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Installation Guide

Longview

Version 26

Document Information

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Zlib General Purpose Compression Library

zlib.h -- interface of the 'zlib' general purpose compression library

version 1.2.3, July 18th, 2005

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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 http://www.ietf.org/rfc/rfc1950.txt (zlib format), rfc1951.txt (deflate format) and rfc1952.txt (gzip format).

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FastColoredTextBox 2.16.1.1

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Longview Installation Overview

This section contains information on these main topics:

- Third Party Licenses
- Hardware and software requirements
- Prerequisites for installing Longview
- Installing Longview
- Upgrading Longview
- Uninstalling Longview
- Appendix A: The Server Configuration File
- Appendix B: The Installation Configuration File
- Appendix C: Longview database tables

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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's standard issue prioritization criteria.

Longview reserves the right to end support for supported platforms with subsequent releases of the application.

Should a customer choose to use current versions of Longview software on non-supported platforms, Longview will continue to provide the application support under the terms of the Maintenance Services Agreement with the following exceptions:

- 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.

Updating Windows Universal CRT

Improved security and compatibility of Longview means that older server machines must install Windows Universal C Runtime (CRT) update 2999226.

You can determine whether your server requires this update and download this update, if needed, from the following link:

https://support.microsoft.com/en-us/topic/update-for-universal-c-runtime-in-windows-c0514201-7fe6-95a3-b0a5-287930f3560c

Data Server OS and RDBMS

The following combinations are supported for all servers in the application:

(x64 architecture)	Server RDBMS
Windows Server 2025	▪ SQL Server 2022

(x64 architecture)	Server RDBMS
Windows Server 2022	■ SQL Server 2022 ■ SQL Server 2019 ■ Oracle 19c
Windows Server 2019 (Not supported from v26.2 onward)	■ SQL Server 2022 ■ SQL Server 2019 ■ Oracle 19c

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:

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

Server operating system	Web Server
Windows Server 2025	Microsoft IIS 10.0
Windows Server 2022	Microsoft IIS 10.0
Windows Server 2019 (Not supported from v26.2 onward)	Microsoft IIS 10.0

Data Server Web Services

The following combinations are supported for Data Server Web Services:

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

Server operating system	Java
Windows Server 2025	Oracle JDK 21 (LTS), OpenJDK 21, Oracle JDK 25 (LTS) or OpenJDK 25

Server operating system	Java
Windows Server 2022	Oracle JDK 21 (LTS), OpenJDK 21, Oracle JDK 25 (LTS) or OpenJDK 25
Windows Server 2019 (Not supported from v26.2 onward)	Oracle JDK 21 (LTS), OpenJDK 21, Oracle JDK 25 (LTS) or OpenJDK 25

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 9.0.102 installed.

Longview Grid Server

The following combinations are supported for the Longview Grid Server when Grid Processing Type is selected in Longview Server Manager:

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

Operating system	ODBC
Windows Server 2025	ODBC Driver 18 for SQL Server
Windows Server 2022	
Windows Server 2019 (Not supported from v26.2 onward)	ODBC Driver 18 for SQL Server

Note: You must install the ODBC Driver 18 for SQL Server 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:

Server hardware	Server operating system
x64 Architecture	Windows Server 2025
	Windows Server 2022
	Windows Server 2019(Not supported from v26.2 onward)

Note: You must have .NET 4.8 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

Longview client components

The following platforms are supported for client computers.:

Client operating system	Web browser	.NET version
Windows 11	Microsoft Edge [2] Google Chrome[1]	.NET 4.8

Note:

- [1]Chrome browsers require a Chrome extension to automatically deploy and launch ClickOnce components. Alternatively, an organization can use Enterprise Deployment to deploy components via IT
- [2] Longview components require WebView2.dll which is part of Edge.
- 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.

Microsoft Excel

The following Microsoft Excel versions are supported.

- Office 365 – 32-bit and 64-bit
- Excel 2024 - 32-bit and 64-bit.

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 Add-In for Office.

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:

Requirements	English	French
Windows requirements	English Windows English Microsoft Office	French Windows French Microsoft Office
Java	Oracle JDK 21(LTS) OpenJDK 25(LTS) OpenJDK 21 or OpenJDK 25	Oracle JDK 21(LTS) Oracle JDK 25(LTS) OpenJDK 21 or OpenJDK 25
Web browser	English	French
Server operating system	English	English
RDBMS	English	English
Web server	English	English

Prerequisites For Installing Longview

Required installation files

The following files need to be downloaded from Longview Support prior to installing the Longview application.

The following tables include the installation files required:

Core Components

This table includes all required files for installing only core components. If installing Longview Close and Plan or Longview Tax, skip this section.

Component	Files
Longview Servers	Longview Installer-26.x.exe

Longview Close and Plan

This table includes all required files for installing Longview Close and Plan. If installing Longview Tax skip this section.

Component	Files
Longview Servers	Longview Installer -26.x.exe
Longview Close and Plan	Longview Close and Plan -26.x.zip

Additionally, if you purchased Longview Analytics additional files are required:

Component	Files
Longview Close Analytics	Longview Close Analytics -26.x.zip

Longview Tax

This table includes all required files for installing Longview Tax.

Component	Files
Longview Servers	Longview Installer-26.x.exe

Additional files are required depending on which tax components you purchased:

- Longview Tax Analytics files
- Longview Tax Provision files
- Longview Tax Multi-Regional Provision files

- Longview Tax Task Management only files
- Longview Transfer Pricing only files
- Longview Pillar Two only files

Longview Tax Analytics Files

Component	Files
Longview Tax Analytics	Longview Tax Analytics - 26.x.zip

Longview Tax Provision Files

Component	Files
Longview Tax Provision	Longview Tax Provision - 26.x.zip
If you also purchased Longview Tax Global Transparency	Longview Tax Global Transparency - 26.x.zip
If you also purchased Longview Tax Task Management	Longview Tax Task Management - 26.x.zip
If you also purchased Longview Tax Planning	Longview Tax Planning-26.x.zip
If you also purchased Longview Transfer Pricing	Longview Transfer Pricing-26.x.zip
If you also purchased Longview Pillar Two	Longview Pillar Two-26.x.zip

Longview Tax Multi-Regional Provision Files

Component	Files
Longview Tax Multi-Regional Provision	Longview Tax Multi-Regional Provision-26.x.zip
If you also purchased Longview Tax Global Transparency	Longview Tax Global Transparency-26.x.zip
If you also purchased Longview Tax Task Management	Longview Tax Task Management-26.x.zip
If you also purchased Longview Tax Planning	Longview Tax Planning-26.x.zip
If you also purchased Longview Transfer Pricing	Longview Transfer Pricing-26.x.zip
If you also purchased Longview Pillar Two	Longview Pillar Two-26.x.zip

Longview Tax Task Management Only Files

Component	Files
Longview Tax Task Management	Longview Tax Task Management-26.x.zip

Longview Transfer Pricing Only Files

Component	Files
Longview Transfer Pricing	Longview Transfer Pricing-26.x.zip

Longview Pillar Two Only Files

Component	Files
Longview Pillar Two	Longview Pillar Two-26.x.zip

Optional Components

This table includes all optional files that can be used with any installation.

