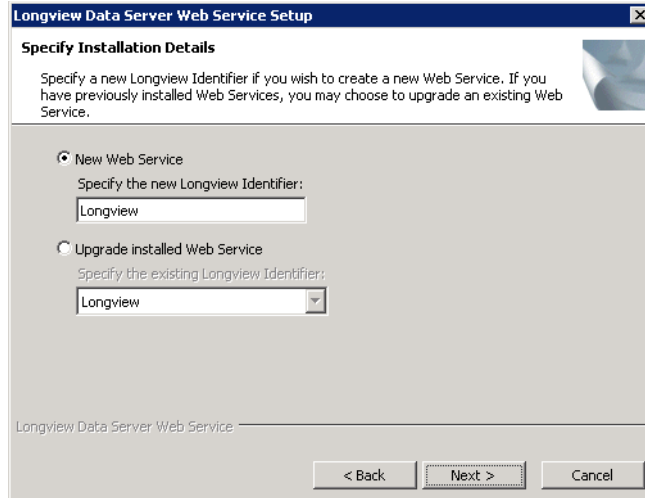
5. Select **Upgrade installed Web Service** and select the Longview Identifier (LID) of the Data Server Web Service that you want to upgrade from the drop-down list.

6. Click Next. The Collecting Information screen opens.
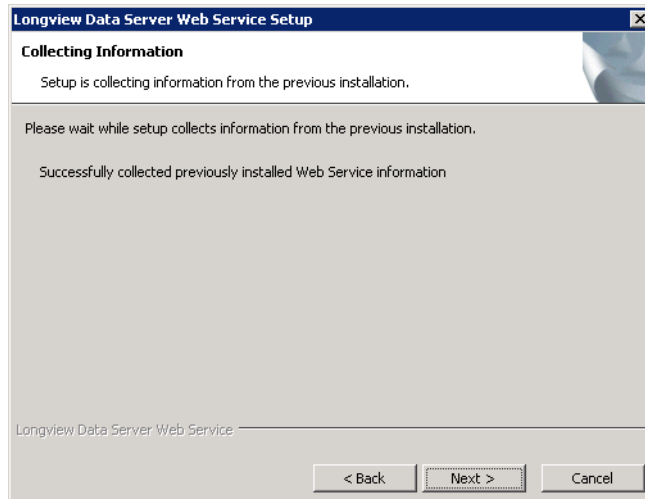
7. Click Next. The Installing page opens, displaying the progress of the upgrade process.
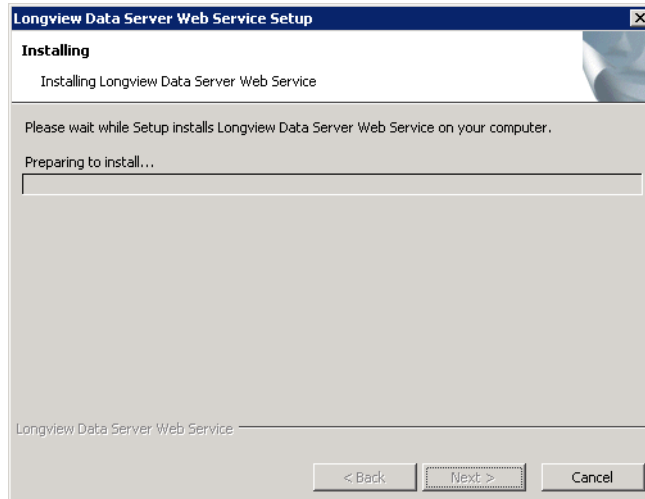
8. After the upgrade process is complete, the Completing Install page opens.
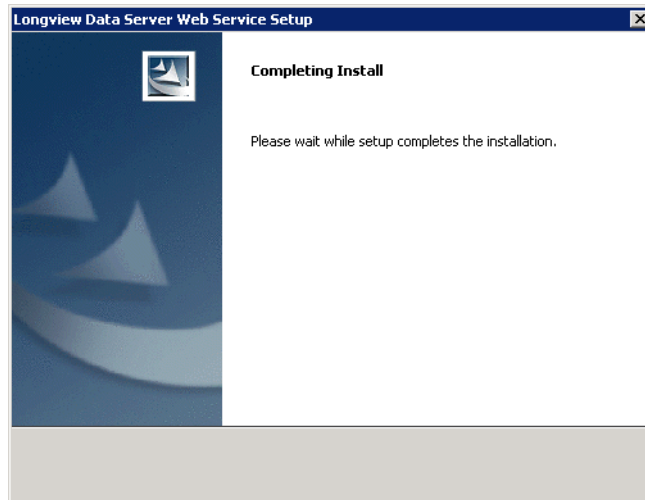
9. When the upgrade is complete, the Longview Data Server Web Service Setup Complete page opens.
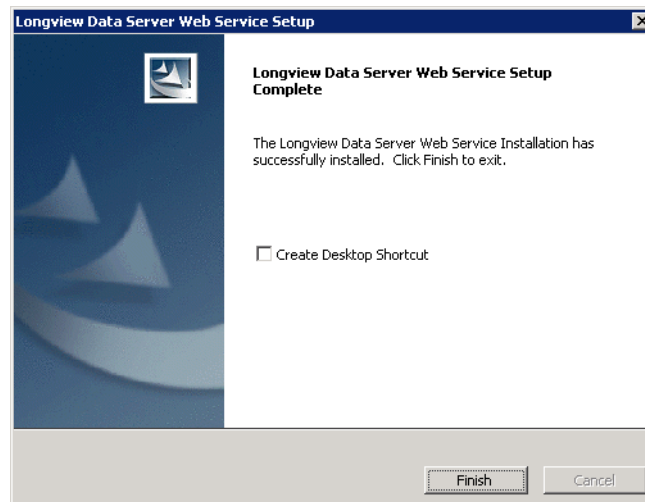
10. Click Finish to exit the wizard.

Upgrading Longview client components

Upgrading client components consists of the following steps:

Upgrading components from Longview Component Manager

If your system's setting for CLIENT_DEPLOYMENT_POLICY is ALWAYS or PROMPT, you can upgrade client components directly from Longview Component Manager.

If the setting is set to ALWAYS, Longview client components are always updated to the newest available version. If this setting is set to PROMPT, users are prompted to accept or decline the update when they sign in to Longview Component Manager.

Upgrading Longview Launcher

If Longview Solutions releases a new version of Longview Launcher, you can upgrade your existing files and make the new components available to users.

To obtain the Longview Launcher files:

1. Download the appropriate version for the Longview Launcher-7.3 (Build *xxxx*).zip file from the location specified by Longview Support Services.

2. Navigate to the directory referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\Longview. Typically, C:\inetpub\wwwroot\cgi-bin*LID*, where *LID* is the Longview Identifier for your system.

3. Delete the Longview.ComponentLauncher.application file.

4. Open the Application Files folder.

5. Delete the `Longview.ComponentLauncher_72_x_xxxx_x` folder.

6. Unzip the file you downloaded in step 1 to the Web bridge directory, merging folders and overwriting files as necessary.

7. Continue to "Upgrading components through Longview Launcher" on page 160.

Upgrading components through Longview Launcher

If you have upgraded your Longview Launcher files, provide the original link to users. For information on links, see "Deploying client components" on page 103. When users click this link, the updated components download automatically.

Continue to "Upgrading the Longview Add-In for Office" on page 160.

Upgrading the Longview Add-In for Office

You can upgrade the Longview Add-In for Office by completing the steps in this section.

Note   *The Longview Add-In for Office version must match the Data Server version. If the versions do not match, the user is prompted to deploy the correct Add-In from the Longview Dashboard or a Longview component.*

To upgrade the Longview Add-In for Office:

1. Navigate to the directory referenced by the `WEB_SERVER_BRIDGE` parameter in the `lvsrvr.cfg` file. For example, `C:\inetpub\wwwroot\cgi-bin\Longview`.

2. Delete the `LongviewAddIn.Office.application` file.

3. Open the `Application Files` folder.

4. Delete the `LongviewAddIn.Office_72_x_xxxx_x` folder.

5. Download the `Longview Add-In for Office-7.3 (Build xxxx).zip` file from the location specified by Longview Support Services.

6. Unzip the file to the Web bridge directory as referenced by the `WEB_SERVER_BRIDGE` parameter in the `lvsrvr.cfg` file. For example, `C:\inetpub\www-root\cgi-bin\Longview`.

7. To verify the version, open the Longview Add-In for Office using the appropriate method.

8. Click the File tab. The Backstage view displays.

9. Click Longview. Make sure the version for Longview Add-In for Office is 7.3 (Build *xxxx*).

10. Continue to "Upgrading Longview for Excel" on page 161.

Upgrading Longview for Excel

You can upgrade Longview for Excel by completing the steps in this section. These instructions apply only if your company has users with Longview for Excel installed through the standalone installer. If all of your company's users access Longview for Excel through Longview Component Manager, you have already upgraded the necessary components in "Upgrading components from Longview Component Manager" on page 159 and you can proceed to "Upgrading Longview Web Controls" on page 161.

Note   *These steps must be implemented on all computers used to access Longview for Excel through the standalone installer.*

To upgrade Longview for Excel:

1. Complete the steps in "Uninstalling Longview for Excel" on page 186.
2. Complete the steps in "Creating the .msi file for Longview for Excel" on page 108.
3. Complete the steps in "Running the Longview for Excel Setup Wizard" on page 108.
4. Continue to "Upgrading Longview Web Controls" on page 161.

Upgrading Longview Web Controls

To upgrade Longview Web Controls, follow the process for "Repairing Longview Web Controls" on page 176.

Upgrading Longview Tax

At this time, you can upgrade Tax Provision only.

If you are on a version of Longview Tax earlier than Longview 7.2 Update 3 then you must upgrade to Longview Tax 7.2 Update 3 in its entirety first. For information on upgrading from your current version, see the installation guide specific to your version.

To upgrade Tax Provision, complete these steps:

1. "Upgrading Longview Platform" on page 163
2. "Backing up the Longview Tax database" on page 163
3. "Backing up Longview Tax files" on page 164
4. "Removing local report templates" on page 164
5. "Obtaining Longview Tax files" on page 165
6. "Upgrading Tax Provision files" on page 165
7. "Running a restatement" on page 166
8. "Following release-specific instructions" on page 166
9. "Confirming upgrades" on page 167

Upgrading Longview Platform

Before you follow any instructions in the rest of this section, make sure you upgrade Longview Platform. For more information, see "Upgrading Longview Platform" on page 141.

Backing up the Longview Tax database

Before you upgrade Tax Provision, back up your Longview Tax Database using the Export functionality in Longview Server Manager. For more information, see the *Longview Server Manager Guide.*

Backing up Longview Tax files

Many of the Tax Provision files and folders are overwritten during the upgrade process. To preserve any custom modifications, create backups for the following folders and files in the Server machine Data Server working directory (for example, C:\Longview\DataServers\LongviewTax):

- APPFRMWRK
- applications
- templates
- recalc
- Web\css
- Web\images
- Web\panels
- RuleDependencies.txt
- RuleMerges.txt

Removing local report templates

Publishers have local copies of published report templates in their Data directory. These files must be removed when new files are updated on the server to ensure the user is viewing the updated version of the report.

Any Administrative users that have Publisher application access authorization for Longview Analysis and Reporting must do the following:

1. Navigate to the Data directory on the local machine, created when installing Longview Component Manager, for example C:\ProgramData\Longview Solutions\<*LID*>\data\, where <*LID*> is the Longview Identifier for your system.

2. Create a new folder named Longview Analysis and Reporting *old version #*.

3. Copy all .rtp files from the Longview Analysis and Reporting folder to this new directory.

   Note   *If you have any local unpublished report templates, you must paste them back into the Longview Analysis and Reporting folder from your backup directory.*

4.

Obtaining Longview Tax files

Longview Support Services has provided you with one or more links which you can visit to download the files that relate to the components you have purchased.

Download the following files:

- Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip
- Longview Tax 7.3 (Build *xxxx*) Client.zip
- Longview Tax 7.3 (Build *xxxx*) Upgrade Scripts Tax Provision.zip

Continue to "Upgrading Tax Provision files" on page 165.

Upgrading Tax Provision files

Before you upgrade Longview Tax files, verify that there are no locks on any of the Longview Tax administrative editors or tools.

To upgrade Tax Provision files:

1. Unzip the Tax Provision upgrade files to the following locations:

File	Location
Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip	Server machine Data Server working directory. For example, C:\Longview\DataServers\LongviewTax.
Longview Tax 7.3 (Build *xxxx*) Client.zip	Web bridge directory as referenced by the WEB_SERVER_BRIDGE parameter in the lvsrvr.cfg file. For example, C:\inetpub\wwwroot\cgi-bin\LongviewTax.
Longview Tax 7.3 (Build *xxxx*) Upgrade Scripts Tax Provision.zip	Server machine Data Server working directory in the Application Framework folder. For example, C:\Longview\DataServers\LongviewTax\lvaf.

2. Restart IIS.

3. Stop your Longview Server.

4. Navigate to the server machine Data Server working directory, and open the lvaf\LV73 Upgrade\Tax Provision folder.

5. Depending on your server RDBMS, open the appropriate folder, run the script, and review the output to ensure that no errors occurred:

   - For SQL Server—LongviewTax_724-73_SQL.sql
   - For Oracle—LongviewTax_724-73_ORA.sql

6. Start your Longview Server.

7. Right-click the StartUpgrade.bat file located in the lvaf\LV73 Upgrade\Tax Provision folder, and open it with your preferred text editor.

8. Make the following changes:

Replace all instances of...	with...
<Longview Server working directory>	Your server machine Data Server working directory path as set by the WORK_DIRECTORY parameter in the lvsrvr.cfg file (without the surrounding quotation marks). For example, C:\Longview\DataServers\LongviewTax.
<LID>	The Longview Identifier as set in the SERVER_NAME parameter in the lvsrvr.cfg file. For example, LongviewTax.
<Host>	The host machine of the Longview Data Server as set in the APPLICATION_SERVER parameter in the lvsrvr.cfg file. For example, localhost.
<Port>	The client port number of the Longview Server as set in the LISTENER_PORT parameter in the lvsrvr.cfg file. For example, 28000.
<TaxAdmin User>	The user name for the tax administrative user.
<TaxAdmin pwd>	The password for the tax administrative user.

9. Save the batch file, and then run it.

10. Navigate to the lvaf\LV723 Upgrade\Tax Provision\tmp folder, and open and review the UPGRADE_HISTORY.out file to validate all procedures have run successfully.

11. Continue to "Running a restatement" on page 166.

Running a restatement

Once you have upgraded your Longview Tax files, run a restatement. For information on running a restatement, see the *Longview Application Administrator Guide.*

Continue to "Following release-specific instructions" on page 166.

Following release-specific instructions

To complete the upgrade process, follow the release-specific instructions in the Longview Tax 7.2 Update 4 Upgrade to Longview Tax 7.3 Tax Provision file. Continue to "Confirming upgrades" on page 167.

Confirming upgrades

You can use the About dialog in Longview Tax to verify the versions for the components you installed during the installation process. After you install Longview Tax, you should verify that all versions in the About Longview dialog match and then delete the related Upgrade folder.

To verify version information:

1. In Longview Tax, click About. The About Longview dialog opens.

2. Verify the version numbers for the components you have purchased:

Component	Related installation file
Longview Tax	Longview Tax 7.3 (Build *xxxx*) Client.zip
Tax Provision - Application Logic	Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip
	Longview Tax 7.3 (Build *xxxx*) Upgrade Scripts Tax Provision.zip
Tax Provision - Calculation Logic	Longview Tax 7.3 (Build *xxxx*) Server Logic Tax Provision.zip
	Longview Tax 7.3 (Build *xxxx*) Upgrade Scripts Tax Provision.zip
Web Bridge	Web(x64)–7.3 (Build *xxxx*).zip
Data Server	Longview Server Setup–7.3 (Build *xxxx*).exe

3. Once you have confirmed that the upgrade was successful, delete the C:\Longview\DataServers\LongviewTax\lvaf\LV723 Upgrade folder.

Reinstalling Longview Platform components

In some cases, you can repair Longview platform components. Currently, Longview Solutions provides repair/reinstall functionality for Longview Data Server only.

The Longview server reinstall process is similar to the procedure followed for a new installation. Before the installation begins, the existing version is uninstalled, allowing you to specify new installation criteria.

Note   *If you click Cancel during the Reinstall process, the installer removes all files; however, the database is not removed.*

To upgrade the installed components without uninstalling your existing setup, you can run an upgrade process. See "Upgrading Longview Data Server" on page 141.