Component	Files
Longview Application Framework (local install)	Application Framework(x64)-26.x.zip Or Application Framework-26.x.zip
Longview Data Server Web Service	Longview Data Server Web Service Setup-26.x.exe
Longview Grid (SQL Server)	Grid_Nodes-win(x64)-26.x.zip

Preparing for a tiered system

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
- Preparing for a tiered system with Oracle
- Preparing for a tiered system with OS authentication

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 ODBC Driver 18 for SQL Server
- 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 the RECALC_FILES section in Settings for all systems.

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 19.3. Ensure you have configured your TNSNAMES.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

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

Preparing for Longview Dashboard

If you are using the Longview Dashboard, the following steps are required:

1. Installing .NET Framework
2. Installing the Web Server (IIS)
3. Configuring program components on IIS

Note: Potentially weak protocols and cipher suites should be disabled according to your InfoSec policy.

Installing .NET Framework

As a prerequisite for Longview HTTP Proxy, the following .NET Framework must be installed.

Server	.NET Version
Server 2016/2019	4.8

Installing the Web Server (IIS)

As a prerequisite for Longview Dashboard, the Web Server (IIS) must be installed with the following roles services.

Category	Role
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

If you are using REST APIs or the HTML5 Dashboard the following features must not be installed as they interfere with DELETE and PUT requests.

Category	Role
Common HTTP Features	WebDAV Publishing

Configuring program components on IIS

As a prerequisite for Longview Dashboard, the following program components on IIS must be configured:

1. Configuring authorizations
2. Configuring handler mappings
3. Configuring component restrictions
4. Adding a handler mapping (IPC only)
5. Configuring a redirection for the Longview sign-on URL
6. Determining the URL for HTTP Proxy Server (if using HTTP Proxy Server)
7. Configuring application request routing extension (if using HTTP Proxy Server)
8. Configuring URL rewrite (if using HTTP Proxy Server)

Configuring authorizations

1. In IIS, select your **server** in the Connections pane.
2. Double-click **Authentication**.
3. Select **Anonymous Authentication** in the list and click **Disable** in the Actions pane.
4. Select **Windows Authentication i**n the list and click **Enable** in the Actions pane.

Configuring handler mappings

1. In IIS, select your **server** in the Connections pane.
2. Double-click **Handler Mappings**.
3. Do one of the following:
   - If you are using IPC/CGI, right-click **CGI-exe** and select **Edit Feature Permissions**.
   - If you are using TCP/ISAPI, right-click **ISAPI-dll** and select **Edit Feature Permissions**.
4. Select **Execute** to enable CGI-exe or ISAPI-dll and click **OK**.

Configuring component restrictions

1. In IIS, select your **server** in the Connections pane.
2. Double-click **ISAPI and CGI Restrictions**.
3. Select **Edit Feature Settings** in the Actions pane
4. 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**.

Adding a handler mapping (IPC Only)

Note: This section applies to IPC Only

1. In IIS, select your **server** in the Connections pane.
2. Double-click **Handler Mappings**.
3. Click **Add Module Mapping** in the Actions pane.
4. Complete the following fields:
   a. Request path: Enter “*.cgi”.
   b. Module: Select **CgiModule** from the drop-down list.
   c. Executable (Optional): Leave this field empty.
   d. Name: Enter “LONGVIEW CGI”.
5. Click **Request Restrictions**.
6. Click the **Access** tab.
7. Select **Execute** and click **OK**.
8. Restart IIS.

Determining the URL for Longview HTTP Proxy server

If you are using Longview HTTP Proxy server there are several configuration properties that must be specified with similar values related to the URL. The rule for specifying these values is that the end portion of the URL must match.

For example:

Component	Parameter	URL Example
HTTP Proxy Server	HttpProxyServerListenerPortURL	http://<serverName>:8080/clientproxy/
Data Server	CLIENT_HTTP_PROXY	https://<serverName>/clientproxy/
IIS URL Rewrite	Pattern (Client rewrite)	clientproxy/.*
IIS URL Rewrite	Rewrite URL (Client rewrite)	http://<serverName>:8080/clientproxy/{R: 1}
HTTP Proxy Server	HttpProxyServerAdminPortURL	http://<serverName>:8080/adminproxy/
Data Server	ADMIN_HTTP_PROXY	https://<serverName>/adminproxy/
IIS URL Rewrite	Pattern (Admin rewrite)	adminproxy/.*
IIS URL Rewrite	Rewrite URL (Admin rewrite)	http://<serverName>:8080/adminproxy/{R: 1}
Data Server	WEB_SERVER_BRIDGE	"/cgi-bin/<LongviewIdentifier>/lvweb.cgi"
IIS URL Rewrite	Pattern (Web Bridge Rewrite)	cgi-bin/<LongviewIdentifier>/.*
IIS URL Rewrite	Rewrite URL (Web Bridge rewrite)	http://<serverName>/{R: 0}

Configuring the application request routing extension for IIS

If you are using the 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 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 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**.

Preparing for Longview Data Server Web Services

If you plan to use Data Server Web Services to enable users to work with SOAP web services, you must perform some additional setup steps wherever the Web Services will be installed.

The following pre-requisites must be met:

- A supported version of the Java JDK must be installed.
- The JAVA_HOME environment variable must be set.
- If you have the JRE_HOME environment variable set, it must also be set to the same value as the JAVA_HOME environment variable.

Note: If you have multiple versions of Java installed, the latest version of the JDK must be first in the Path environment variable. For example, if you have JDK 12 and JRE 1.8 installed, JDK 12 must be before JRE 1.8 in the variable.

Installing Longview

This section contains instructions on installing your Longview system.

Installing Longview consists of the following steps:

1. Installing Longview Servers
2. Installing Optional Servers
3. Installing Solution Components
4. Installing Longview Tax Analytics
5. Installing Longview Close Analytics
6. Installing Optional Clients

Installing Longview Servers

The Longview Platform Installer allows you to install all the platform components in a step-by-step process or using a silent install approach.

> **Note:** If you are installing the Longview Web Bridge on a different machine than the data servers, you will need to run the Longview Installer separately for Database and Executables, and Web on each target machine.

Using the step-By-Step process to install Longview Servers

To install Longview Servers using the step-by-step process:

1. Double-click the **Longview Installer-**26.x**.exe** received from Longview. The Longview Setup wizard opens.

    a. You can also open an administrator command prompt and execute the installer with the /SAVEINF=<filename> parameter to save the choices you make during install to a configuration file that can be used with silent install.

    > **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**.
3. The Licensing Agreement for Longview software page opens. Read through the agreement and check **I accept the terms of the license agreement** to proceed.
4. Click **Next**.
5. The Specify Installation Details page opens. Enter the Instance Name.
6. Select **Create New Instance**.

7. Check **French** under additional languages if you want French application components installed.
8. Click **Next**.
9. The Select Destination Location page opens. 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.

> **Caution:** Folders in the destination path cannot contain spaces.

c. Click **OK**.

d. Click **Next**. If the folder selected already exists, you will be asked to confirm the selected folder. Click **Yes** to continue or **No** to return to Step 4.

10. The Select Components page opens. Select the **components** to install:
    a. Executables: The data server executable files and solutions framework
    b. Database: The Longview database
    c. Web: The Longview web bridge, click-once applications and help files

    > **Note:** Do not select Web with any other components if you are using the TCP communication protocol as Web must be installed separately in this case.

    d. Proxy: The Longview HTTP Proxy Server
11. Click **Next**. Depending on the components selected the remaining steps will vary.
12. Executables / Database selected: The Select RDBMS Type page opens.Select **SQL Server** or **Oracle**.
13. Click **Next**.
14. Database selected: The Configure Database account page opens. Complete these fields:
    a. Select **Windows Authentication**, or
    b. Select **Database Authentication**.
        - Enter the Username
        - Enter the Password.
        - Click **Next**.

15. Executables / Database selected: The Configure Data Server page appears.

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

a. **SQL Server**: Complete these fields:

Field	Description
Database Server Name[\Instance Name]	Specify the server on which to create the database and the instance name if required. This field defaults to the machine on which the installer is being executed.
Database Name	Specify the name for the database. The default for this field is lvdataserver.
DBO User	Specify the Username to use for the database owner. 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.
DBO Password	Specify the password to use for the database owner. If using OS Authentication, leave blank.
DBO Confirm Password	Confirm the password to use for the database owner.
Contained Database	Select this option to create the database as a contained database.

Field	Description
Cloud Provider Managed	Select this option if the database is being created in an Azure Managed instance. **Note:** Longview only supports Azure managed systems.

b. **ORACLE**: Complete these fields:

Field	Description
Database Server Name	Specify the server on which to create the database and the instance name if required. This field defaults to the machine on which the installer is being executed.
Tablespace Name	Specify the name for the database. The default for this field is LVDAT. **Note:** If the tablespace name already exists, you will be prompted to confirm when you click Next

Field	Description
DBO User	Specify the Username to use for the database owner. 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.
DBO Password	Specify the password to use for the database owner.
DBO Confirm Password	Confirm the password to use for the database owner.
Oracle Service Name	Specify the service name for the Oracle database.

c. Click Next.

16. Database selected: The Configure the User Reporting Component page opens. Complete these fields:

    a. 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 username and password with the DBO username and password that you specified in the previous dialog.

    Note: If you specify the DBO user as the view user, the DBO user can query all tables as well as views.

    b. View User Name: Specify the username for the view user.

    c. View User Password: Specify the password for the view user.

    d. View User Password Confirm: Confirm the password to use for the View User.

17. Click **Next**.
18. Database selected: The Database file locations page opens.

> **Note:**
> - The defaults are based on the RDBMS configuration.
> - If Cloud Provider Managed was selected this page will not appear.

a. SQL SERVER: Complete these fields:

- Primary File: Specify the name and location of the system database file.
- KLX_BASE_DAT File: Specify the name and location of the base (leaf) data file.
- KLX_DERIVED_DAT File: Specify the name and location of the derived (calculated) data file.
- Log File: Specify the name and location of the database log file.

b. ORACLE: Complete these fields:

- Tablespace Directory: Enter or select the directory for the table space. The default for this field is read from the Oracle RDBMS configuration.
- Tablespace Size: The initial tablespace size (in megabytes). The default value for this field is 1000.

c. Click **Next**.

19. Database selected: The Configure Dimensions page opens.

a. Complete these fields:

- Number of Base Dimensions: Enter the number of base dimensions.

- For Longview Close this must be at least 6.
- For Longview Tax this must be set to 8.
- For Longview Transfer Pricing this must be set to 8.

- Number of Extra Dimensions: Enter the number of schedule dimensions. The default of 3 is generally used for all implementations
- Number of Partitions: Enter the number of partitions the data table will be divided into. If you do not know, leave it as 1 as it can be adjusted later.

b. Click **Next**.

20. Database selected: The Configure Dimensions page opens.
    a. For Longview Close, enter the following for the first four dimensions:

i. ACCOUNTS

ii. TIMEPERIODS

iii. ENTITIES

iv. DATAVIEWS

    b. For Longview Close, enter the following for the last two dimensions:

i. SCENARIOS

ii. CURRENCIES

iii. SCENARIOS

iv. CURRENCIES

    c. For Longview Tax, enter the following for the dimensions:

i. ACCOUNTS

ii. TIMEPER

iii. ENTITIES

iv. DETAILS

v. CURRENCY

vi. SEGMENTS

vii. ELEMENTS

viii. CONTROLS

21. Executables selected: The Data Server Configuration page opens.
    a. Complete these fields:

i. Identifier: Enter the identifier for Longview data server. The default for this field is Longview.

ii. Administrator Port: Enter the port for administrator connections to use. The default for this field is 27999.

iii. Listener Port: Enter the port for client connections to use. This is normally one larger than the Administrator Port. The default for this field is 28000.

iv. Web Listener Port: Enter the port for web connections to use. This is normally one larger than the Listener Port. The default for this field is 28001.

v. Application Server: Enter the name of the Application Server. This defaults to the machine on which the installer is being executed.

vi. ODBC Data Source: SQL Server: Enter the name of the ODBC Data Source. This is normally the same as the Identifier.

b. Click **Next**.

22. Executables selected: The Data Server Config File page opens.

a. Enter the name of the JDK file that will be used. This file needs to be placed in the software folder of the data server working directory.

i. Java File Name: Specify the Name of the JRE file that you will place in the SOFTWARE folder when Installing the Java JDK.

ii. Custom Files Path: Specify the location of where custom files and customer specific files will be stored. For example: applications, config, export, logs,templates, web, and workflow.

iii. Client HTTP Proxy: If you are using HTTP proxy, specify the secure listener port URL for your HTTP Proxy Server. See Determining the URL for Longview HTTP Proxy server for details.

iv. Admin HTTP Proxy: If you are using HTTP proxy, specify the secure admin port URL for your HTTP Proxy Server. See Determining the URL for Longview HTTP Proxy server for details.

v. Local Admin Group: If you want to start and stop your Longview Servers using a Windows local group, then specify the name of a local group that will be created during install or select an existing group from the drop list. The user currently signed into the server running the install will be added to this group.