To reinstall Longview Data Server:

1. Double-click the setup file received from Longview Solutions. The Longview Server Setup wizard opens.

    Note   *Depending on your system, a User Account Control dialog may prompt you to allow the installer to make changes to the computer. Click Yes.*
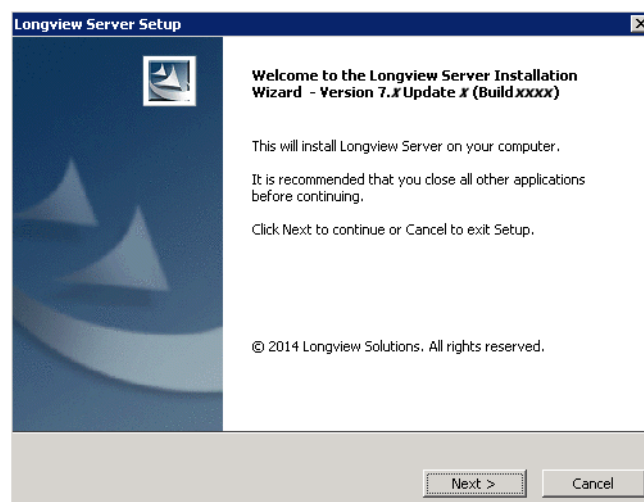
2. Click Next. The Specify Installation Details page opens.
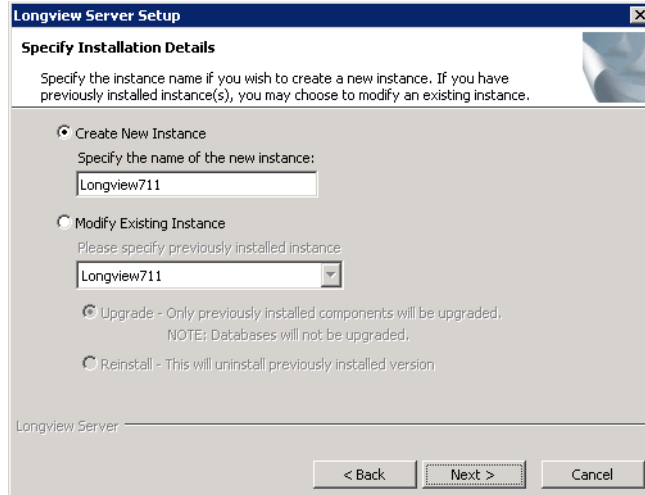
3. Complete these fields:

Modify Existing Instance	Select this option, and select the appropriate instance in the drop-down list.
Reinstall	Select this option.

4. Click Next. The Setup process uninstalls the previous installation.
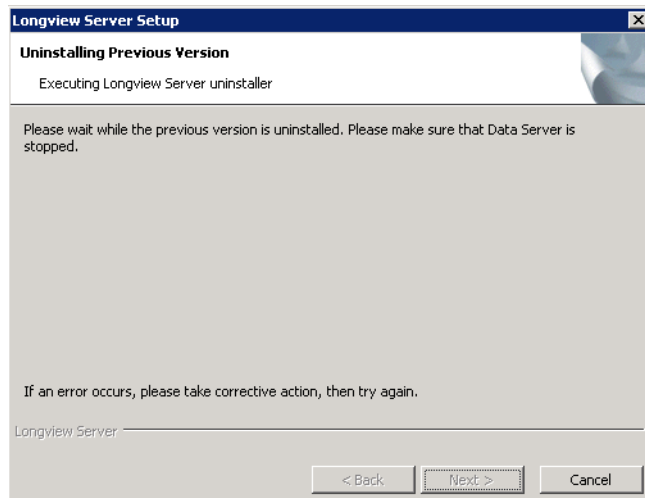
5. When the previous version is uninstalled, continue as for a new installation from step 4 on page 30.

Reinstalling Longview Web Controls

Use the reinstall process to replace your Longview Web Controls with more recent versions of the web controls.

To reinstall Longview Web Controls:

1. Navigate to Programs and Features from your Windows Control Panel.

   Note   *You can also double-click the most recent InstallerName.msi. This also opens the Longview Web Controls Installer, with the Setup page in view.*

2. Select Longview Web Controls from the list of programs and click Change. The Longview Web Controls Installer opens, with the Setup page in view.
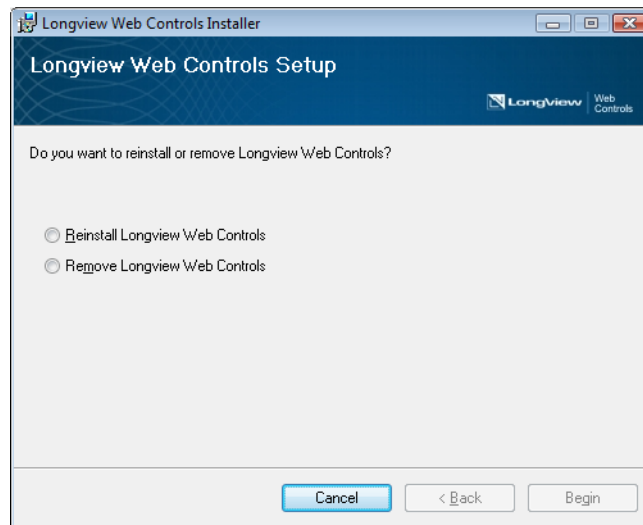
3. Select Reinstall Longview Web Controls and click Begin.

   Note   *The Begin button is disabled until a selection is made.*

The Installing Longview Web Controls page appears, indicating the progress of the reinstallation.
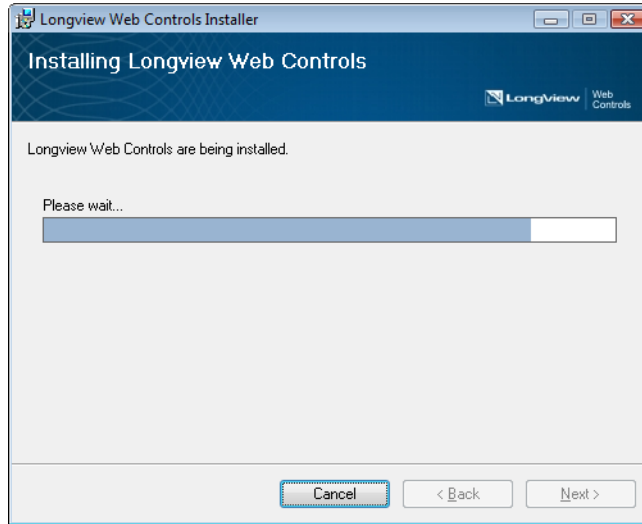
4. When the reinstallation is complete, the Installation Complete page opens. Click Close.
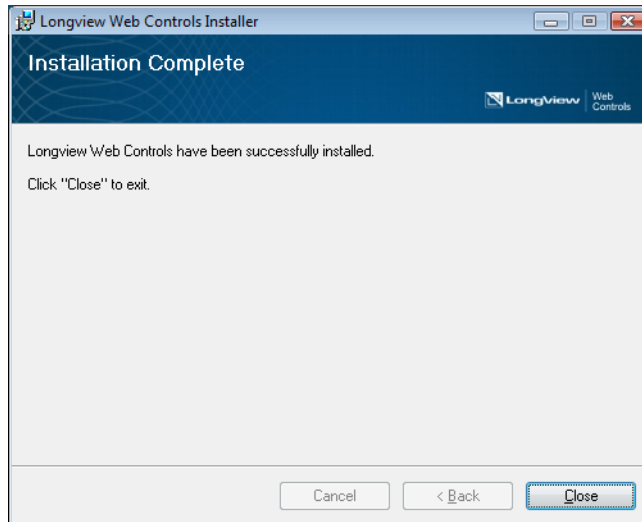
Repairing Longview client components

Repairing client components consists of the following steps:

1. "Repairing Longview Component Manager" on page 173
2. "Repairing Longview for Excel" on page 173
3. "Repairing Longview Web Controls" on page 176

Repairing Longview Component Manager

If users have issues with Longview Component Manager itself, they can repair the program using the installer repair process.

Note   *If you are running Windows 10, you must repair Longview Component Manager through the Windows Control Panel. The Windows Apps & Features menu is currently not supported by Longview.*

To repair Longview Component Manager:

1. Navigate to Programs and Features from your Windows Control Panel.
2. Select Component Manager - *LID* from the list of programs, where *LID* is the Longview Identifier for the system.
3. Click Change. The Component Manager Setup Wizard opens.
4. Click Next.
5. Click the Repair icon.
6. Click Repair. The system rebuilds the application, restoring it to its original file set.
7. When the process is complete, click Finish to exit the wizard.

Repairing Longview for Excel

Running the repair process restores the registry entries that store the values input during the install, and the files created during the install.

To repair Longview for Excel:

1. Navigate to Programs and Features from your Windows Control Panel.
2. Select Longview for Excel from the list of programs.

3. Click Change. The Longview for Excel Setup Wizard opens.
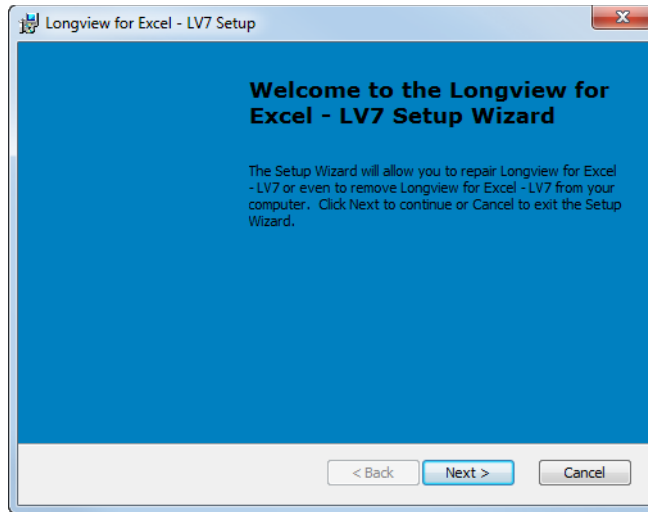
4. Click Next. The Repair or Remove Installation page opens.
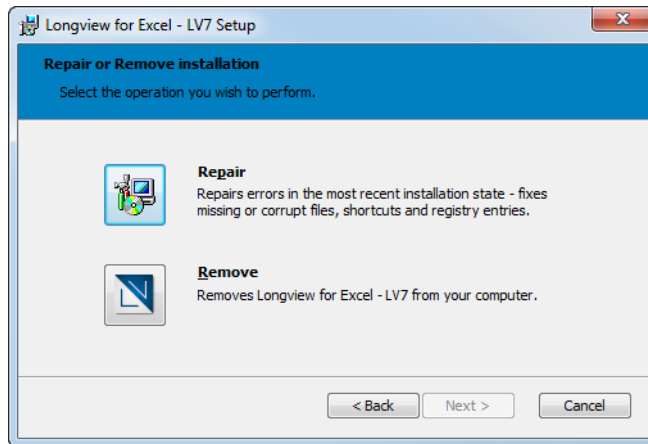
5. Click Repair. The Repair Longview for Excel page opens.
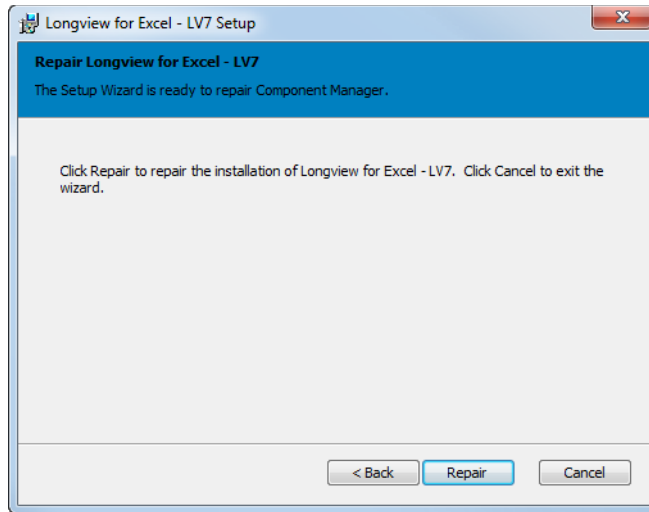
6. Click Repair. A progress page opens informing you of the status of the repair process.
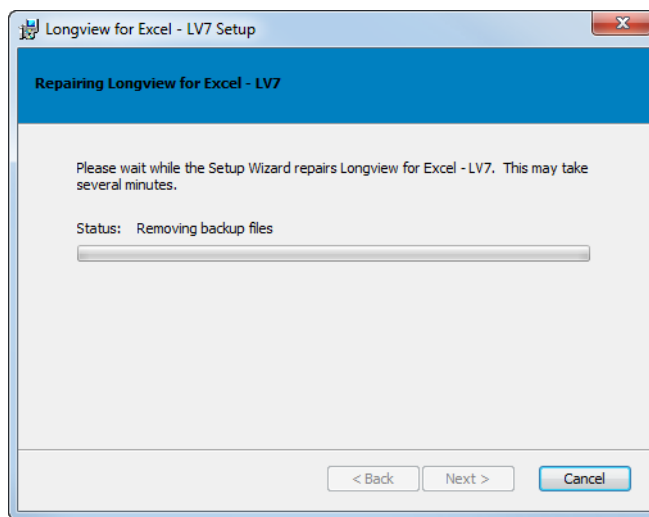
7. When the process is complete, the Completing the Longview for Excel Setup Wizard page opens.
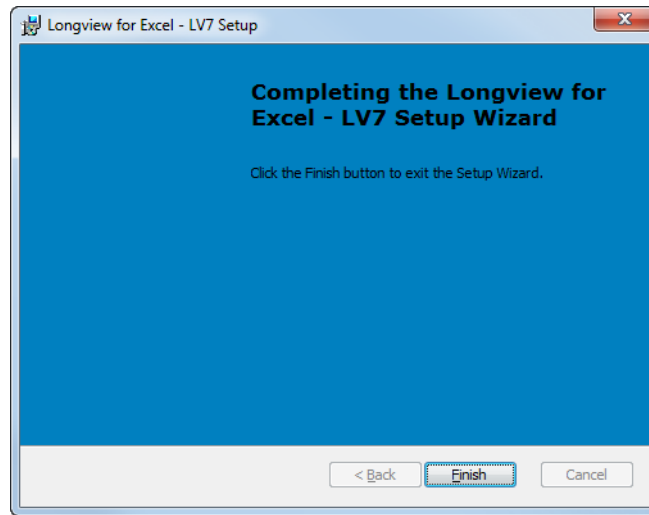
8. Click Finish to exit the wizard.

Repairing Longview Web Controls

Use the reinstall process to replace your Longview Web Controls with more recent versions of the web controls.

To reinstall Longview Web Controls, follow these steps:

1. Navigate to Programs and Features from your Windows Control Panel.

   Note   *You can also double-click the most recent* Longview Web Controls Installer–7.3 (Build *xxxx*).msi*. This also opens the Longview Web Controls Installer, with the Setup page in view.*

2. Select Longview Web Controls from the list of programs and click Change. The Longview Web Controls Installer opens, with the Setup page in view.


3. Select Reinstall Longview Web Controls and click Begin.

   Note   *The Begin button is disabled until a selection is made.*

   The Installing Longview Web Controls page appears, indicating the progress of the reinstallation.
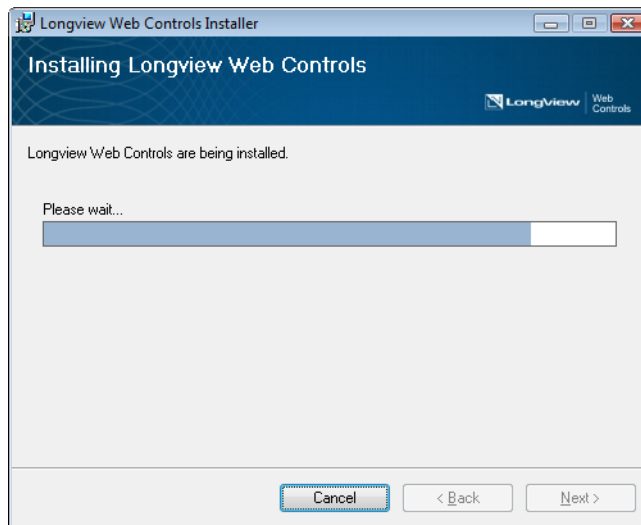
4. When the reinstallation is complete, the Installation Complete page opens. Click Close.

Uninstalling Longview Platform

Uninstalling Longview Platform consists of the following steps:

1. "Uninstalling Longview Data Server" on page 179
2. "Uninstalling Longview HTTP Proxy Server" on page 183
3. "Uninstalling the Data Server Web Service" on page 183

Uninstalling Longview Data Server

Running the uninstall process removes Longview Data Server from your system, with the option of leaving the databases and logins, or removing them as well.