Note: Local Admin Group will not work with a Windows default local group.

23. Web selected: The Web Server Configuration page opens.

a. Complete the following fields:

i. Web Type: Specify the web communication protocol.

- IPC – for inter-process communication. This can only be used if the web server and data server are on the same machine.
- TCP – for transmission control protocol. This can only be selected if the install component selected is only Web. This must be used if the web server is on a different machine than the data server.

ii. Destination Folder: Specify the location to install the web bridge and click once client files. Default is c:\inetpub\wwwroot\cgi-bin\<Instance Name> (web only) or <Identifier> (executables and web)

iii. Web Server Name: Enter the name of the web server. This field defaults to the machine on which the installer is being executed.

b. Click **Next**.

24. Proxy selected: The Proxy Server Configuration page opens.
    a. Complete these fields:

    i. Local Folder: Specify the location to install the HTTP Proxy server files. Default is <Destination Location>\ProxyServers\<Instance Name> (proxy only) or <Identifier> (executables and proxy)

    ii. Data Server Host: Specify the Data Server host for the HTTP proxy. This value matches the APPLICATION_SERVER parameter in the data server configuration file.

    iii. Data Server Listener Port: Specify the Data Server Listener port. This value matches the LISTENER_PORT parameter in the data server configuration file.

    iv. Data Server Administrator Port: Specify the Data Server Admin port. This value matches the administrator port specified during the installation of the Data Server.

    v. Proxy Client URL: Specify the listener port URL for the HTTP Proxy Server. The last part of the URL must match the last part of the CLIENT_HTTP_PROXY parameter in the Data Server configuration file. See Determining the URL for Longview HTTP Proxy Server for details.

    vi. Proxy Administrator URL: Specify the administrator port URL for the HTTP Proxy Server. The last part of the URL must match the last part of the ADMIN_HTTP_PROXY parameter in the Data Server configuration file. See Determining the URL for Longview HTTP Proxy server for details.

    vii. Proxy Service Name: Enter the name of the Longview Proxy service. The default for this field is LongviewProxy.

    b. Click **Next**.

25. The Ready to Install page opens.
    a. Confirm the information in the summary.
    b. Click **Install**.

26. Database selected: A prompt will appear to review repository scripts before proceeding. If you have any changes to make edit the files in the DataServerRepositories\<Instance> folder.

> **Note:** If you are installing Longview Close you will need to modify the file SCHEMA_LV_DATASERVER.sql before clicking OK. Change: INSERT INTO [dbo].[KLX_ATTR_DEFS] VALUES(0, 6, 'SGPCurrencyDimension', 5, 0.000000, 'CURRENCY' , 'WR');, to make CURRENCY match the name of your currencies dimension and save the file.

    a. Click **OK**.

27. The Completing Longview Setup page opens.
    a. Optionally, check **View install log file**.
    b. Database selected: Optionally, check **View database log file**.
    c. Click **Finish**.

Using the silent option to install Longview Servers

To install Longview Servers using the silent option:

1. Create an install configuration file
   - See Sample install configuration file for SQL Server for SQL Server.
   - See Sample install configuration file for Oracle for Oracle.

   See Appendix B: The Installation Configuration File for details on the configuration parameters.
2. Open an administrator command prompt
3. Execute the Longview Installer -26.x.exe with the /LOADINF=<config.ini>
   a. Specify /silent or /verysilent

   i. /silent will display installation progress

   ii. /verysilent will run installation completely in the background

   b. Optionally, specify /SAVEINF=<SavedFileName.ini> to save a resolved version of this configuration file. The saved configuration file will contain actual values for any parameters that were set to (Default) in the original configuration file.

Note: If you are installing Longview Close you will need to update the default value for the SGPCurrencyDimension attribute after the installation is complete. You can do this with the following statement:
Update [dbo].[KLX_ATTR_DEFS] set ATTR_STR = ' CURRENCY '
where CLASS_ID = 0 and ATTR_ID = 6;, to make CURRENCY match the name of your currencies dimension.

Sample install configuration file for SQL Server

```
[Setup]
Lang=English
Dir=C:\Longview
Group=(Default)
NoIcons=0
SetupType=full
Components=executables,database,web,proxy
Tasks=
[Instance]
InstanceName=(Default)
InstallType=New
InstallLanguages=en,fr
[Data Server]
LongviewID=(Default)
DataServerHost=(Default)
```

```
DataServerAdminPort=(Default)
DataServerListenerPort=(Default)
DataServerWebListenerPort=(Default)
DataServerDataSource=(Default)
ApplicationServer=(Default)
[Data Server Configuration]
DataServerConfigFile=
JAVA_FILENAME=openjdk-20_windows-x64_bin.zip
FILES_CUSTOM_ROOT_PATH=(Default)
CLIENT_HTTP_PROXY=https://localhost/client
ADMIN_HTTP_PROXY=https://localhost/admin
[Database]
BaseDimensions=(Default)
ScheduleDimensions=(Default)
Partitions=(Default)
DimensionNames=(Default)
DimensionDescriptions=(Default)
FrenchDimensionDescriptions=(Default)
SQLServerUseWindowsAuth=Yes
SQLServerUser=system
SQLServerPassword=
DBOUser=lvdbo
DBOPassword=Longview7
DatabaseViewUseDBOAuth=No
DatabaseViewUser=lvviewuser
DatabaseViewPassword=Longview7
DBMS=SQL Server
SQLServerInstanceName=(Default)
DatabaseName=(Default)
OnDatabaseExists=Terminate
ContainedDatabase=No
CloudProviderManaged=No
RepoPrimaryFile=(Default)
RepoBaseFile=(Default)
RepoDerivedFile=(Default)
RepoLogFile=(Default)
```

```
[Web]
WebType=IPC
WebServerHost=(Default)
WebDirectory=(Default)
[Longview HTTP-RPC Proxy Server]
ProxyDirectory=(Default)
ProxyClientURL=https://localhost:8080/client/
ProxyAdminURL=https://localhost:8080/admin/
ProxyServiceName=(Default)
```