To uninstall Longview Data Server:

1. To start the uninstall process, select Start > [All] Programs > Longview Server > Uninstall Longview Server - *Server ID*. The Uninstall Longview Server dialog opens.

   Note   Depending on your system, a User Account Control dialog may prompt you to allow the installer to make changes to the computer. Click Yes.
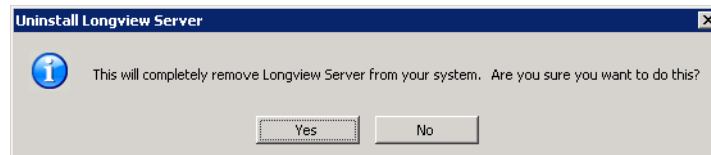
2. Click Yes. The Select Uninstall Type dialog opens.
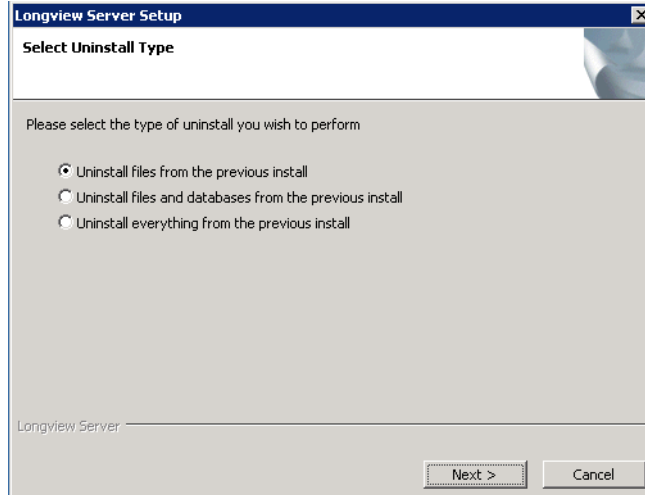
3. Select one of the following options:

Uninstall files from the previous install	Deletes files that were deployed by the installer. Any files that were not deployed by the installer are not removed. The Longview Database is not removed.
Uninstall files and databases from the previous install	Deletes files that were deployed by the installer. Any files that were not deployed by the installer are not removed. The Longview Database is also removed.
Uninstall everything from the previous install	Deletes files that were deployed by the installer. Any files that were not deployed by the installer are deleted as well. The Longview Database is removed.

4. Click Next.

5. Do one of the following:

   • If you selected **Uninstall files from the previous install**, continue to step 10.

   • If you selected **Uninstall files and databases from the previous install** or **Uninstall everything from the previous install**, a dialog opens warning you that data will be lost.

   Warning   ***Clicking Yes in the next step deletes all data permanently.***
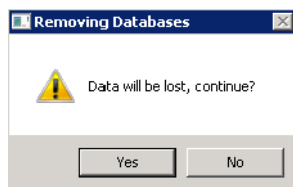
6. Click Yes. If you are uninstalling an Oracle system, the Removing Oracle DB dialog opens.
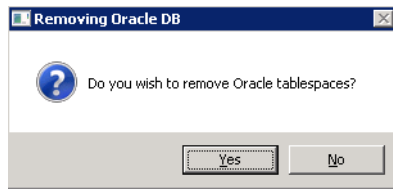
7. Do one of the following:

   • To remove the tablespace, click Yes.

   • To retain the tablespace, click No.

8. The Uninstall process verifies the status of installed servers. When the status of the server is verified, the Configure Database Account page opens.
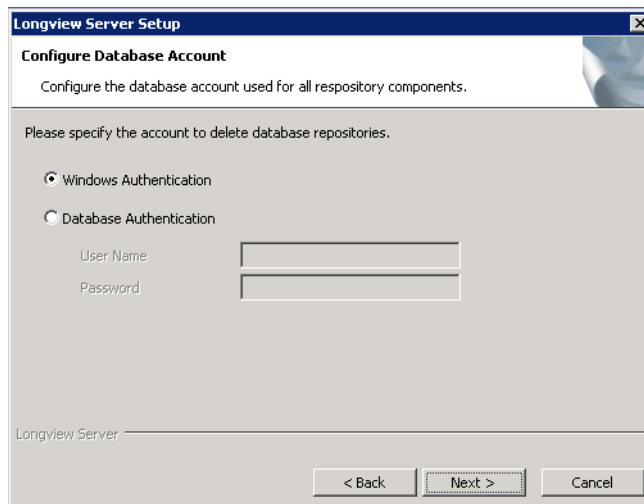
9. Select the authentication method, and then specify the user name and password if necessary.

10. Click Next. The Uninstall process removes the previous installation.
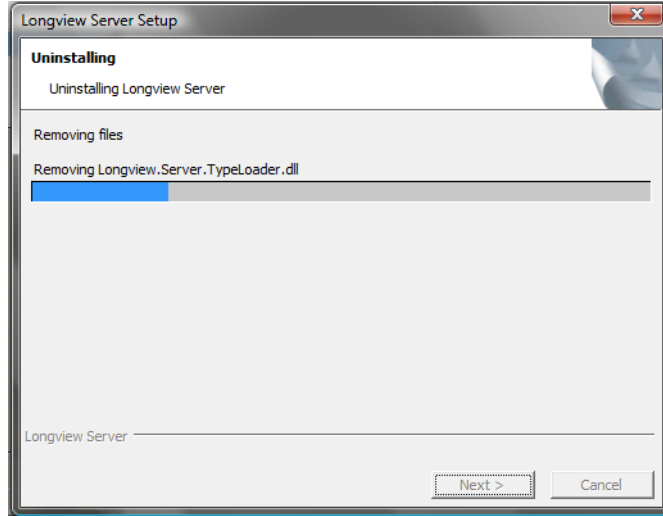
11. When the installation is uninstalled, the Uninstall Complete page opens.
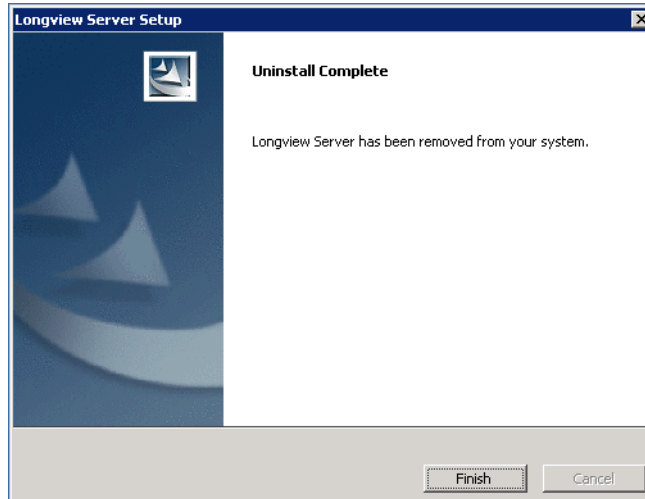
12. Click Finish to exit the wizard.

Uninstalling Longview HTTP Proxy Server

If you no longer require the HTTP Proxy Server, you can uninstall it.

To uninstall the HTTP Proxy Server service:

1. Open the command line using administrative privileges.
2. Run the following command:

   Longview.HTTPProxyServer.exe –uninstall*ServiceName*

   where:

   ServiceName is the name of the service to uninstall.

Uninstalling the Data Server Web Service

Running the uninstall process removes the Longview Data Server Web Service from your system.

To uninstall the Data Server Web Service:

1. To start the uninstall process, select Start > All Programs > Longview Data Server Web Service > Uninstall Web Service - *LID*. The Uninstall Longview Data Server Web Service dialog opens.
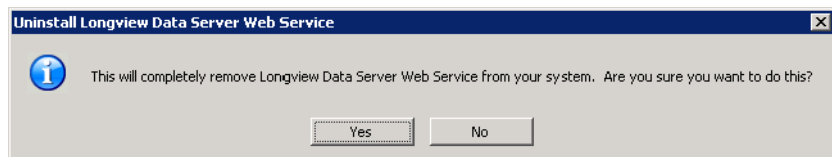
2. Click Yes. The Check Data Server Web Service Status screen opens.
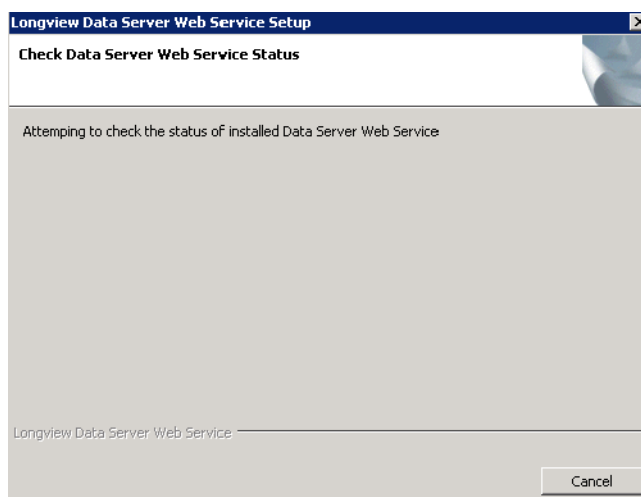
3. After status of the installed Data Server Web Service is checked, the Uninstall process removes the Longview Data Server Web Service.
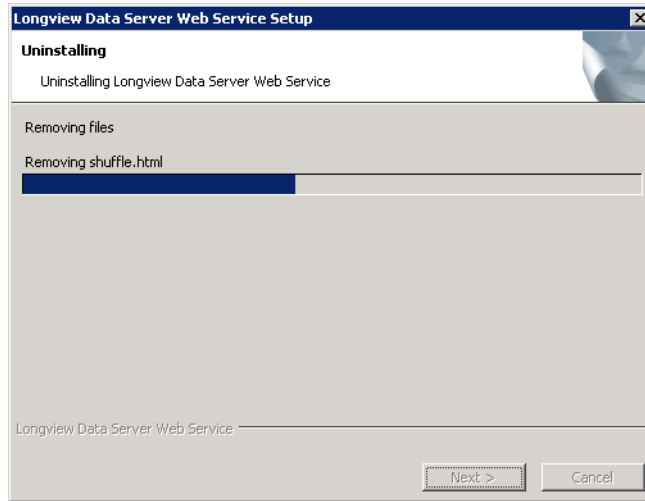
4. When the Longview Data Server Web Service is uninstalled, the Uninstall Complete page opens.
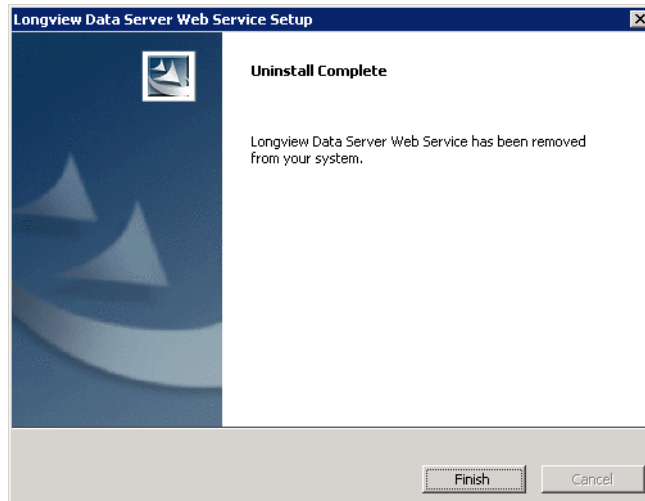
5. Click Finish to exit the wizard.

Uninstalling Longview client components

Uninstalling Longview client components consists of the following steps:

Uninstalling Longview Component Manager

If you no longer need Longview Component Manager installed on a computer, you can uninstall it.

Note   *If you are running Windows 10, you must uninstall Longview Component Manager through the Windows Control Panel. The Windows Apps & Features menu is currently not supported by Longview.*

To uninstall Longview Component Manager:

1. Navigate to Programs and Features from your Windows Control Panel.
2. Select Component Manager - *LID* from the list of programs, where *LID* is the Longview Identifier for the system.
3. Click Uninstall.
4. When prompted, click Yes. The process of uninstalling the application proceeds to completion.

Uninstalling the Longview Add-In for Office

Completing the uninstall process removes the Longview Add-In for Office from your computer. Longview Add-In for Office files are stored in several locations on your computer and must be deleted in order to uninstall the Add-In.

To uninstall the Longview Add-In for Office:

1. Navigate to the following directories where Longview Add-In for Office files are stored and delete the specified folders and files:

Directory	Items to delete
C:\Users*UserName*\Document s\Longview\Office*	• Excel folder • AddIn.config file
C:\Users*UserName*\AppData\ Roaming\Microsoft\Excel\XLST ART*	• Longview folder • LongviewExcelAddIn-packed.xll file
C:\Users*UserName*\AppData\L ocal\Apps*	• 2.0 folder **Warning** **This folder may contain other Longview ClickOnce application files which will be redeployed as needed. Deleting this folder may have unexpected effects as it may contain other files unrelated to Longview which may need to be redeployed at a later point in time.**
	* where UserName is your current user name

Uninstalling Longview for Excel

Running the uninstall process removes Longview for Excel from your computer.

To uninstall Longview for Excel:

1. Navigate to Programs and Features from your Windows Control Panel.

2. Select Longview for Excel - *LID* from the list of programs, where *LID* is the Longview Identifier for the system.

3. Click Uninstall.

4. When prompted, click Yes. The process of uninstalling Longview for Excel proceeds to completion.

Uninstalling Longview Web Controls

Use the removal process to uninstall Longview Web Controls from your system.

To uninstall Longview Web Controls:

1. Navigate to Programs and Features from your Windows Control Panel.

   Note   *Alternately, you can double-click the most recent* Longview Web Con-trols Installer–7.3 (Build *xxxx*).msi. *This also opens the Longview Web Controls Installer, with the Setup page in view.*

2. Select Longview Web Controls from the list of programs and click Change. The Longview Web Controls Installer opens, with the Setup page in view.
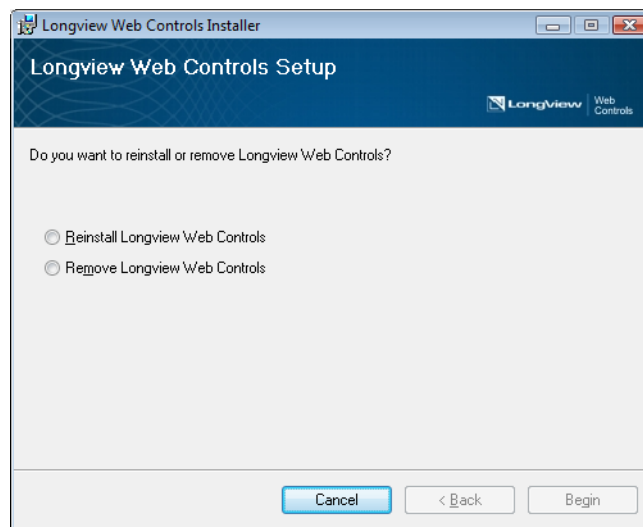
   Note   *If you select Longview Web Controls from the list of programs and click Uninstall, the Longview Web Controls are uninstalled via the Windows user interface.*

3. Select Remove Longview Web Controls and click Begin.

   Note   *The Begin button is disabled until a selection is made.*

The Removing Longview Web Controls page appears, indicating the progress of the removal.
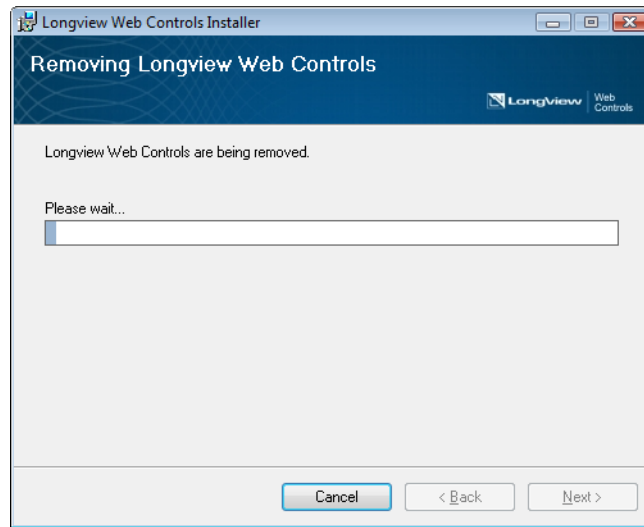
4. When the removal is complete, the Installation Complete page opens. Click Close.
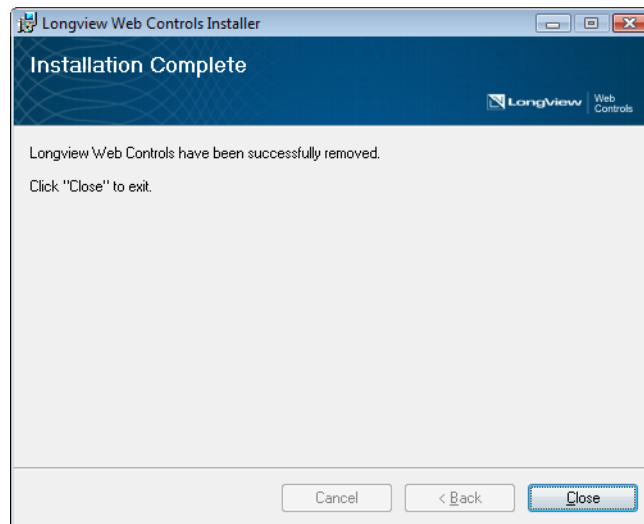
Appendix A: The Server Configuration File

During installation, you may want to make configuration changes that determine the behavior of Longview Data Server. Typically, you configure your Data Server using Longview Server Manager; however, because you have not yet installed Longview client components, you must use the manual configuration file provided by Longview Solutions.

Note   *You may need to revisit the manual configuration file during implementation or during regular system maintenance.*

For information on configuring settings related to Longview Tax, see "Configuring your Data Server for Longview Tax" on page 121.

To configure your Longview Data Server:

1. Navigate to your server machine Data Server working directory. For example, C:\Longview\DataServers\Longview.

2. Copy the existing lvsrvr.cfg file, and save it with a new name.

3. Open the lvsrvr.cfg file in your preferred text editor.

   Warning   ***Incorrectly modifying some parameters may result in not being able to start your server or may prevent features from functioning. Use with caution.***

4. In the Primary Server Parameters section, review the following parameters:

SERVER_TYPE	This parameter is populated by the server installer and specifies the type of server selected during installation. • DATASERVER • DATASERVERWEBSERVICE
SERVER_NAME	This parameter is populated by the server installer and specifies the name of the Data Server (Longview System ID or LID).1
WORK_DIRECTORY	This parameter is populated by the server installer and specifies the location in which the servers are started, and in which the Data Server Log file (lv_dataserver.log) is saved. This path must be enclosed in double quotation marks. The default path is "C:\Longview\DataServers*LID*" where *LID* is the Longview Identifier for the system.

5. In the Application Logic Switches section, update the following parameters as required:

ACCOUNTING_NDD	Specify whether to use N-Dimensional Distribution. • TRUE—Use this value to enable N-Dimensional Distribution. • FALSE—Use this value to disable N-Dimensional Distribution. The default value for this parameter is FALSE.
ACCOUNTING_PAC	Specify whether to use Period Activity Calculation (PAC) logic. • TRUE—Use this value to use Period Activity Calculation (PAC) logic. • FALSE—Use this value to disable PAC logic. The default value for this parameter is FALSE.
ACCOUNTING_REC	Specify whether to use Retained Earnings Calculation (REC) logic. • TRUE—Use this value to use Retained Earnings Calculation (REC) logic. • FALSE—Use this value to disable REC logic. The default value for this parameter is FALSE.

ACCOUNTING_TRN	Specify whether to use data translation. • **TRUE**—Use this value to use data translation. • **FALSE**—Use this value to disable data translation. The default value for this parameter is **FALSE**.
ACCOUNTING_YTD	Specify whether to use accounting year-to-date (YTD) logic. • **TRUE**—Use this value to use accounting year-to-date (YTD) logic. • **FALSE**—Use this value to disable YTD logic. The default value for this parameter is **FALSE**.
DO_ELIMINATIONS	Specify whether to use the Elimination Server. • **TRUE**—Use this value to use eliminations. If you use this value, **USE_JOURNAL_ENTRIES** must also be set to **TRUE**. • **FALSE**—Use this value to disable elimination logic. The default value for this parameter is **FALSE**.
USE_DATA_CACHE	Specify whether to use this feature. • **TRUE**—Use this value to store calculated data in cache files. • **FALSE**—Use this value to load all data to the database. The default value for this parameter is **FALSE**.
USE_AGENT_DATA_CACHE	Specify whether to store the data cache for agents and web agents in RAM. • **TRUE**—Use this value to store the data cache for agents and web agents in RAM. • **FALSE**—Use this value to store the data cache for agents and web agents in the KSA along with other server data caches. The default value for this parameter is **FALSE**.
USE_JOURNAL_ENTRIES	Specify whether to use the Journal Entry Server. • **TRUE**—Use this value to enable Journal Entries. • **FALSE**—Use this value to disable Journal Entries. If the value of **DO_ELIMINATIONS** is **TRUE**, the value for this parameter must also be **TRUE**. The default value for this parameter is **FALSE**.

USE_MODEL	Specify whether to use server model rules. • **TRUE**—Use this value to enable model rules. • **FALSE**—Use this value to disable model rules. The default value for this parameter is **FALSE**.
USE_QUERY_RULES	Specify whether to use query rules. • **TRUE**—Use this value to enable query rules. • **FALSE**—Use this value to disable query rules. The default value for this parameter is **FALSE**.
USE_ROLLUP_RULES	Specify whether to use Rollup rules. • **TRUE**—Use this value to enable Rollup rules. The calculation of data areas is subject to **INCLUSION** or **EXCLUSION** as set in the **ROLLUP_RULES_METHOD** parameter. • **FALSE**—Use this value to disable Rollup rules and calculate all data areas. The default value for this parameter is **FALSE**.
USE_VALIDATION	Specify whether to use validation rules. • **TRUE**—Use this value to enable validation rules. • **FALSE**—Use this value to disable validation rules. The default value for this parameter is **FALSE**.
USE_TRN_ROUNDING	Specify whether to use translation rounding. • **TRUE**—Use this value to enable translation rounding. If this parameter is specified as **TRUE**, **ACCOUNTING_TRN** must also be specified as **TRUE**. • **FALSE**—Use this value to disable translation rounding. The default value for this parameter is **FALSE**.
USE_RDBMS_TEMPTABLES	This parameter applies to systems with Oracle databases only. Specify whether the system uses Oracle Global Temporary temp tables. • **TRUE**—Use this value to use Oracle Global Temporary temp tables. • **FALSE**—Use this value to use regular temp tables. The default value for this parameter is **FALSE**.
USE_LONG_COMPONENT_NAMES	Set this parameter to **TRUE** unless otherwise instructed by Longview Support Services.

USE_GRID_PROCESSING	Specify whether to use grid processing when running restatements.
	• TRUE—Use this value to use grid processing when running restatements.
	• FALSE—Use this value to use regular processing when running restatements.
	The default value for this parameter is FALSE.
GRID_PROCESSING_TYPE	If USE_GRID_SERVER is TRUE, specify the type of grid processing to use.
	• LVGRID—Use this value to use Longview Grid processing.
	• DATASYNAPSE—Use this value to use third-party data synapse grid processing.
	The default value for this parameter is LVGRID.
USE_FILE_ATTACHMENT	Specifies whether to enable file attachments for web input templates and Data Grids.
	• TRUE—Use this value to enable file attachments for web input templates and Data Grids.
	• FALSE—Use this value to disable file attachments for web input templates and Data Grids.
	The default value for this parameter is FALSE.
USE_WORKFLOW	Specify whether to enable Longview Workflow.
	• TRUE—Use this value to enable Longview Workflow.
	• FALSE—Use this value to disable Longview Workflow.
	The default value for this parameter is FALSE.
USE_JE_WORKFLOW	Specify whether or not users receive emails notifying them of journal entry activity.
	• TRUE—Use this value to send users notification emails. If this parameter is set to TRUE, the value of USE_JOURNAL_ENTRIES must also be TRUE.
	• FALSE—Use this value to disable email notifications.
	The default value for this parameter is FALSE.

USE_EVENT_RULES	Specify whether to enable Event-based rules in the system.
	• **TRUE**—Use this value to enable Event-based rules.
	• **FALSE**—Use this value to disable Event-based rules.
	The default value for this parameter is **FALSE**.
DELTA_MATH_LOGIC	Specify whether the system uses deltas when processing math logic to eliminate rounding errors caused by using the delta values for math processing.
	• **TRUE**—If this parameter is set to **TRUE**, the system uses the difference in the deltas for math processing.
	• **FALSE**—If this parameter is set to **FALSE**, the system zeroes out the area to which users are submitting data, and then submits the new value.
	The default value for this parameter is **TRUE**.
ROLLUP_RULES_METHOD	Specify the rollup rule method, in conjunction with the **USE_ROLLUP_RULES** parameter.
	• **INCLUSION**—Use this value to roll up only the DataArea specified by a rollup rule. All other areas of the database do not roll up to their parents.
	• **EXCLUSION**—Use this value to roll up all areas of the database, except for those specified by a rule. Areas specified by a rule do not roll up to their parents.
	The default value for this parameter is **EXCLUSION**.
USE_SESSION_LOCKS	Specifies whether to use session-based locking for Application Framework.
	• **TRUE**—When an Application Framework session ends, when the timeout is reached or the connection is lost, all session locks are released.
	• **FALSE**—Locks are maintained when an Application Framework session ends and must be deleted manually.
	The default value for this parameter is **TRUE**.

USE_DATA_AUDIT_TRAIL	Specify whether Data Audit Trail is enabled in this system. Data Audit Trail is used to query the database for records of what values in the database have been changed and by which users and to export those records to a text file. For more information, see the *Longview Application Administrator Guide.*
	• TRUE—Use this value to enable Data Audit Trail.
	• FALSE—Use this value to disable Data Audit Trail.
	If you are installing Longview Tax, set this parameter to TRUE.
	The default value for this parameter is FALSE.
USE_WEB_DEPLOYMENT	Specify whether to deploy client components using Longview Launcher. For more information, see "Choosing a deployment method" on page 85.
	• TRUE—Use this value to deploy client components using Longview Launcher. If you use this value, links in the Longview Launch Center, and links to Longview Input or Longview Analysis and Reporting templates use Longview Launcher to launch the appropriate component.
	• FALSE—Use this value to disable deployment through Longview Launcher. If you use this value, links in the Longview Launch Center, and links to Longview Input or Longview Analysis and Reporting templates, use Longview Component Manager to launch the appropriate component.
	The default value for this parameter is FALSE.
USE_DATA_EVENT_SEQUENCING	Specify whether to use sequencing for events. If you use data event sequencing, the DEFAULT_ACTIONS_TIME_INTERVAL parameter is ignored.
	• TRUE—Use this value to use data event sequencing. For more information on data event sequencing, see the *Longview Application Administrator's Guide.*
	• FALSE—Use this value to disable data event sequencing.
	The default value for this parameter is FALSE.

USE_REPORT_VIEWER	Specify that reports launched from Longview Dashboard and Longview Tax Provision open using Report Viewer. Mobile Dashboard reporting does not use Report Viewer.
	Note To use Report Viewer, you must follow the steps in "Installing Longview Report Viewer" on page 65.
	• **TRUE**—Use this value to enable Report Viewer.
	• **FALSE**—Use this value to disable Report Viewer. Reports open as HTML-based reports.
	The default value for this parameter is **TRUE**.
USE_MEMORY_CACHE	Specify whether to enable caching data in memory if the **MemoryCacheSizes.txt** file is present in the location specified by the **MEMORY_CACHE_LOCATION** parameter.
	Note Longview Solutions recommends caching data in memory only as part of a full-system performance strategy. Review "Caching data in memory" in the *Longview Server Manager Guide* before implementing this feature.
	• **TRUE**—Use this value to enable caching data in memory.
	• **FALSE**—Use this value to disable caching data in memory.
	The default value for this parameter is **FALSE**.

6. In the General System Parameters section, modify the following parameters as required:

DATABASE_DBO	This parameter is populated by the server installer and specifies the name of the DBO of the Data Server database.
DATABASE_PWD	This parameter is populated by the server installer and specifies the password for the DBO of the Data Server database.
DATABASE_HOST	This parameter is populated by the server installer and specifies the host name. Host names can be a maximum length of 23 characters.

DATABASE_SERVER	This parameter is populated by the server installer and specifies the following: • For Oracle systems, this parameter identifies the SQL*Net connection string for the instance. • For SQL Server systems, this parameter identifies name of the ODBC connection. The maximum length for this parameter is 23 characters.
LISTENER_PORT	This parameter is populated by the server installer and specifies the port number used by the Listener (client port).
WEB_LISTENER_PORT	Specify the port through which the Longview web application connects to the database. The default value for this parameter is one less than the value of the port used by the Server Administrator.
GRID_LISTENER_PORT	Specify the **GRID_LISTENER_PORT** number when the Grid processing type is **LVGRID**.
WEB_AGENT_PROTOCOL	Specifies protocol used between the web server and the web agent: • **IPC**—Shared memory • **TCP**—TCP/IP The default value for this parameter is **IPC**.
SMTP_SERVER	If you're using email notification, specify the name of the SMTP server.
COMPRESS_WEB_CONTENT	Specify whether to use gzip standard compression whenever applicable. • **TRUE**—Use this value to enable gzip standard compression. • **FALSE**—Use this value to disable gzip standard compression. The default value for this parameter is **TRUE**.
USE_THIRD-PARTY_AUTH	Specifies whether to enable third-party web authentication. • **TRUE**—Use this value to enable third-party web authentication. • **FALSE**—Use this value to disable third-party web authentication. The default value for this parameter is **FALSE**. ***Note*** Users select **Single Sign-On (Web)** when signing on.

THIRD‑PARTY_HTTP_VARIABLE	Specify the HTTP variable used for third-party web authentication (valid only if USE_THIRD‑PARTY_AUTH is set to TRUE). The default value for this parameter is LONGVIEW_SSO_USER.
ENABLE_WEB_TRACE	Specify whether to enable web trace to assist in debugging web-related issues. • TRUE—Use this value to enable web trace. • FALSE—Use this value to disable web trace. The default value for this parameter is FALSE.
GRID_SERVICE_NAME	Specify the name for the grid service when the Grid-processing type is DATASYNAPSE.
WRITER_ASYNC_IO	Specify whether to enable asynchronous IO for your grid environment when the value of WRITER_SERVER_RAM is a positive integer. • TRUE—Use this value to enable asynchronous IO. • FALSE—Use this value to disable asynchronous IO. The default value for this parameter is TRUE.
APPLICATION_SERVER	Specify the host name or address of the Data Server that the Longview Smart Client or Longview Tax should connect to. The GetSessionInfo web action returns this parameter to the Longview Smart Client or to Longview Tax.
WEB_SERVER	Specify the host name or address of the Web Server that the Longview Smart Client or Longview Tax should connect to.
CLIENT_HTTP_PROXY	Specify the secure listener port URL (HttpProxyServerListenerPortURL) for your HTTP Proxy Server. For example, https://srvr1201sql01:8080/listenerportproxy/. If you specify a value for this parameter, connections between Longview Application Framework, Longview Apps, and Longview Tax can use a secure HTTP proxy connection. For information on installing the HTTP Proxy Server, see "Installing Longview HTTP Proxy Server" on page 66.

ADMIN_HTTP_PROXY	Specify the secure admin port URL (HttpProxyServerAdminPortURL) for your HTTP Proxy Server. For example, "https://srvr1201sql01:8080/adminportproxy/".
ALTERNATE_SYSTEM_LANGUAGE	Specifies the alternate language to use in your system. • EN—Use this value to use English as the alternate system language. • FR—Use this value to use French as the alternate system language. The default value for this parameter is FR.

7. In the File Location section, modify the following parameters as required:

DOCUMENTATION_LOCATION	Specify the location of the documentation folder. This path must be enclosed in double quotation marks. The default value for this parameter is "C:\Longview\DataServers*LID*\docs" where *LID* is the Longview Identifier for the system.
HELPFILE_LOCATION	Specify the location of the help files folder. This path must be enclosed in double quotation marks. The default value for this parameter is "C:\Longview\DataServers*LID*\helpfiles" where *LID* is the Longview Identifier for the system.
TEMPORARY_FILES	Specify the location in which all temporary files are saved. This path must be enclosed in double quotation marks. The recalculation uses this folder to create files that are needed for submissions, dynamic rollups, and calculations. Once the process completes successfully, these files are deleted. The default value for this parameter is "C:\Longview\DataServers*LID*\tmp" where *LID* is the Longview Identifier for the system.