Sample install configuration file for Oracle

```
[Setup]
Lang=English
Dir=C:\Longview
Group=(Default)
NoIcons=0
SetupType=full
Components=executables,database,web,proxy
Tasks=
[Instance]
InstanceName=(Default)
InstallType=New
InstallLanguages=en,fr
[Data Server]
LongviewID=(Default)
DataServerHost=(Default)
DataServerAdminPort=(Default)
DataServerListenerPort=(Default)
DataServerWebListenerPort=(Default)
DataServerDataSource=(Default)
ApplicationServer=(Default)
[Data Server Configuration]
DataServerConfigFile=
JAVA_FILENAME=openjdk-20_windows-x64_bin.zip
FILES_CUSTOM_ROOT_PATH=(Default)
```

```
CLIENT_HTTP_PROXY=https://localhost/client
ADMIN_HTTP_PROXY=https://localhost/admin
[Database]
BaseDimensions=(Default)
ScheduleDimensions=(Default)
Partitions=(Default)
DatabaseServer=(Default)
DimensionNames=(Default)
DimensionDescriptions=(Default)
FrenchDimensionDescriptions=(Default)
OracleUser=system
OraclePassword=
DBOUser=lvdbo
DBOPassword=Longview7
DatabaseViewUseDBOAuth=No
DatabaseViewUser=lvviewuser
DatabaseViewPassword=Longview7
DBMS=Oracle
OracleServiceName=orclpdb
TablespaceName=(Default)
TablespaceDirectory=(Default)
TablespaceSize=1000
OnTablespaceExists=Terminate
OnDatabaseExists=Terminate
[Web]
WebType=IPC
WebServerHost=(Default)
WebDirectory=(Default)
[Longview HTTP-RPC Proxy Server]
ProxyDirectory=(Default)
ProxyClientURL=https://localhost:8080/client/
ProxyAdminURL=https://localhost:8080/admin/
ProxyServiceName=(Default)
```

Installing the Java JDK

Some Longview components require the Java JDK. The Java JDK must be configured before any of these components may be used. You must obtain a supported version of the Java JDK and place it in

the appropriate folder of the Longview Data Servers.

To configure the Java JDK:

1. Obtain a supported version of the Java JDK in .zip file format.
   a. This should be the file you specified for the JAVA_FILENAME option during install.
2. Copy the Java JDK zip file to the \software folder of the Longview Data Servers working directory.

Updating the Longview Data Server configuration file

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 `…\<FilesCustomRootPath>\<LongviewIdentifier>\config` directory, right-click the **lvsrvr.cfg file** and open it in your preferred text editor.
2. Set the following parameters to the suggested values, as listed below.
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.

Settings for all systems

Application Logic Switches	Value
USE_GRID_PROCESSING	Specifies if grid processing should be used when running restatements.
GRID_PROCESSING_TYPE	If using grid processing, specifies whether the grid processing type is LVGRID or DATASYNAPSE.

General System Parameters	Value
DATABASE_DBO	SYSTEM (if using OS Authentication)
DATABASE_PWD	Clear the password entry. (If using OS Authentication)
GRID_LISTENER_PORT	If using grid processing, valid port number

General System Parameters	Value
GRID_SERVICE_NAME	If using grid processing, specifies the name for the grid service when Grid Processing Type is DATASYNAPSE.

Caution: File locations listed are automatically created when unpacking your zip files for the components. After saving the lvsrvr.cfg file do not start the servers until AFTER the component files are extracted or create them manually.

System Maximums	Value
GRID_CURSORS_MAX	Specifies the maximum number of grid cursors.

System Policies	Value
TICKET_SECURITY	TRUE

Settings for Longview Tax and Longview Transfer Pricing

Application Logic Switches	Value
USE_EVENT_RULES	TRUE
USE_DATA_AREA_MONITORING	TRUE
USE_DATA_EVENT_SEQUENCING	TRUE

System Maximums Parameters	Value
MAX_PERSISTENT_EVENTRULES	0

System Policies Parameters	Value
AGENT_IDLE_TIMEOUT	720
WEB_IDLE_TIMEOUT	720
DATABASE_INITIATION_TIMEOUT	10
DATABASE_RECONNECT_TIMEOUT	10
DATA_AREA_MONITORING_DIMENSIONS	ACCOUNTS,ENTITIES,TIMEPER,DETAILS, SEGMENTS,ELEMENTS

System Policies Parameters	Value
DATA_AREA_STATUS_DIMENSION	ENTITIES

Settings for Longview Close and Plan

Application Logic Switches	Value
USE_EVENT_RULES	TRUE
USE_DATA_AREA_MONITORING	TRUE
USE_DATA_EVENT_SEQUENCING	TRUE

System Policies Parameters	Value
DEFAULT_ACTIONS_TIME_INTERVAL	00:30
DATA_AREA_MONITORING_DIMENSIONS	All dimensions. For example: ACCOUNTS,TIMEPERIODS,ENTITIES, DATAVIEWS, SCENARIOS,CURRENCIES
DATA_AREA_STATUS_DIMENSION	ENTITIES

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. Start your Longview Data Server.

9. In Longview Application Administrator, create a new user with the ID of the Windows-authenticated user that you specified in step 5. For more information on creating users, see the Longview Application Administrator Guide.
10. Grant this user authorization to start and stop the server.
11. 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.

Configuring a redirection for the Longview sign-on URL

To provide your users with a simple URL to sign on to Longview Dashboard, Longview suggests that you create a redirection. Once you have configured a redirection, users can access the sign on page from http://<servername>/<LID> instead of having to use the full URL. <LID> is the Longview Identifier, which was defined during Longview installation.

1. In File Explorer, navigate to the 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
&LongviewClientID=<LID>
&LongviewAuthMode=<AuthMode>
```

    - For TCP, enter:

```
/cgi-bin/<LID>/ks_iweb.dll?LongviewIdentifier=<LID>
&LongviewAction=GetSignon
```

```
&LongviewLangCode=EN
&LongviewClientID=<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 Single Sign-on authentication.

5. Click **Apply** in the Actions pane.
6. Restart IIS.
7. To test the configuration, open a supported browser, and navigate to http://<ServerHost>/<LID>. The Longview sign on page should appear.

Configuring Single Sign-On (Web) for on-premises servers:

Single Sign-On (Web) can be configured with on-premises servers using customer specific security software. Longview Supports both SAML and OpenID/OAuth methods.

To configure single sign-on, please refer to the Installing & Configuring Longview Single Sign-on Guide.

Configuring Additional Post-installation components

Depending on your installation and whether you are using the Longview HTTP Proxy server and/or TCP web protocol there may be additional post-installation configuration steps.

Configuring Longview Web Bridge for ISAPI (TCP Communication Protocol)

If you are using ISAPI with TCP, you must perform additional configuration steps.

To configure for TCP communication protocol:

1. Navigate to the IIS root directory (typically C:\Inetpub\wwwroot) and open the folder cgi-bin\<LongviewIdentifier>.
2. Open the lvweb.xml file in your preferred text editor.
3. Edit the following parameters in the lvweb.xml file:
   a. KOServer: Specify the name of the Longview application server where the Data Server component exists.

   b. 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.

c. KOPoolSize: Specifies the number of threads to use with Web communications. Leave this value at 5.

4. Save and close the lvweb.xml file.
5. Open the Longview Data Server configuration file (lvsrvr.cfg), found in the working directory of the data server installation.

a. Set the parameter WEB_SERVER to the name of the machine the web bridge is installed on.

b. Set the parameter WEB_AGENT_PROTOCOL to TCP.

c. Set the parameter WEB_SERVER_BRIDGE to /cgi-bin/<LongviewIdentifier>/ks_iweb.dll

6. Save and close the lvsrvr.cfg file.
7. The Longview Data Server needs to be restarted for this change to take effect.

Configuring IIS URL rewrite for HTTP proxy connections

If you are using Longview HTTP Proxy Server, you must configure IIS URL rewrite, which is responsible for sending requests to Longview HTTP Proxy Server.

To configure the IIS URL rewrite:

1. On the 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 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 recommends that you prepend your inbound rule names with the Longview Identifier for the system.

8. Add a rule that rewrites client requests to the Longview HTTP Proxy Server by completing these fields:
   a. Pattern: Specify the string to match. This string must match the end portion of the HttpProxyServerListenerPortURL value in the HTTP Proxy Server configuration.

   b. Rewrite URL: Specify the rewrite URL for the rule. This string should match the HttpProxyServerListenerPortURL appended with /{R:1}.

   c. Stop processing of subsequent rules: Select this option.

9. 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 recommends that you prepend your inbound rule names with the Longview Identifier for the system.

14. Add a rule that rewrites admin requests to the Longview HTTP Proxy Server by completing these fields:
    a. Pattern: Specify the string to match. This string must match the end portion of the HttpProxyServerAdminPortURL value in the HTTP Proxy Server configuration.

    b. Rewrite URL: Specify the rewrite URL for the rule. This string should match the HttpProxyServerAdminPortURL appended with /{R:1}.

    c. Stop processing of subsequent rules: Select this option.

15. 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 recommends that you prepend your inbound rule names with the Longview Identifier for the system.

20. Add a rule that rewrites requests to the Longview Web Bridge.
    a. Pattern: Specify the string to match. This string must match the path specified by WEB_SERVER_BRIDGE.

    b. Rewrite URL: Specify the rewrite URL for the rule. This string should match the HttpProxyServerAdminPortURL appended with /{R:1}.

21. Click **Apply**.

Additional configuration for HTTP Proxy Server

The Longview HTTP Proxy Server is installed with a default configuration.

To modify the configuration for Longview HTTP Proxy Server:

1. Open the configuration file (Longview.HttpProxyServer.exe.config) in your preferred text editor.
2. Specify the value for each element under appSettings:
   a. 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.
   b. LogMaxSize: If logging is set to TRUE, specific the maximum log file size in kilobytes. The log file will be archived each time it reaches or this size.
   c. 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 client's poll for the status of the original request. Longview recommends using an integer between 1 and 60.
   d. LogFileName: Specify the name for the log file. By default, this log file is saved to the directory containing the Longview.HttpProxyServer.exe.config file.
3. Save the file.
4. Open the Services manager and right-click on the **new service** (Longview_<ServiceName>).
5. Click **Restart** to have the changes take effect.

Once you've installed the Longview servers, continue to Installing Optional Servers.

Installing Optional Servers

Installing Longview Grid

Longview systems on Windows platforms can 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.

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

Before you can set up grid nodes, you must update the Longview Server configuration file, see General System Parameters in Settings for all systems.

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. Installing node files
2. Installing and configuring node software

Installing node files

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

```
...\Longview\<LID>
```

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

2. Extract the Grid_Nodes-win(x64)- 26.x.zip file appropriate to your SQL Server version into the <LongviewIdentifier> directory.

SQL Server version	ODBC Driver for SQL version	File
2019	18	Grid_Nodes_win(x64)-26.x.zip
2022	18	Grid_Nodes_win(x64)-26.x.zip

The directories extracted to your system include:

Directories	Located in...
node binaries	...\Longview\<LongviewIdentifier>\software\servers\current
batch file scripts to install and run the node software	...\Longview\<LongviewIdentifier>\Scripts\defaultsetup
log files directory	...\Longview\<LongviewIdentifier>\logs

3. In the `...\Longview\<LongviewIdentifier>` directory, create a directory with the name “tmp”.
4. Repeat for each node that should participate in the grid.

Installing and configuring node software

Once you have installed the 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\<LongviewIdentifier>\Scripts` folder in your preferred text editor.
2. Update the string:

```
KHALIXSERVERPATH=C:\Longview\<LongviewIdentifier>\software\servers\curren
t
```

To point to the current version of the node software binaries.

```
C:\Longview\<LongviewIdentifier> with the correct path to ...\
Longview\<LongviewIdentifier>;
```

for example: `E:\Longview\DataServers\LongviewDEV`

3. Save the setenv.bat file.
4. Open the installGridservice.bat file in your preferred text editor.
5. Make the following changes:

Replace all instances of...	with...
<ServiceName>	The name of the service to identify. Longview recommends that you set this value to _LIDGridNode. For example, _LongviewDevGridNode if the Longview Identifier is LongviewDev.
<WorkDirectory>	The `...\Longview\<LongviewIdentifier>` directory location.
<BinaryDirectory>	The location of the node binaries in `...\Longview\<LongviewIdentifier>\software\servers\current`
<RemoteHost>	The master or host application server. This can be the IP address or NetBIOS name
<RemotePort>	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.
<LongviewIdentifier>	The SERVER_NAME parameter set in the lvsrvr.cfg file of the host application server
<MathServers>	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 recommends that you set this value to one per dedicated CPU.
<TempDirectory>	The `...\Longview\<LongviewIdentifier>\tmp` directory location.

6. Save the batch file, and then run it.
7. If your Data Server is not running, start it.
8. 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.

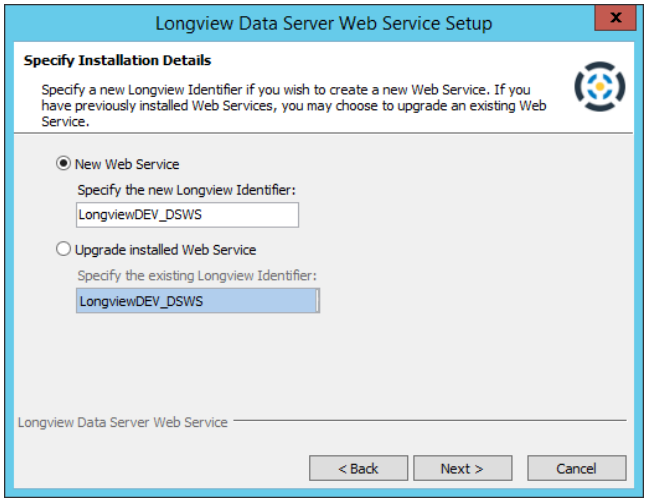
9. Repeat for each node participating in the grid.
10. Launch the in the Longview Server Administration Console (lvmgrl).
11. Run the GET NODE CONNECTED to verify that all nodes are connected to the server. For more information on this command, see the Longview Server Manager Guide.