WEB_SERVER_BRIDGE	Specify the path for the cgi or dll file serving as the communication bridge between the web server and Longview Data Server. This path must be relative to the document root configured for the web server and must be enclosed in double quotation marks.
	This value is used when resolving the WEBBRIDGE token in web content delivered to a user. Therefore, if it is not specified correctly, your web application will not work correctly.
	The default value for this parameter is "/cgi-bin/*LID*/lvweb.cgi" where *LID* is the Longview Identifier for the system.
WEB_SIGNOFF_PAGE	Specify the default sign off page when the user connects through the web interface.
	If this parameter does not start with http://, the Sign on window appears again.
	The default value for this parameter is lvwebsignon.ksp.
WEB_TRACE_FILE_LOCATION	This parameter applies only when ENABLE_WEB_TRACE is set to TRUE.
	Specify the path to where the trace file is stored on the web server. This path must be enclosed in double quotation marks.
	The trace file contains data that may help in debugging web connection problems. For more information, contact Longview Support Services. In order to write to this file, users must have full read/write access to this location.
	The default value for this parameter is "C:\Longview\DataServers*LID*\tmp" where *LID* is the Longview Identifier for the system.
APPLICATIONFRAMEWORK_LOCATION	Specify the location of the Application Framework binaries used for data events and model/procedure links. This path must be enclosed in double quotation marks.
	The default value for this parameter is "C:\Longview\DataServers*LID*\lvaf" where *LID* is the Longview Identifier for the system.

EVENTS_LOG_FILES_LOCATION	Specify the location where log files generated for Events are stored. This path must be enclosed in double quotation marks.
	If you do not specify a value for this parameter, the Events tool does not display the Log Files column, which provides users with links to open log files.
EVENTS_ERROR_FILES_LOCATION	Specify the location where error files generated for Events are stored. This path must be enclosed in double quotation marks.
	If you do not specify a value for this parameter, the Events tool does not display the Error Files column, which provides users with links to open error files.
EVENTS_HISTORY_FILES_LOCATION	Specify the location where history files generated for Events are stored. This path must be enclosed in double quotation marks.
	If you do not specify a value for this parameter, the Events tool does not display the History Files column, which provides users with links to open history files.

PASSWORD_DICTIONARY_LOCATION	This parameter applies only if PASSWORD_COMPLEXITY is set to TRUE.
	Specify the location where the dictionary files are stored. This path must be enclosed in double quotation marks.
	Dictionary files are text files that contain strings of characters that cannot be used in passwords if PASSWORD_COMPLEXITY is set to TRUE. Examples of strings commonly not allowed in passwords include "abc", "password", or your company name.
	If you do not specify a value for this parameter, passwords are not restricted by the strings in the dictionary files.
	The following rules apply to dictionary files:
	• Strings must be at least three characters in length.
	• Strings must be listed one per row in the text file.
	• Password matches to dictionary files are not case-sensitive. For example, if the dictionary file contains "Abc", the password "1aBCD" is not permitted.
	Dictionary files adhere to the following naming convention:
	password_dictionary_*FileName*.txt
	Note *File extensions other than* .txt *can be used. For example,* password_dictionary_LVWords.dct *is a valid dictionary file name.*
MEMORY_CACHE_LOCATION	This parameter applies only when USE_MEMORY_CACHE is set to TRUE.
	Specify the location of the Memory Cache folder containing the memory block files for caching data in memory.
	The default value for this parameter is the Data Server working directory, such as "C:\Longview\DataServers*LID*" where *LID* is the Longview Identifier for the system.
	Note *The location must be a path local to the server machine; do not specify a network drive.*

8. In the System Maximums section, modify the following parameters as required:

ELIM_QUEUE_MAX	Specify the maximum number of entries in the Elimination queue. This number can range from 32 to 100000000.
	If you have a high volume of submissions, you'll need to make the value large enough to handle the backlog, although you need to remember that each leaf table can be handled by only one Submission Server at a time.
	The default value for this parameter is 500.
MATH_QUEUE_MAX	Specify the maximum number of entries in the Math queue. This number can range from 32 to 100000000.
	The value for MATH_QUEUE_MAX does not change with changes in the MATH_POOL value. For example, if you specify 500 for MATH_QUEUE_MAX, then regardless of the number of Math Servers running (MATH_POOL), there will be one queue with a maximum of 500 entries. If the queue becomes full, the 501st job returns an error.
	Use the following factors to calculate the optimum size of the math queue:
	• volume of anticipated submissions during a peak period
	• number of partitions (because submission jobs may be broken into many smaller partitioned jobs)
	• RECALC_HASH_VALUE used during a recalculation or restatement
	If you have a high volume of submissions, you'll need to make the value large enough to handle the backlog, although you need to remember that each leaf table can only be handled by one Submission Server at a time.
	The default value for this parameter is 1000.
MAX_DATA_LOCKS	Specify the maximum number of data locks allowed in the database. This number can range from 100 to 100000000.
	The default value for this parameter is 500.
MAX_MATH_ITERATIONS	Specify the maximum number of math iterations. This number can range from 100 to 100000000.
	The default value for this parameter is 500.

MAX_SCHEDULE_LOCKS	Specify the maximum number of Schedule locks. This number can range from 100 to 100000000.
	The default value for this parameter is 100.
MAX_SCHEDULES	Specify the maximum number of Schedules allowed. This number can range from 1 to 5000.
	The default value for this parameter is 100.
MAX_HOMEPAGE_LOCKS	Specify the maximum number of home page locks. This number can range from 1 to 1024.
	The default value for this parameter is 1024.
MAX_WEBPANELS_LOCKS	Specify the maximum number of web panel locks. This number can range from 1 to 4096.
	The default value for this parameter is 1024.
MAX_SESSIONS	Specify the maximum number of sessions allowed at one time. This number can range from 8 to 100000000.
	The default value for this parameter is 2000.
SUBMISSION_QUEUE_MAX	Specify the maximum number of entries in the Submission queue. This number can range from 32 to 100000000.
	If you have a high volume of submissions, you'll need to make this value large enough to handle the backlog, considering that each leaf table can be handled by only one Submission Server at a time.
	The default value for this parameter is 500.
WRITER_QUEUE_MAX	Specify the maximum number of entries in the Writer queue. This number can range from 32 to 100000000.
	If you have a high volume of submissions, you'll need to make this value large enough to handle the volume of jobs. The recalculation also uses the writer queue, so this number should take into account the volume required by the recalculation.
	The default value for this parameter is 5000.
EVENT_QUEUE_MAX	Specify the size of the queue to be used by the Model Server in processing Event messages. This number can range from 32 to 100000000.
	The default value for this parameter is 5000.
GRID_CURSORS_MAX	Specify the maximum number of grid cursors. This number can range from 1 to 12.
	The default value for this parameter is 4.
GRID_OUTPUT_MAX_THREADS	Specify the maximum number of grid output threads. This number can range from 1 to 80.
	The default value for this parameter is 5.

MAX_FILE_ATTACHMENT_SIZE	This parameter applies only if USE_FILE_ATTACHMENT and WEB_USE_ACTIVEX are set to TRUE.
	Specify the maximum file size, in megabytes, for file attachments in web input templates. This number can range from 5 to 25. If this setting is greater than the maxAllowedContentLength attribute in your IIS web.config file, the IIS setting is used.
	The default value for this parameter is 20.
MAX_ACTIVE_DATA_EVENTS	Specify the maximum number of active data events to allow in an event sequence iteration. This number can range from 0 to 999.
	The default value for this parameter is 999.
MAX_PERSISTENT_EVENTRULES	Specify the maximum number of event rules that can be set as persistent. This number can range from 0 to 999. For more information on persistent event rules, see the *Longview Application Administrator Guide*.
	Note *Setting event rules as persistent increases memory consumption on the data server. If you do not want to use this feature, set this parameter to 0.*
	The default value for this parameter is 999.
MAX_PERSISTENT_RUNS	Specify the number of times events specified as persistent run before the system unloads and reloads the events. This number can range from 0 to 100000000.
	The default value for this parameter is 100.
MAX_DATA_EVENT_ITERATION_TIME	Specify the maximum time, in the format mm:ss, that the Management Server will wait for the current iteration to complete before starting the next iteration. The minimum value allowed for this parameter is 00:01 and the maximum is 1440 minutes (one day).
	The default value for this parameter is 2:00.

9. In the Query Tuning section, modify the following parameters as required:

DATA_FETCH_SIZE	Specify the fetch size for datalink queries. This number can range from 1000 to 32000.
	A larger fetch size results in a better compression rate, and therefore better datalink performance, especially over slow networks. However, more memory is consumed by agents during large datalinks.
	The default value for this parameter is 25000.
STRING_DATA_FETCH_SIZE	Specify the maximum size of string data that can be returned in a query. This number can range from 1000 to 16000.
	The default value for this parameter is 2500.
RANGE_CONVERSION_LIMIT	Specify the number of dimensions to which range conversion logic applies.
	• Numeric value—Specify the number of dimensions (from 0 to 16).
	• AUTO—Specifies the number of dimensions minus 2. For example, if your system has 16 dimensions, this value will set the range conversion limit to 14.
	Range conversion logic is used to optimize the SQL statements generated when querying data from the database. The logic considers converting one dimension's query constraint to a parameter and repeatedly re-executing the statement with different parameter values, as this can be more efficient than a BETWEEN clause, which can sometimes return extra data that needs to be discarded. This parameter determines the maximum number of dimensions to consider (in index order) for the use of range conversion logic.
	The default value for this parameter is AUTO.

RANGE_CONVERSION_MAX	Specify the maximum number of symbols (from 1 to 32000) to allow when considering the use of range conversion logic for a dimension.
	Range conversion logic is used to optimize the SQL statements generated when querying data from the database. The logic considers converting one dimension's query constraint to a parameter and repeatedly re-executing the statement with different parameter values, as this can be more efficient than a BETWEEN clause, which can sometimes return extra data that needs to be discarded. This parameter determines the maximum number of symbols to allow in a dimension being considered for range conversion (and therefore the maximum number of re-executions of the statement).
	The default value for this parameter is 32000.
IN_CLAUSE_MAX	Specify the maximum number of symbols (from 1 to 32000) to allow when considering the use of an IN clause for a dimension.
	Range conversion logic is used to optimize the SQL statements generated when querying data from the database. The logic considers converting one dimension's query constraint to an IN clause explicitly listing the individual symbols requested, as this can be more efficient than a BETWEEN clause, which can sometimes return extra data that needs to be discarded. This parameter determines the maximum number of symbols to allow in an IN clause.
	The default value for this parameter is 10.
GATHER_ORACLE_STATISTICS	This parameter applies only to Oracle systems.
	Specify whether Oracle database statistics are gathered automatically on the temporary tables after they are created.
	• TRUE—Use this value to help the Oracle optimizer make appropriate assumptions when choosing an access plan. Before you set this parameter to TRUE, make sure the DBO has the ability to gather statistics on its own schema.
	• FALSE—Use this value to disable Oracle statistic gathering.
	The default value for this parameter is FALSE.
MAX_QUERY_RULE_DATA	Specify the maximum number of Query Rule Records allowed in a single query. This number can range from 0 to 1000000000. The value 0 specifies that an unlimited number of Query Rule Records are allowed.
	The default value for this parameter is 0.

10. In the Submission Tuning section, modify the following parameters as required:

WRITER_BATCH_SIZE	Specify the batch size. This number can range from 500 to 1000000000.
	When the value of WRITER_BATCH_SIZE is reached, the writer transfers data from the temp table to the destination table. The higher this value, the better the throughput of the writer. However, there may be a penalty in the size of database temp space, rollback, and so on.
	The default value for this parameter is 50000.
WRITER_HASH_VALUE	Specify the number of jobs in which to divide a Writer job destined for one particular table, so that multiple writers can work on them concurrently. This number can range from 1 to 256.
	It is faster to have many processes updating one table in parallel than to have just one process update the table with all records sequentially.
	The default value for this parameter is 1.

11. In the Restatement/Import/Export Parameters section, modify the following parameters as required:

COMPRESS_TEMP_FILES	Specify whether to compress temp files.
	• TRUE—Use this value to compress temp files. If you specify this value, less disk space is required for temporary files. However, there is also a slight impact on the CPU.
	• FALSE—Use this value to disable compression of temp files.
	The default value for this parameter is FALSE.
EXTERNAL_LOAD	Specify whether a partition recalculation, restatement, or import should expect an external load to occur (for example, piped loading during a recalculation).
	• TRUE—If you use this value, the recalculation, restatement, or import truncates the tables, but does not load the resulting ASCII file (ftd_Pnnn.out). In this case, it is the responsibility of the Administrator to prepare the external load scripts.
	• FALSE—If you use this value, the recalculation truncates the table and loads it (via SQL*Loader for Oracle, or via bulk insert for SQL server).
	The default value for this parameter is FALSE.

JE_RECALC_FETCH_SIZE	Specify the fetch size used by the Journal Entry Server during journal entry recalculations. This number can range from 1000 to 128000.
	A larger fetch size results in faster recalculations, but consumes more memory.
	The default value for this parameter is 25000.
MAX_EXPORT_FILE_SIZE	Specify the maximum size of any export file in kilobytes. This number can range from 1024 to 2097151.
	The default value for this parameter is 2097151.
RECALC_FILE_DELIMITER	This parameter applies only if RECALC_FILE_TYPE is set to DELIMITEDASCII.
	Specify the character used as a delimiter in the ASCII file created during a partition recalculation.
	• {—Use this value to use the left brace as the delimiter.
	• }—Use this value to use the right brace as the delimiter.
	• ,—Use this value to use the comma as the delimiter.
	• ;—Use this value to use the semicolon as the delimiter.
	The default value for this parameter is {.
RECALC_FILE_TYPE	Specifies the type of output file a partition recalculation creates.
	• BINARY—Use this value to produce the smallest and fastest loading file.
	• DELIMITEDASCII—Use this value to produce a delimited ASCII file. This file type is preferable when you are troubleshooting and need to read the file's contents.

RECALC_FILES	Identifies the location where all files created during a restatement or a recalculation are saved. This folder also contains the export files created when you export server data. When you import server data from another environment, the export files used for the import should be saved to this folder. For more information on exporting and importing server data, see the *Longview Server Manager Guide*. This path must be enclosed in double quotation marks.
	If you're using a tiered system (the application server and database server are on separate host machines) with SQL Server, you must set this parameter to the following network share value:
	"*AppServer**ShareName**Path*", where
	AppServer is the name of the application server.
	ShareName is the name of the network share to grant access to.
	Path is the path from the network share to the folder where the files are saved.
	For more information on tiered systems, see "Preparing for a tiered system" on page 27.
	The default value for this parameter is "C:\Longview\DataServers*LID*\recalc" where *LID* is the Longview Identifier for the system.

RECALC_HASH_DIMENSION	Specify the dimension to be used to split up the leaf records into smaller jobs (hashing).
	• *Dimension*—Specify a specific dimension name in which to split up the leaf records into smaller jobs.
	• AUTO—Use this value to split up the leaf records of the dimension with the largest number of symbols into smaller jobs.
	Sometimes this choice results in unbalanced performance, which can be detected by noting the last message from each Math Server during a recalculation or restatement. If some Math Servers complete long before others, the jobs are not balanced. If so, select a dimension in which the data is fairly evenly distributed. Avoid specifying dimensions with single symbols that contain large percentages of data.
	The default value for this parameter is AUTO.
RECALC_HASH_VALUE	Specify the number of jobs in a group, using hashing logic. If this value is greater than 1, the system subdivides Math Server jobs during a partition recalculation. This number can range from 1 to 256.
	For example, if this value is specified as 5, the recalculation divides the number of rows in the leaf tables into 5 sections to do the rollup, contributing to performance gains.
	Increase this value to create more jobs with each containing fewer records and to help balance the Math Servers, as described in RECALC_HASH_DIMENSION. You may have to test this value when running your restatement to find the optimal value.
	The default value for this parameter is 32.

12. In the System Policies section, modify the following parameters as required:

AGENT_IDLE_TIMEOUT	Specify the time-out period (the number of minutes to wait if the agent is inactive, before releasing the agent). This number can range from 1 to 1440. This parameter applies to Longview Application Framework as well as Longview Tax and Longview Smart Client. The default value for this parameter is 120.
WEB_IDLE_TIMEOUT	Specifies the time-out period (the number of minutes to wait if the web agent is inactive, before releasing the web agent). This number can range from 1 to 1440. This parameter applies to Longview Dashboard sessions. The default value for this parameter is 120.
WEB_IDLE_TIMEOUT_WARNING	Specify the number of minutes before timeout to send a warning to the user. This number can range from 2 to 1440. This value must be less than the value set for WEB_IDLE_TIMEOUT. The default value for this parameter is 10.
WEB_VIEWACTION_TIMEOUT	Specify the number of minutes that a web request can run before it is terminated. This number can range from 0 to 1440. If this parameter is set to 0, web requests can run for an unlimited amount of time. The default value for this parameter is 0.