Installing Longview Data Server Web Service

The Data Server Web Service software enables users to work with SOAP web services. Be sure to complete the steps in Preparing for Longview Data Server Web Services prior to beginning installation.

To install the Data Server Web Service:

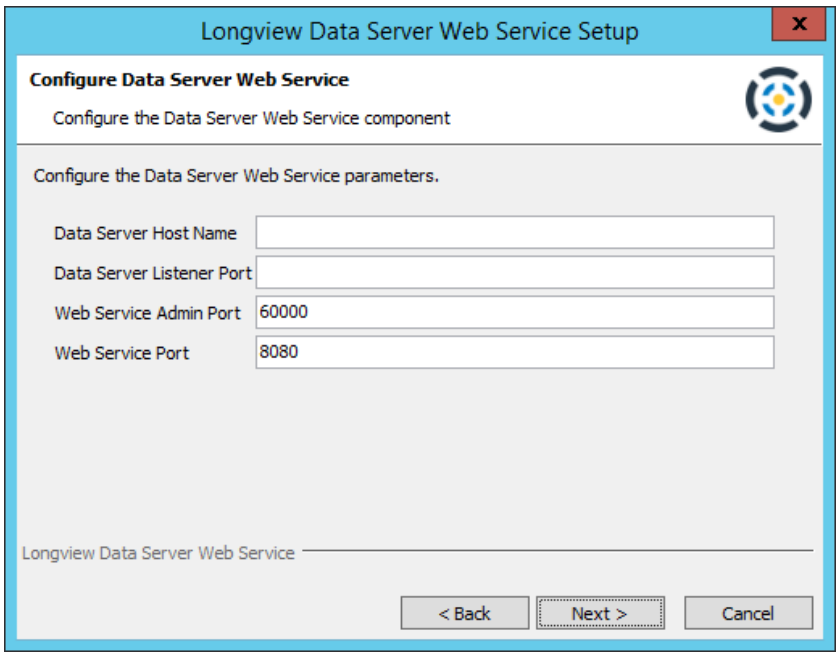
1. Double-click the **Longview Data Server Web Service Setup-**26.x**.exe file** received from Longview.
2. The Longview Data Server Web Service Installation wizard opens.
3. Click **Next**. The Licensing Agreement for Longview software page opens. Read through the agreement and choose your agreement option.
4. Click **Yes** to agree. The Check for Prerequisites page opens, indicating the success or failure of the installer to locate required resources.
5. Click **Next**. The Specify Installation Details screen opens.



6. 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.

7. Click **Next**. The Configure Data Server Web Service page opens.



8. Complete the following fields:

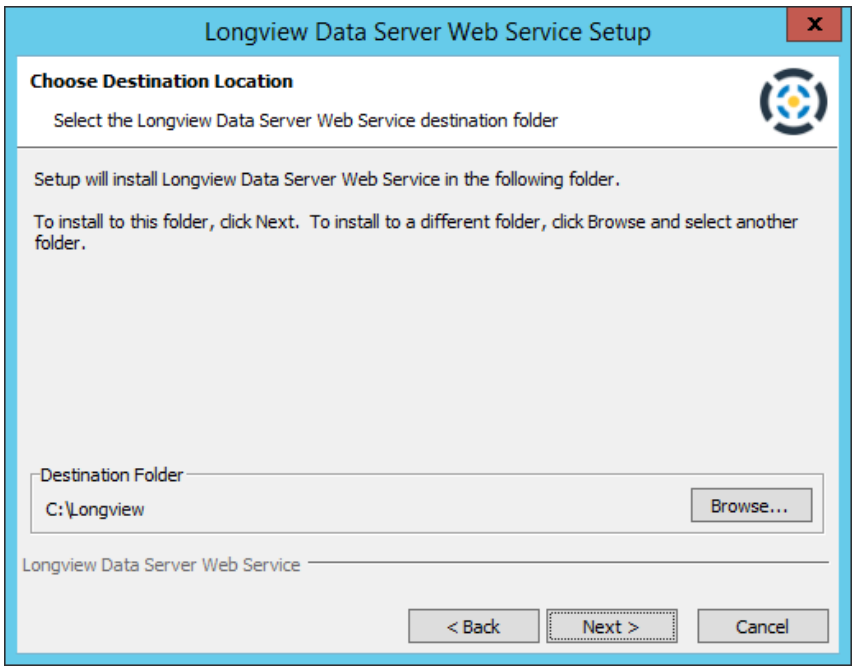
   a. Data Server Host Name: Specify the Data Server host name.

   b. Data Server Listener Port: Specify the Data Server Listener port. Ports can be set to a value from 1000 to 65535.

   c. 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.

   d. 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.

9. Click **Next**. The Choose Destination Location page opens.



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

Installing Solution Components

Depending on your system type and additional add-on products purchased, the following solution components can be installed:

Solution	Description
Solutions Framework	Provides database structures, tools, and templates. Required for all solution component installs or upgrades. **Note:** Solutions Framework is deployed as part of “Installing Longview Servers”.

Solution	Description
Longview Tax Provision	Provides database structures and settings, editors, and calculation logic for Longview Tax Provision.
Longview Task Management	Provides database structures and settings, editors, and calculation logic for Longview Task Management.
Longview Global Transparency	Provides structures, editors, and calculation logic for Longview Global Transparency.
Longview Multi-Regional Provision	Provides database structures and settings, editors, and calculation logic for Longview Multi-Regional Provision.
Longview Tax Planning	Provides structures, editors, and calculation logic for Longview Tax Planning.
Longview Close and Plan	Provides structures, editors, and calculation logic for Longview Close and Plan.
Longview Transfer Pricing	Provides structures, editors, and calculation logic for Longview Transfer Pricing.
Longview Pillar Two	Provides structures, editors, and calculation logic for Longview Pillar Two

Note: Global Transparency and Tax Planning currently require Tax Provision or Multi-Regional Provision to be installed. A Tax Provision system can be upgraded to use the Multi-Regional Provision product. Pillar Two, Task Management and Transfer Pricing may be installed without the Tax Provision or Multi-Regional Provision base.

Installing or upgrading solution components requires the following steps:

1. Installing the Solution Component Files
2. Updating Your Connection File
3. Updating your Initialization File
4. Running the Installation Script
5. Finalizing the Install or Upgrade

Note: The steps below are the same whether you are performing an upgrade or an install of Longview Solution components. If you are performing an upgrade, please note that many files and folders are overwritten during the upgrade process. Please confirm that a copy was made as part of the upgrading Longview Servers step Backing up Longview files to preserve any custom modifications.

Installing the solution component files

1. Depending on your system type, extract the solution component files obtained in Required Installation Files to the Server machine Data Server working directory.