CLIENT_KEEPALIVE_TIME	Specify the number of minutes a client socket waits after data is last sent before sending a TCP keepalive packet to the data server to verify that the connection is still available. This number can range from 0 to 1440. If this parameter is set to 0, client sockets do not send TCP keepalive packets.
	Currently, this parameter applies to the following client components with or without using Longview HTTP Proxy:
	• Longview Add-In for Office
	• Longview Application Framework
	• Longview Apps
	• Longview Designer
	• Longview Performance Manager
	• Longview Tax
	• Longview tools and editors
	The default value for this parameter is 0.
CLIENT_DEPLOYMENT_POLICY	This parameter applies only if USE_WEB_DEPLOYMENT is set to FALSE.
	Specify the deployment policy of client components with regard to upgrades.
	• OFF—Users don't receive client component upgrades.
	• ALWAYS—Users automatically receive upgrades to client components as new updates are detected.
	• PROMPT—When new updates are detected, users are prompted with the option to upgrade their Longview system.
	The default value for this parameter is ALWAYS.
DOCUMENTATION_DEPLOYMENT	Specify where, or if, documentation is deployed.
	• CLIENT—Use this value to deploy documentation locally.
	• EXTERNAL—Use this value to deploy documentation to the location as specified by the DOCUMENTATION_LOCATION parameter.
	• OFF—Use this value to disable documentation deployment.
	The default value for this parameter is CLIENT.

HELPFILE_DEPLOYMENT	Specify where, or if, Help files are deployed.
	• CLIENT—Use this value to deploy Help files locally.
	• EXTERNAL—Use this value to deploy Help files to the location as specified by the HELPFILE_LOCATION parameter.
	• OFF—Use this value to disable Help file deployment.
	The default value for this parameter is CLIENT.
LV_IDENTIFIER_POLICY	Specify whether the system should enforce that the Client LID matches the Server LID specified during installation.
	• ENFORCE—Use this value to enforce that the Client Longview Identifier (LID) matches the Server LID specified during installation.
	• OFF—Use this value to allow the Client LID to be different than the Server LID.
	The default value for this parameter is ENFORCE.
ON_ERROR	Specify how system responds to a data submission error.
	• IGNORE—Use this value to report errors to the Longview Data Server Log (lv_dataserver.log) only; users do not see an error message.
	• WARNING—Use this value to send submission error messages to the user.
	The default value for this parameter is WARNING.
SERVER_TIMEOUT	Specify the time-out period (number of minutes to wait for a response before timing out on server startup or shutdown). This number can range from 1 to 120.
	The default value for this parameter is 2.
PASSTHRU_LOGIN_TIMEOUT	Specify the number of minutes for Longview Component Manager to wait before exiting when users move back and forth among applications. This number can range from 0 to 100.
	The default value for this parameter is 10.

PASSWORD_COMPLEXITY	Specify whether the system enforces password complexity.

- TRUE—Use this value to force passwords to meet the password complexity restrictions.
- FALSE—Use this value to not enforce password complexity restrictions. Passwords are still restricted by the value set for PASSWORD_MINIMUM_LENGTH.

Regardless of the setting for PASSWORD_COMPLEXITY, passwords cannot contain any of the following characters—double quotation marks ("), pipes (|), or spaces.

The default value for this parameter is TRUE.

If this parameter is set to TRUE, a password must meet all of the following restrictions:

- The password must contain at least one character from each of the following categories—uppercase letters (A-Z), lowercase letters (a-z), base 10 digits (0-9), and special characters (~ ! @ # $ % ^ & * _ - + = ` \ ( ) { } [ ] : ; ' < > , . ? /).
- The password must meet the length as specified for PASSWORD_MINIMUM_LENGTH.
- The password cannot contain the whole User Name, First Name, or Last Name of the user that the password is assigned to, in either uppercase or lowercase, if they are more than two characters in length. If any of the following characters (. - _ # ! ` ~ @ '), or any spaces appear in the User Name, First Name, or Last Name, these characters are treated as delimiters instead of consecutive characters.

   For example, the password for user 'Jean-Paul' cannot contain the strings 'jean' or 'paul', but can contain 'pau'.

- The password cannot contain any of the password dictionary strings, in either uppercase or lowercase. For more information, see PASSWORD_DICTIONARY_LOCATION.

PASSWORD_MINIMUM_LENGTH	Specify the minimum length for passwords, in number of characters. This number can range from 1 to 63.
	Note *If you set* PASSWORD_COMPLEXITY *to* TRUE*, avoid setting this parameter to a value of 3 or less. Since password complexity restrictions require that passwords must contain at least one character from four different categories, passwords that are three or less characters in length will not be permitted.*
	The default value for this parameter is 8.
PASSWORD_EXPIRY	Specify the number of days until a password expires. This number can range from 1 to 10000.
	The default value for this parameter is 30.
PASSWORD_EXPIRY_WARNING	Specify the number of days before the value set in PASSWORD_EXPIRY to send a password expiry warning. This number can range from 1 to 10000.
	For example, if PASSWORD_EXPIRY is set to 30, and PASSWORD_EXPIRY_WARNING is set to 5, a password expiry warning is sent to the user on the twenty-fifth day (five days before the value set in PASSWORD_EXPIRY).
	The default value for this parameter is 5.
PASSWORD_FORCECHANGE	Specify whether to enforce password changes.
	• **TRUE**—Use this value to force users to change their passwords the first time they log in or after their password is reset.
	• **FALSE**—Use this value to allow users to retain their initial passwords. Passwords do not have to be changed.
	The default value for this parameter is TRUE.
PASSWORD_DAYS_BEFORE_REUSE	Specify the number of days, after a password is set or reset, until it can be reused. This number can range from 0 to 3650.
	A password cannot be reused until both the number of days set by this parameter and the number of changes set in PASSWORD_CHANGES_BEFORE_REUSE have been exceeded.
	The default value for this parameter is 1.

PASSWORD_CHANGES_BEFORE_REUSE	Specify the number of password changes that must occur before a password can be reused. This number can range from 0 to 1000.
	A password cannot be reused until both the number of days set in PASSWORD_DAYS_BEFORE_REUSE and the number of changes have been exceeded.
	The default value for this parameter is 1.
PASSWORD_FAIL_ATTEMPTS	Specify the number of times a user can enter an incorrect password before they are locked out of the system. This number can range from 0 to 100.
	The default value for this parameter is 3.
ACCOUNT_LOCK_TIME	Specifies the time interval, in minutes, between when an account is locked (due to repeated failed password attempts, exceeding the number set in PASSWORD_FAIL_ATTEMPTS), and when the account is unlocked. This number can range 0 to 1440.
	If this parameter is set to 0, the account is locked until the administrator resets the password.
	The default value for this parameter is 10.
ENABLE_PASSWORD_RESET	Specifies whether users can reset their passwords from the Longview Dashboard web Sign On dialog.
	• TRUE—Users can reset their passwords from the web Sign On dialog.
	• FALSE—Users cannot reset their passwords from the web Sign On dialog.
	The default value for this parameter is FALSE.
	Note *In order for users to reset their passwords from the web Sign On dialog, they must have a unique email address as specified in their user settings. For more information, see the Longview Application Administrator Guide or the Longview Tax Administrator's Guide.*
PASSWORD_RESET_EMAIL_ADDRESS	This parameter applies only if ENABLE_PASSWORD_RESET is set to TRUE.
	Specify the email address that the password reset link is sent from when users reset their passwords from the web Sign On dialog. This parameter must be enclosed in double quotation marks.

PASSWORD_RESET_EMAIL_DESCRIPTION	This parameter applies only if ENABLE_PASSWORD_RESET is set to TRUE.
	Specify a description for the email address that the password reset link is sent from when users reset their passwords from the web Sign On dialog. This parameter must be enclosed in double quotation marks.
PASSWORD_RESET_TIME_LIMIT	This parameter applies only if ENABLE_PASSWORD_RESET is set to TRUE.
	Specifies the time, in minutes, before the password reset link expires. The password reset link is provided when users reset their password from the web Sign On dialog. This number can range from 0 to 1440.
	The default value for this parameter is 60.
WEB_IP_SECURITY	Specify whether to validate a web session ID against the user's IP address for each web action. If you are using Longview HTTP Proxy Server, or any other proxy server, you must set this value to FALSE.
	• TRUE—Use this value to validate a web session ID against the user's IP address for each web action.
	• FALSE—Use this value to disable web session ID to IP validation.
	The default value for this parameter is FALSE.
WEB_COOKIE_SECURITY	Specify whether cookies are used to pass the web session ID and its key information. When this parameter is set to TRUE, the user's browser must allow cookies.
	• TRUE—Use this value to pass the web session ID and its key information using cookies.
	• FALSE—Use this value to disable cookie security.
	The default value for this parameter is TRUE.

WEB_HTTPS	Specify whether **Secure** and **HttpOnly** attributes are added to the cookie header. When this parameter is set to **TRUE**, the Web Server uses Secure Sockets Layer (SSL).
	• **TRUE**—Use this value to add **Secure** and **HttpOnly** attributes to the cookie header.
	• **FALSE**—Use this value to disable **Secure** and **HttpOnly** attributes in the cookie header.
	The default value for this parameter is **TRUE**.
	The **WEB_COOKIE_SECURITY** and **WEB_HTTPS** parameters behave together in the following ways:
	• If **WEB_COOKIE_SECURITY** and **WEB_HTTPS** are both set to **TRUE**, the Web Server uses **https** (SSL) and cookies are used and have **Secure** and **HttpOnly** attributes set.
	• If **WEB_COOKIE_SECURITY** is set to **TRUE** and **WEB_HTTPS** is set to **FALSE**, the Web Server uses **http** and cookies are used but do not have **Secure** and **HttpOnly** attributes set.
	• If **WEB_COOKIE_SECURITY** is set to **FALSE** and **WEB_HTTPS** is set to **TRUE**, the Web Server uses **https** (SSL) and cookies are not used.
	• If **WEB_COOKIE_SECURITY** and **WEB_HTTPS** are both set to **FALSE**, the Web Server uses **http** and cookies are not used.
WEB_USE_ACTIVEX	Specify whether to enable the use of ActiveX technology, which allows users to use certain features in web templates.
	• **TRUE**—Use this value to enable the use of ActiveX.
	• **FALSE**—Use this value to disable the use of ActiveX.
	The default value for this parameter is **FALSE**.
WEB_MAXCALC_WARNING	Specify the number of calculations in a web input template that trigger a warning message to the user. The warning advises that the number of calculations is large, and asks if the user wishes to proceed. Selecting "No" allows the user to change the criteria to request fewer calculations. This number can range from **0** to **1000000000**. If set to zero, this feature is disabled. The value for this parameter must be less than the value set for **WEB_MAXCALC_LIMIT**.
	The default value for this parameter is **0**.

WEB_MAXCALC_LIMIT	Specify the maximum number of calculations a web input template may request of the system. If exceeded, the user must change the query criteria to request a smaller number of calculations.
	This number can range from 0 to 1000000000. If set to 0, this feature is disabled. The value for this parameter must be less than the value set for WEB_MAXCALC_WARNING.
	The default value for this parameter is 0.
DEFAULT_ACTIONS_TIME_INTE RVAL	This parameter applies only if USE_DATA_EVENT_SEQUENCING is FALSE.
	Specify the minimum amount of time that must pass before the same Event action may be triggered again. The format for this value is mm:ss, where mm is the number of minutes, and ss is the number of seconds. The seconds value is optional. The minimum value for this parameter is 0 minutes, and the maximum is a combined value of 1440 minutes (one day).
	The default value for this parameter is 30.
DATABASE_RECONNECT_TIME OUT	This parameter applies to SQL servers only.
	This parameter, set in minutes, causes the server to check the connection each time it attempts to communicate with the database, and to reconnect if necessary. This number can range from 0 to 60.
	If the connection fails during a SQL operation, a regular error message is returned and the submission does not complete. The server tries to reconnect in the next operation. Reconnection attempts occur every five seconds for the duration of the time period (in minutes) defined by this parameter.
	The default value for this parameter is 0.
DATABASE_INITIATION_TIMEO UT	Specify, in minutes, the amount of time during which the server attempts to connect to the database if the first attempt to connect failed. This number can range from 0 to 60.
	The server attempts to reconnect every five seconds until the value set is exceeded.
	The default value for this parameter is 0.

USE_DATA_AREA_MONITORING	Specify whether to track and store batch and event activity for a given data area. • **TRUE**—Use this value to enable data area monitoring. If you use this value, you must specify at least one dimension for **DATA_AREA_MONITORING_DIMENSIONS**. Optionally, you can also specify a dimension for data area status tracking (**DATA_AREA_STATUS_DIMENSION**). • **FALSE**—Use this value to disable data area monitoring. The default value for this parameter is **FALSE**.
DATA_AREA_MONITORING_DIMENSIONS	This parameter applies only if **USE_DATA_AREA_MONITORING** is set to **TRUE**. Specify the dimensions for which to enable data area monitoring. Separate multiple dimensions with a comma. Spaces are not supported. For example, **Accounts,Entities,TimePer**.
DATA_AREA_STATUS_DIMENSION	This parameter applies only if **USE_DATA_AREA_MONITORING** is set to **TRUE**. Specify the dimension for which to enable data area status tracking. The dimension must be included in those specified for **DATA_AREA_MONITORING_DIMENSIONS**. For example, **Entities**. If you do not specify a dimension for this parameter, data area status is not tracked.

13. In the Diagnostics section, modify the following parameters as required:

ENABLE_WEB_TRACE	Specify whether to enable web trace, using one of the following options: • **TRUE**—Enables web trace to assist in debugging web connection problems. • **FALSE**—Disables web trace. The default value for this parameter is **FALSE**.
WEB_TRACE_FILE_LOCATION	Specifies the path to where the trace file is stored, which must be on the web server. The trace file contains data that may help in debugging web connection problems. For more information, consult Support Services at Longview Solutions. This field is valid only when ENABLE_WEB_TRACE is set to **TRUE**. Specify the full path name of the output trace file. This path must be enclosed in double quotation marks. The default location is "C:\longview\dataservers*LID*\tmp".
DIAGNOSTIC_SERVICE_TRACKING	Specify whether to include diagnostic service tracking information in the Longview Data Server Log (lv_dataserver.log). • **TRUE**—Use this value to include diagnostic service tracking information. These statistics are included for agents, web agents, and locking, management, and security servers. • **FALSE**—Use this value to disable logging of service tracking information.
DIAGNOSTIC_SERVICE_DETAIL	Specify whether to include diagnostic service detail information in the Longview Data Server Log (lv_dataserver.log). • **TRUE**—Use this value to include process timing and memory usage information in the Longview Data Server Log. Process timing information includes the elapsed time of a service, the count and sum of elapsed time per unique service, and summarized timing statistics. This information is included for agents, web agents, and locking, management, and security servers. • **FALSE**—Use this value to disable tracking and logging of process timing and memory usage information.

DIAGNOSTIC_SERVICE_LOGGING	Specify whether to track and log service activity information.
	• TRUE—Use this value to generate a separate .csv log file per agent process that contains diagnostic service tracking information.
	• FALSE—Use this value to disable tracking and logging of service activity information.
DIAGNOSTIC_QUERY_STATISTICS	Specify whether to include query statistic information in the Longview Data Server Log (lv_dataserver.log).
	• TRUE—Use this value to include query statistic information.
	• FALSE—Use this value to disable tracking and logging of query statistic information.
DIAGNOSTIC_QUERY_LOGGING	Specify whether to log query information.
	• TRUE—Use this value to generate a separate .csv log file per agent process, containing detailed information about all queries.
	• FALSE—Use this value to disable query logging.
DIAGNOSTIC_RDBMS_LOGGING	Specify whether to track and log RDBMS information.
	• TRUE—Use this value to generate a separate .csv log file per agent process that contains RDBMS activity information.
	• FALSE—Use this value to disable tracking and logging of RDBMS activity.
DIAGNOSTIC_EVENT_PROFILING	Specify whether to output event profiling for diagnostic purposes. If this parameter is set to TRUE, profiling for each event is enabled and output to two files:
	• the profile for each event is output to the profile_EventProc_*RuleID*.csv file and overwritten each time a rule ID is triggered.
	• the profile for the bottleneck event for each iteration is appended to the profile_criticalpath.csv file.
	Specify one of the following:
	• TRUE—Use this value to enable diagnostic event profiling.
	• FALSE—Use this value to disable diagnostic event profiling.

14. In the Partitioning section, modify the following parameters as required:

PARTITION_PARENT	This parameter applies only to partitioned systems. Specify whether the data tables are partitioned for parent data. • **TRUE**—Use this value to partition parent data. • **FALSE**—Use this value to use one table for parent data. The default value for this parameter is **FALSE**.
PARTITION_LEAF_CALCULATED	This parameter applies only to partitioned systems. Specify whether the data tables are partitioned for leaf and calculated data. • **TRUE**—Use this value to partition leaf and calculated data. • **FALSE**—Use this value to use one table for leaf and calculated data. The default value for this parameter is **FALSE**.

15. In the Memory Configuration section, modify the following parameters as required:

DATA_CACHE_RAM	Specify the amount of RAM (in KB) reserved in the KSA for data cache files. This value can range from **1024** to **100000000**. Increase this value to allocate more memory to this cache. Memory is allocated only if the value of **USE_DATA_CACHE** is **TRUE**. The size of this cache affects performance of queries when using data cache files. The default value for this parameter is **102400**.
HIER_SERVER_RAM	Specify the amount of RAM (in KB) reserved in the KSA for the Management Server. This number can range from **1024** to **1245184**. This parameter depends on the number of symbols and parent/child relationships. To identify the minimum amount, see the Longview Data Server Log (**lv_dataserver.log**) after the Management Server has started. It must be higher than the minimum amount required, or the servers will not start. It should also be high enough to allow for expected growth in the size of the hierarchy; however, setting this value excessively high is not an effective use of memory. This value does not affect performance. The default value for this parameter is **10240**.

MATH_NDD_RAM	This parameter applies only if **ACCOUNTING_NDD** is set to **TRUE**.
	Specify the amount of RAM (in KB) reserved in the KSA for N-Dimensional Distribution (NDD). This parameter can range from 1024 to 2048000. This parameter depends on the number of symbols configured for NDD.
	The default value for this parameter is 1024.
MATH_SERVER_RAM	Specify the maximum amount of RAM (in KB) to be used by each Math Server in the Math Server pool. This value can range from 1024 to 2097151. The optimal value suggested by Longview Solutions is 262144.
	Once the Math Server pool reaches that memory for a job, it transfers the data to the writer pool. Leave enough memory available for operating system overhead and the RDBMS (if it resides on the same machine).
	To calculate the total possible memory consumption during a restatement or recalculation, multiply this number by the **MATH_POOL** value.
	To speed up math operations (rollup, accounting, restatement, and model), you can increase this value to increase the overlap percentage, resulting in fewer redundant writes to the database tables. Increasing this value also helps to reduce temporary disk space usage. However, you'll need to ensure that your system has enough memory to support the value you specify.
	The default value for this parameter is 102400.
MATH_TRN_RAM	This parameter applies only if **ACCOUNTING_TRN** is set to **TRUE**.
	Specify the amount of RAM (in KB) reserved in the KSA for translation logic. This value can range from 1024 to 1024000 and depends on the number of different translation rates used.
	The default value for this parameter is 1024.
MODEL_SERVER_RAM	This parameter applies only if **USE_MODELS** is set to **TRUE**.
	Specify the amount of RAM (in KB) reserved in the KSA for the Model Server. This value can range from 1024 to 102400 and depends on the number and complexity of server rules.
	The default value for this parameter is 1024.
WRITER_SERVER_RAM	This parameter applies only if **WRITER_ASYNC_IO** is set to **TRUE**.
	Specify the amount of RAM (in KB) reserved for the writers. This value can range from 102400 to 2097151.
	The default value for this parameter is 102400.

16. In the Pooling section, modify the following parameters as required:

AGENT_POOL	Specify the number of agents required to handle client connections from the Longview components. This value can range from 0 to 250.
	If you specify a value of 0 (in other words, a dedicated server) the system uses one agent for each connection, rather than using a pool of agents.
	The default value for this parameter is 10.
WEB_AGENT_POOL	Specify the number of web agent workers to handle client connections from Longview Dashboard. This value can range from 0 to 250.
	The default value for this parameter is 1.
JE_WORKERS	This parameter applies only if USE_JOURNAL_ENTRIES is set to TRUE.
	Specify the number of workers in the journal entry (JE) pool. This value can range from 1 to 100.
	If the journal entry portion of a recalculation or restatement runs too slowly, you can increase this value to attempt to improve performance.
	The default value for this parameter is 1.
MATH_POOL	Specify the number of Math Servers required to handle math logic. This number can range from 1 to 100000 and indicates the number of CPUs on the server machine. Longview Solutions suggests that you set this value to the total number of CPUs on the server machine for optimal performance.
	The recalculation or restatement attempts to take full advantage of all available math Servers in the pool. If the math portion of a recalculation or restatement runs too slowly, increase this value. Remember, however, that increasing this number beyond the numbers of CPUs in your system will have less impact, and may even slow it down.
	The default value for this parameter is 1.

SUBMISSION_POOL	Specify the number of Submission Servers required to handle data submissions. This number can range from 1 to 100000. The default value for this parameter is 1.
WRITER_POOL	Specify the number of Writer Servers required to handle data written to database. This value can range from 1 to 100000. You can increase this value if your system is partitioned at the leaf level. The recalculation takes full advantage of all available writers in the pool. The writers are responsible for merging and sorting temporary files created by the Math Server, then loading the result into a data table. You can set this parameter to a value as large as possible without causing disk bottlenecks on the server machine. In practice, many data tables may actually be small, with only a few large ones. In this case, the recalculation will likely not benefit from a WRITER_POOL value larger than the number of large data tables (since these are the loads likely to take the longest, any additional writers will be idle). Increasing this parameter causes more concurrent table loads to occur during a recalculation or restatement. Increase this value to keep as many disks and controllers as possible utilized. The default value for this parameter is 1.

Appendix B: Longview database tables

This chapter contains information about the Longview 7 database tables and objects. A database object is one of the elements of a database.

In this chapter, you can find information on the following topics:

- "Database objects" on page 229
- "Database tables" on page 230
- "Web tables" on page 247

Database objects

There are four types of database objects—database tables, indexes, temporary tables, and views. The most important type of database objects are database tables.

Database tables

The application resides on a Relational Database Management System (RDBMS). An RDBMS generally functions on the same principle as a simple two-dimensional spreadsheet, in which the Longview database consists of tables with rows and columns. Each table performs one of two functions:

- A metadata table is a table used to describe the meaning and structure of business data.

- A data table contains the actual data stored in the database.

Indexes

An index takes data stored in a table and sorts it, based on the order of the columns specified for the index. The actual space used by an index depends on the number of columns listed in the index and the amount of data stored in the corresponding table.

Temporary tables

A temporary table is a table used by the application to temporarily store batches of data before transfer to a data table. The temporary tables are created automatically when you start up the servers, and deletes them when you shut the servers down.

When a server needs to send data to a data table, it first uses the temp table to store the data. When the temp table fills up, or has the number of rows specified for the writer batch size, or the process finishes, the data in the temp table moves to the data table. This procedure helps to minimize processing bottlenecks and allows for faster handling of data.

The number of temporary tables depends on the number of servers in the Submission and Writer Server Pools.

Database tables

Database tables fall into one of the following categories:

- Attribute tables
- Batch tables
- File attachment tables
- Elimination tables
- Journal entry tables
- Mappings tables
- Modeling tables
- Schedule tables
- User and group tables
- Workflow tables
- Metatables
- App tables
- Data tables

Attribute tables

An attribute is data used to describe the characteristics of an object in the application.

Attributes are stored in database tables, and managed by the Management Server. They are cached on the user's computer for faster access. Because the System Administrator performs most work on attributes in your system, you, as Database Administrator (DBA), need to perform fewer configuration tasks.

There are three attribute classes:

Attribute classes	Description
SYSTEM	Describes the entire system at the highest level. Attributes of this class specify system-wide characteristics. There is only one object in the SYSTEM attribute class—the application itself.
USER	Describes the attributes of a particular user. Each user is an object in the USER attribute class.
SYMBOL	Describes the characteristics of individual symbols. Each symbol is an object in the SYMBOL attribute class.

The application stores information related to attributes in the following tables:

Table name	Description
KLX_ATTR_DEFS	The attribute definitions table provides details on the attributes that can be used in your system.
KLX_ATTRIBUTES	The attributes table identifies the attributes in your system.
KLX_SYMATTR_NUMVAL	The symbol attribute numeric values table stores numeric values for SYMBOL class attributes.
KLX_SYMATTR_STRVAL	The symbol attribute string values table stores string values for SYMBOL class attributes.
KLX_SYSATTR_NUMVAL	The system attribute numeric values table stores numeric values for SYSTEM class attributes. It is identical in structure to the symbol attribute numeric values table (KLX_SYMATTR_NUMVAL).
KLX_SYSATTR_STRVAL	The system attribute string values table stores string values for SYSTEM class attributes. It is identical in structure to the symbol attribute string values table (KLX_SYMATTR_STRVAL).
KLX_USRATTR_NUMVAL	The user attribute numeric values table stores numeric values for USER class attributes. It is identical in structure to the symbol attribute numeric values table (KLX_SYMATTR_NUMVAL).
KLX_USRATTR_STRVAL	The user attribute string values table stores string values for USER class attributes. It is identical in structure to the symbol attribute string values table (KLX_SYMATTR_STRVAL).

Batch tables

When a user submits data for any reason, the submission moves through the appropriate servers until it is complete. Each submission and process caused by the submission is logged in the batch tables.

Users can use the batch monitoring feature to track the data submission through the various servers.

The data server database stores information related to batches of server submissions in the following tables:

Table name	Description
KLX_BATCH	The batch control table stores information on the batch in progress.
KLX_BATCH_DETAIL	The batch detail table stores information on completed batches.
	Since this table stores information on every completed batch, it can eventually grow quite large. Longview Solutions recommends that you truncate the batch detail table from time to time, to keep it to a manageable size.
KLX_BATCH_QUEINFO	The batch queue information table stores information on the status of batches in progress and in the server queues. This table is used so that the queues can be recovered in case of server failure.

File attachment tables

File attachment tables store the contents and structure of the Longview Document Repository.

Table name	Description
LV_FILE_DATA	This table stores the contents of files in the Longview Document Repository, including uploaded files.
LV_FILE_DESC	This table stores identity information for all files in the Longview Document Repository.
LV_FILE_DIR	This table stores the directory structure of the Longview Document Repository.

Elimination tables

If your company contains several divisions that share the same corporate parent, it is possible that they do business with each other. To ensure that intercompany transactions are handled correctly, you need to identify each entity that does business with its siblings, and then perform an intercompany elimination on each of those transactions.

These tables store information related to intercompany eliminations in the following tables:

Table name	Description
KLX_IC_HEADER	The intercompany headers table stores information on intercompany headers for each journal entry (JE).
KLX_IC_OBJECT	The intercompany objects table stores data on intercompany objects.
KLX_IC_OWN_PCT	The intercompany owner percentage table stores data on ownership percentage.
KLX_IC_STOCK	The intercompany stock table stores data on intercompany stocks.
KLX_IC_TRANS_ELIM	The intercompany transaction elimination table stores data on elimination transactions.
KLX_ICC_TXN	The intercompany calculated data transaction table stores calculated data on intercompany transactions.
KLX_ICL_TXN	The intercompany leaf data transaction table stores leaf data on intercompany transactions. It is identical in structure to the intercompany calculated data transaction table (KLX_ICC_TXN).
KLX_ICT_TXN	The intercompany translated transaction table stores translated data on intercompany transactions. It is identical in structure to the intercompany calculated data transaction table (KLX_ICC_TXN).

Journal entry tables

In many organizations, staff members at the divisional level take care of the vast majority of routine financial data entry, which Corporate Head Office then organizes into a consolidated set of financial information. Each record is known as a journal entry (JE).

These tables store information related to journal entries in the following tables:

Table name	Description
KLX_JE_FILE_ATTACHMENT	The journal entry file attachment table stores information on the file attachments of journal entries.
KLX_JE_GROUPS	The journal entry groups table stores structure information on journal entry groups.
KLX_JE_HEADER	The journal entry header table stores structure information on journal entry headers, including the type and the name of the creator.
KLX_JE_HEADER_BAK000	During journal entry restatement, the journal entry tables are truncated and then republished. Since journal entry tables contain source data, the tables are backed up in the _BAK000 tables in case the restatement fails. The KLX_JE_HEADER_BAK000 table is a backup of the KLX_JE_HEADER table.
KLX_JE_SUBCATEGORIES	The journal entry subcategories table stores structure information on journal entry subcategories.
KLX_JEC_DETAIL	The journal entry calculated detail table stores structure information on journal entries for calculated data, including dimension information.
KLX_JEC_DETAIL_BAK000	During a journal entry restatement, the journal entry tables are truncated and then republished. Since journal entry tables contain source data, the tables are backed up in the _BAK000 tables in case the restatement fails. This table is a backup of the KLX_JEC_DETAIL table.
KLX_JEL_DETAIL	The journal entry leaf detail table stores structure information on journal entries for leaf data, including dimension information. It is identical in structure to the journal entry calculated detail table (KLX_JEC_DETAIL).
KLX_JEL_DETAIL_BAK000	During a journal entry restatement, the journal entry tables are truncated and then republished. Since journal entry tables contain source data, the tables are backed up in the _BAK000 tables in case the restatement fails. This table is a backup of the KLX_JEL_DETAIL table.
KLX_JESL_DETAIL	The journal entry schedule leaf detail table stores structure information on journal entries for schedule leaf data, including dimension information.

Table name	Description
KLX_JET_DETAIL	The journal entry translated detail table stores structure information on journal entries for translated data, including dimension information. It is identical in structure to the journal entry calculated detail table (KLX_JEC_DETAIL).
KLX_JET_DETAIL_BAK000	During a journal entry restatement, the journal entry tables are truncated and then republished. Since journal entry tables contain source data, the tables are backed up in the _BAK000 tables in case the restatement fails. This table is a backup of the KLX_JET_DETAIL table.

Mappings tables

Mappings tables store mapping data for maps and mappings created using the Mappings editor.

The application stores mapping information in the following tables:

Table name	Description
LV_SYM_MAPPINGS	This table stores mapping indexes, methods, and expressions for mappings created using the Mappings editor.
LV_SYM_MAPS	This table stores information for maps created using the Mappings editor.

Modeling tables

A modeling table is a table that stores parameters related to server-side modeling.

The application stores information related to rules and events in the following tables:

Table name	Description
KLX_BATCH_FROM_EVENT	This table stores relational information for events that submit data and the resulting batches.
KLX_MODEL	This table stores the list of server rules used by your system for models, validations, rollups, event rules, and query rules.
LV_EVENT	This table stores all events triggered by batches.

Table name	Description
LV_EVENT_ACTIONS	This table stores the triggered actions created in server rules that cause the system to perform certain designated functions when data in specific parts of the database changes or matches set criteria.
LV_EVENT_FROM_BATCH	This table stores relational information for events and the batches that triggered them.

Schedule tables

In the application, a schedule is the concept of one or more extra dimensions, designed to store additional information on a particular cell in the application database.

The application stores information related to schedules in the following tables:

Table name	Description
KLX_SCHED_DIMS	The schedule dimensions table stores the list of extra dimensions used by schedules.
KLX_SCHEDLOCKS	The schedule locks table stores information on schedule data currently locked, because it is in use by a user, or because the session ended abnormally before a lock was released.
KLX_SCHEDULES	The schedules table stores information on the schedules used in this system.

User and group tables

A user group is a group of users with similar needs and responsibilities. The System Administrator can use a group to specify access settings for multiple users.

These tables are also used to provide preconfigured User Reporting views. For more information, see the *Longview Server Manager Guide*.

The application stores information related to user groups in the following tables:

Table name	Description
KLX_USER_GRP_ACC	The user group object access table stores the list of symbols that can be accessed by users in a particular user group.
LV_GROUP_MAIN	The group main table defines each user group.
LV_GROUP_OPERATIONS	The group operations table defines the operations that each user group is permitted to perform.

Table name	Description
LV_OPERATIONS	The operations table contains identifiers for operations that have User Access Control applied to them.
LV_ROLE	The role table stores Data Server role information.
LV_ROLE_ACC	The role access table stores symbol access assigned to Data Server roles.
LV_USER_DETAILS	The user detail table contains basic information about each user.
LV_USER_GROUP	The user group table defines the membership of user groups.
LV_USER_MAIN	The user main table contains authentication related information for each user.
LV_USER_OPERATIONS	The user operations table defines the operations that each user is permitted to perform.
LV_USER_PASSWORD	The user password table contains the current password and password status for each user.
LV_USER_PASSWORD_HISTORY	The user password history table contains a history of passwords for each user.

Workflow tables

The application can be used to create multi-step approval processes to populate the system with new data (for example, planning, forecasting, month-end Actuals consolidations). Each approval process reflects the steps that the data must go through, from submission by contributors, to approval by multiple levels of management.

The application stores workflow information in the following tables:

Table name	Description
KLX_WF_EMAIL	The workflow email table stores information on the circumstances under which automated email templates are triggered in the application.
KLX_WFAREA_LOG	The workflow area log table stores log information on a DataArea in the application.
KLX_WFAREA_STATE	The workflow area state table stores information on the status of a DataArea in the application.
KLX_WFTASK	The workflow task table stores information on tasks performed in the application
KLX_WFTASK_DATA	The workflow task table stores data on tasks in the application.

Table name	Description
KLX_WFTASK_HIERMAP	The workflow task hierarchy map table stores information on tasks in the application.
KLX_WFTASK_LOCK	The workflow task lock table stores database locks on tasks performed in the application.
KLX_WFTASK_LOG	The workflow task log table stores the results of a log query in the application.
KLX_WFTASK_STATE	The workflow task state table stores information on the status of tasks in the application.
KLX_WFTASK_USER	The workflow task user table stores information on the users who perform tasks in the application.

Metatables

A metatable is a table used to describe the meaning and structure of business data. With two exceptions, each metatable has a fixed structure, no matter how many dimensions are in the application database. The two exceptions are the Partitions and Datalocks tables, which are dimension dependent.

The application stores metatable information in the following tables:

Table name	Description
KLX_CATEGORIES	This table stores the name and ID associated with the category for Longview Input and Longview Analysis and Reporting templates.
KLX_DATALOCKS	This table stores information on data currently locked because it is in use by a user or because the session ended abnormally before a lock was released.
KLX_DESC	This table stores all descriptions for all languages (except for symbol descriptions).
KLX_FILE_CAT_ASSIGNMENT	This table stores information on which Longview Input and Longview Analysis and Reporting templates belong to which categories.
KLX_MASTER_DIM	The master dimension table stores information on the names of the dimensions used in your system. For example, if your system contains four dimensions, the master dimension table contains definitions for four entries, with the rest marked as unused.
KLX_MASTER_SYMBOL	The master symbol table stores information on the names of the symbols used in your system.
KLX_OBJ_STAMPS	The object stamps table stores time stamp information used for caching.

Table name	Description
KLX_PARENT_CHILD	The parent/child relationships table stores a list of hierarchical symbol relationships in all dimensions. For example, the symbol relationship that Quarter 1 is a parent of January is stored here.
KLX_PARTITIONS	The partitions table stores information on the server partitions used in the database. The application uses this table for the partition recalculation process. The values stored in the dim_n_part columns determine the unique identifier of the intermediate file names used in the partition recalculation process.
KLX_SHARED_FILES	The shared files table contains the shared file information (file type and name) for a specific group.
KLX_STATUS	The status table stores information used by the application database servers. This table contains many parameters, many of which cannot be changed, and too numerous to list in this guide. However, you should be aware of some of the parameters you can adjust if necessary.
	The Server_Mode parameter is particularly useful and can have the following values:
	• Admin_user—Prevents all users from connecting to the servers. It is commonly used while running a restatement, to prevent users from connecting to the servers.
	• Single_user—Allows only one Administrator connection. It is used when a System Administrator wants to do some user or symbol maintenance, and does not want other users to connect during that process.
	• Multi_user—Allows all users to connect to the application servers.
KLX_SYM_DESC	This table stores symbol descriptions for all languages.
KLX_SYMBOL_STATS	The symbol statistics table stores statistics collected by the COLLECT STATISTICS command. You can view collected statistics either in line mode or in a graphic interface.
KLX_USER_SYM_ACC	The user symbol access table stores the symbol access restrictions for all application users.
	The application determines symbol access according to symbol position in hierarchy classes. For example, a user may have read rights to entities in one division, but no access to any other divisions.

Table name	Description
LV_APPTABLES	This system table lists the App tables and views in the database. For more information, see "Understanding metatables related to App tables" on page 240.
LV_APPTABLE_COLUMNS	This system table stores information about the structure of the App tables and views in your database. For more information, see "Understanding metatables related to App tables" on page 240.

Understanding metatables related to App tables

The LV_APPTABLES and LV_APPTABLE_COLUMNS metatables are specifically related to App tables and views. These tables are empty until you specify the required information; if you are creating your own App tables or if you plan to use views, you must use these tables as part of the configuration process.

Note   *If your company uses Longview Tax, your system contains preconfigured App tables. Consequently, the* LV_APPTABLES *and* LV_APPTABLE_COLUMNS *are populated with entries from these preconfigured tables. Deleting preconfigured columns may impact system functionality.*

The LV_APPTABLES metatable should list the App tables that have been added to the database, and any views you would like to access via App tables. The metatable includes the following columns:

Column name	Description	Valid values
TABLEID	Specify a unique numeric ID for the App table or view that you wish to register.	integer
TABLENAME	Specify the name of the App table or view that you wish to register. This name must be identical to the SQL/Oracle table or view name.	string
USERCOLUMNSECURITY	Specify whether this table enforces security through the user column.	0

The LV_APPTABLE_COLUMNS table should describe the structure of App tables and views that have been added to the database and includes the following columns:

Column name	Description	Valid values
COLUMNID	Specify a numeric ID for the column.	integer
TABLEID	Specify the numeric ID for the App table or view that contains the column that you are registering. The Table ID was created using the LV_APPTABLES table.	integer
COLUMNNAME	Specify the column header to display in the Table. This value must match the column name in the SQL/Oracle table or the view. For Oracle, this name should be in uppercase unless the column was explicitly created as case sensitive using quotes.	Any string. This value can contain a maximum of 30 characters.
DATATYPE	Specify the Longview data type for the column.	See "Longview data types" on page 242.
DATAVALUES	If the column DATATYPE is symbol or autointeger, you can use this column to restrict the values. If the column DATATYPE is autointeger, you can use this column to specify the starting number for autointeger increments.	For symbol data types: *DimensionName* For autointeger data types: The number to start incrementing from. For all other types, you must use an empty string. For example, for SQL, ".

App tables

Your company can create and use App tables to input and store data for records that do not require hierarchical structure. Based on your company's implementation, you may have custom App tables in your database that include the records that you want to display in a simplified format. For example, it may be more appropriate to access certain records, such as a task list, in a flat list rather than in a hierarchical format. App tables display in a Longview Table.

If you create an App table, you must manually add it to the LV_APPTABLES metatable, which registers the table as an App table, before you can display it in a Longview Table. Additionally, you must register column information for the App table in the LV_APPTABLE_COLUMNS metatable. You may also register views as App tables in the LV_APPTABLES metatable. However, you must register column information in the LV_APPTABLE_COLUMNS metatable as well. Ensure that the SQL or Oracle data type

used for the App table column is valid for the Longview data type. For more infor-
mation on Longview data types, see "Longview data types" on page 242.

Note   *Longview recommends that you use all uppercase letters for App table*
names and view names, and that names do not contain more than 19
characters. In addition, Longview reserves the LV *prefix for system App*
tables and system views, and therefore recommends that you avoid using
this prefix for custom App tables and custom views. If your company uses
Task Management, your system contains preconfigured App tables.

Adding columns

You can manually add custom columns to your App table. When you add columns
to your App table, ensure that the database data type is appropriate for the
Longview cell control that you want to use for the column. For information on cell
controls, see "Longview data types" on page 242. For information on the corre-
sponding SQL and Oracle data types, see "Longview Table security" on page 243.

Note   *Longview recommends that you use all uppercase letters for column*
names.

If you use column names that are reserved keywords for either SQL or Oracle,
WHERE statements in the DataTable definition (.lvdtd) must use quotes. These quotes
will then have to be escaped. For example, WHERE "\"number\" > 500". In Oracle,
when specifying the column names in the CREATE TABLE command, any column
names not explicitly enclosed in double quotes are automatically created in upper-
case. You should take this into account when adding column names to the
LV_APPTABLE_COLUMNS table.

Longview data types

The type of column you create in SQL or Oracle will depend on the cell control
you plan to use for that column and its related Longview data type. You must spec-
ify the appropriate Longview data type in the LV_APPTABLE_COLUMNS table. For more
information on the DATATYPE column, see "Understanding metatables related to
App tables" on page 240.

The following table lists the cell controls along with the valid Longview, SQL and
Oracle data types for Tables.

Cell control	Longview data type	SQL data type	Oracle data type
check box	boolean	int	int
calendar control	date	datetime	date
text box (valid numbers only)	number	float	number
text box, drop-down list, or a combo box	string	varchar (defined by DATALENGTH)	varchar2 (defined by DATALENGTH)

Cell control	Longview data type	SQL data type	Oracle data type
drop-down list populated with users in the system	user	int	int
multiple-selection list box populated with users in the system	userlist	varchar	varchar2
Longview Symbol Selector for the dimension specified by DATAVALUES (for more information on DATAVALUES syntax, see "Understanding metatables related to App tables" on page 240	symbol	int	int
button that opens the Longview File Attachments dialog	file	varchar	varchar2
read-only text box that the system automatically increments by 1 starting at the number specified for the DATAVALUES (for more information on DATAVALUES syntax, see "Understanding metatables related to App tables" on page 240	autointeger	int	int
read-only text box with the username of the currently connected user	autouser	int	int

Longview Table security

Columns in an App Table that use the symbol data type enforce access through symbol access. A user must have access to the symbol specified in each column in order to retrieve a record. In addition, the user's read/write access to the symbol determines whether or not the user can edit the record.

Data tables

Certain tables in a database system store data. A data table specifies the values in specific cells in the database. Each record in a data table contains the coordinates of a cell (one symbol from each dimension) and the value in that cell. Therefore, a data table contains one column for each dimension in the database, plus one column for the value stored in that cell. For example, the data tables for a four-dimensional database have five columns, and the data tables for a five-dimensional database have six columns.

To conserve disk space, the application uses a technique called sparsity. This means that symbol intersections containing a value of zero are not stored in the applica-

tion database. If a symbol intersection is not found in the data tables, then it must have a value of zero. When a symbol intersection is assigned a value other than zero, it is added to the application database.

To make it easier to identify the purpose of a database data table from its name, Longview Solutions uses the following naming convention:

KLX_FTD_PNNN_CELLS

where:

F is the family of data contained in the table. Select one of the following:

A	Tables containing adjusting data.
J	Tables containing adjusting schedule data (but not for leaf schedules).
S	Tables containing schedule data.
U	Tables containing unadjusted data.

T is the type of data contained in the table. It can be one of the following:

C	Calculated data.
L	Leaf data.
P	Parent data.
T	Cumulative Translation Adjustment (CTA) data.
V	Validation data.

D is the data type. It can be one of the following:

N	Numeric data.
S	String data.

The application stores data in the following tables:

Table name	Description
KLX_ACN_PNNN_CELLS	The adjusting calculated numeric data table stores the effect of posted journal entry data after running through server-side math logic. As Database Administrator (DBA), it is your responsibility to create this table during installation.
KLX_ALN_PNNN_CELLS	The adjusting leaf numeric data table stores data information on each journal entry. It is identical in structure to the Adjusting calculated numeric data table (KLX_ACN_PNNN_CELLS).
KLX_APN_PNNN_CELLS	The adjusting parent data table stores data information on details of each posted journal entry being rolled up. It is identical in structure to the Adjusting calculated numeric data table (KLX_ACN_PNNN_CELLS).
KLX_ATN_PNNN_CELLS	The adjusting CTA data table stores information on Cumulative translation adjustment (CTA) on adjusting data from each journal entry. It is identical in structure to the adjusting calculated numeric data table (KLX_ACN_PNNN_CELLS).
KLX_AVN_PNNN_CELLS	The adjusting validation data table stores adjusting data on validations. It is almost identical in structure to the adjusting calculated numeric data table (KLX_ACN_PNNN_CELLS).
KLX_JCN_PNNN_CELLS	The adjusting schedule calculated data table stores adjusting calculated data for schedules.
KLX_JLN_PNNN_CELLS	The adjusting schedule leaf numeric data table stores adjusting leaf data for schedules. It is identical in structure to the adjusting schedule calculated data table (KLX_JCN_PNNN_CELLS).
KLX_JPN_PNNN_CELLS	The adjusting schedule parent data table stores adjusting parent data for schedules. It is identical in structure to the adjusting schedule calculated data table (KLX_JCN_PNNN_CELLS).
KLX_JTN_PNNN_CELLS	The Adjusting schedule CTA data table stores information on Cumulative Translation Adjustment (CTA) on adjusting schedule data from each journal entry. It is identical in structure to the Adjusting schedule calculated data table (KLX_JCN_PNNN_CELLS).
KLX_JVN_PNNN_CELLS	The Adjusting schedule validation data table stores adjusting validation data on schedules.
KLX_SCN_PNNN_CELLS	The schedule calculated data table stores calculated data for schedules.
* nnn = 000 – 999	

Table name	Description
KLX_SLN_PNNN_AUDIT	The schedule leaf data audit table stores the changes in schedule leaf data for data audit functionality. It is identical in structure to the schedule leaf numeric data table (KLX_SLN_PNNN_CELLS) with the extra BATCH_ID column. This extra column is used to store the batch ID of a submission that triggers a data change.
KLX_SLN_PNNN_CELLS	The schedule leaf data table stores numeric leaf data for schedules. It is identical in structure to the schedule calculated data table (KLX_SCN_PNNN_CELLS).
KLX_SLS_PNNN_CELLS	The schedule leaf string data table stores string leaf data for schedules. It is identical in structure to the schedule calculated data table (KLX_SCN_PNNN_CELLS).
KLX_SPN_PNNN_CELLS	The schedule parent data table stores parent data for schedules. It is identical in structure to the schedule calculated data table (KLX_SCN_PNNN_CELLS).
KLX_STN_PNNN_CELLS	The schedule CTA data table stores information on cumulative translation adjustment on schedule data. It is almost identical in structure to the schedule calculated data table (KLX_SCN_PNNN_CELLS).
KLX_SVN_PNNN_CELLS	The schedule validation data table stores validation data on schedules. It is almost identical in structure to the adjusting schedule validation data table (KLX_JVN_PNNN_CELLS).
KLX_UCN_PNNN_CELLS	The unadjusted calculated numeric data table contains all the distributed unadjusted numeric data in your system. It is not necessary to back it up, as it is recreated by performing an enterprise restatement.
KLX_ULN_PNNN_AUDIT	The unadjusted leaf numeric data audit table stores the changes in unadjusted leaf data for data audit functionality. It is identical in structure to the unadjusted leaf numeric data table (KLX_ULN_PNNN_CELLS) with the extra BATCH_ID column. This extra column is used to store the batch ID of a submission that triggers the data change.
KLX_ULN_PNNN_CELLS	The unadjusted leaf numeric data table contains unadjusted numeric data corresponding to leaf or source level data, as well as other static data—essentially, all non-calculated numeric data. It is identical in structure to the unadjusted calculated numeric data table (KLX_UCN_PNNN_CELLS).
* nnn = 000 – 999	

Table name	Description
KLX_ULS_PNNN_CELLS	The unadjusted leaf string data table contains character string data corresponding to leaf or source level data, as well as other static data—essentially, all non-calculated string data. It is identical in structure to the unadjusted calculated numeric data table (KLX_UCN_PNNN_CELLS), except that it contains character strings instead of numeric values.
KLX_UPN_PNNN_CELLS	The Unadjusted parent data tables contain all the rolled-up data in your system, populated through the Writer Servers, with values calculated by the Math Server. It is identical in structure to the Unadjusted calculated numeric data table (KLX_UCN_PNNN_CELLS).
	The number of Unadjusted parent data tables in your system depends on the configuration of the logical partitioning.
KLX_UTN_PNNN_CELLS	The unadjusted CTA data table stores information on Cumulative Translation Adjustment on unadjusted data. It is almost identical in structure to the unadjusted calculated numeric data table (KLX_UCN_PNNN_CELLS).
KLX_UVN_PNNN_CELLS	The Unadjusted validation data table stores unadjusted data on validations. It is almost identical in structure to the adjusting schedule validation data table (KLX_JVN_PNNN_CELLS).
* nnn = 000 – 999	

Web tables

The application stores information related to the web interface in the following tables:

Table name	Description
KLX_WEB_PAGES	The web pages table stores information on web pages.
KLX_WEB_PANEL_ITMS	The web panel items table stores information on list items in web panels.
KLX_WEB_PANELS	The web panels table stores information on web panels.
KLX_WEB_PG_GROUPS	The web page groups table stores information on the user groups assigned to various web pages.
KLX_WEB_PG_PANELS	The web page panels table stores information on the location of web panels in various regions.

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