Solution	Component file
Longview Tax Provision	Longview Tax Provision- 26.x.zip

Solution	Component file
Longview Task Management	Longview Tax Task Management-26.x.zip
Longview Global Transparency	Longview Tax Global Transparency -26.x.zip
Longview Multi-Regional Provision	Longview Tax Multi-Regional Provision-26.x.zip
Longview Close and Plan	Longview Close and Plan-26.x.zip
Longview Transfer Pricing	Longview Transfer Pricing -26.x.zip
Longview Pillar Two	Longview Pillar Two-26.x.zip

2. Start your Longview Server if it is not currently running.

Updating your connection file

Longview provides a connection file allows the install process to connect to your Longview system. Before your database is ready for use, you must update your connection file.

1. In Windows Explorer, navigate to the server machine Data Server working directory and open the `lvaf\Install` folder.
2. Rename the file Connection_Template.cfg to Connection.cfg.
3. Right-click the **Connection.cfg 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. For example, E:\Longview\DataServers\LongviewDEV.
<Longview Identifier>	The Longview Identifier as set in the SERVER_NAME parameter in the lvsrvr.cfg file. For example, LongviewDEV.
<Listener Port>	The client port number of the Longview Server as set in the LISTENER_PORT parameter in the lvsrvr.cfg file. For example, 28000.
<Administration Port>	The administrator port number of the Longview Server as set during install. You can find this in the installservice.bat file located in the Data Server working directory. For example, 27999.
<Admin User>	The username for the system administrative user. This should be set to puser for initial install.
<Admin Password>	The password for the system administrative user. This should be set to Puser1 for initial install.
Administrators	For a new install there is no need to change this value. For an upgrade the group to use needs to be verified and the value updated accordingly.

5. Save the file.

Updating your Initialization file

Longview provides an initialization file that allows you to set up initial parameters to determine how the Longview application will be installed.

Before your database is ready for use, you must update your initialization file. You only need to update the initialization properties that pertain to your system type

1. In Windows Explorer, navigate to the server machine Data Server working directory and open the `lvaf\Install` folder.
2. Rename the file Initialization_Template.cfg to Initialization.cfg.
3. Right-click the I**nitialization.cfg file** and open it with your preferred text editor.
4. Update the following properties as required:

Debug Settings

Statement	Options
Set VARIABLE DEBUG_ Mode = 0 Set VARIABLE DEBUG_ HistoryDetail = 0	To allow for a detailed history output of the installation: Set VARIABLE DEBUG_Mode = 1 Set VARIABLE DEBUG_HistoryDetail = 1 **Note:** This is not recommended unless you are encountering issues with the installation process.

All Installations

Change	to...
Set PROPERTY INSTALL.TB	One of the following options: ▪ SUMMARY ▪ IFRS This will determine if just summary level trial balance accounts are added during install, or if the install will also add the IFRS trial balance account structure.
Set PROPERTY INSTALL.PlatformSupport = 0	Do not modify

Longview Close and Plan

Change	to...
Set PROPERTY INSTALL.Close.CF	Options are SUMMARY or IFRS
Set PROPERTY INSTALL.Close.QTD	Set to 0 to exclude quarter to date hierarchy
Set PROPERTY INSTALL.Close.T12 = 1	Set to 0 to exclude trailing 12 months hierarchy

Change	to...
Set PROPERTY INSTALL.Close.FiscalYearStartMonth	Set the starting month for the fiscal year. Options are one of the following month abbreviations: ■ Jan ■ Feb ■ Mar ■ Apr ■ May ■ Jun ■ Jul ■ Aug ■ Sep ■ Oct ■ Nov ■ Dec

Longview Tax, Longview Transfer Pricing, and Pillar Two

Change	to...
Set PROPERTY INSTALL.Tax.Standard = "ASC"	Set PROPERTY INSTALL.Tax.Standard = "IAS", if your tax accounting standard is IAS
Set PROPERTY INSTALL.Tax.PeriodList = "2016|2017|2018"	To match the initial years, you wish to create in the system.
Set PROPERTY INSTALL.Tax.NumPeriods = 12	Set VARIABLE INSTALL.Tax.NumPeriods = 4, for quarterly provision, or Set VARIABLE INSTALL.Tax.NumPeriods = 1 for yearly provision.
Set PROPERTY INSTALL.Tax.CurrentPeriod = 1	To the match the current period you wish to start at in the system.
Set PROPERTY INSTALL.Tax.RolloverYearStart = 1	To match the period number that marks the start of the calendar year, if your fiscal year is not the calendar year.

Optionally, change the following for Longview Tax:

Statement	Options
Set PROPERTY INSTALL.Tax.ProvideMthstoBI = "<TRUE / FALSE>"	■ FALSE – to hide months from Tax Analytics Reports ■ TRUE – to display months in Tax Analytics reports
Set VARIABLE PROPERTY INSTALL.Tax.ProvideQtrstoBI = "<TRUE / FALSE>"	■ FALSE – to hide quarters from Tax Analytics Reports ■ TRUE – to display quarters in Tax Analytics reports
Set VARIABLE PROPERTY INSTALL.Tax.ProvideYrstoBI = "<TRUE / FALSE>"	■ FALSE – to hide years from Tax Analytics Reports ■ TRUE – to display years in Tax Analytics reports

5. Save the file.

Running the Installation Script

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

2. Start PowerShell in this folder and execute the command **.\StartInstall.ps1**.

   a. The servers will start if they are not running.

   b. Press a **key**.

   c. The installation process starts.

   d. Messages are output to the command prompt window and written to the log file.

   e. The installation ends with a successful message. If an error occurs, the process will stop and report an error.

3. Review the output in your custom files location within `logs\install`. Log files generated are stored in a sub-folder with the date and time the installation was executed.

Finalizing the Install or Upgrade

After completing the installation or upgrade of all components, verify that each component is installed correctly and updated to the expected version.

To verify component versions:

1. Launch the Longview Client.

2. Select **About** to open the About Longview dialog.

3. Confirm that all purchased components are listed and display the correct version numbers.

For Longview Tax and Longview Transfer Pricing

1. Sign on to the tax analytics home page as the tax administrator.
2. Launch Longview Tax.
3. If the system is still using the default ID and password for the tax administrator, click **User** and click **Change Password**.
4. Complete the following fields:
   a. Old Password: Type your original password.
   b. New Password: Type a new password for the user that complies with your company's security policies.
   c. Confirm Password: Type the new password again.
5. Click **OK**:

Installing Longview Tax Analytics

> **Note:** To install Longview Tax Analytics, the Longview Analytics Server must first be installed. For more information, see the Longview Analytics Install Guide.pdf.

Installing Longview Tax Analytics involves the following steps:

1. Installing the Longview Tax Analytics files
2. Updating the Longview Tax connection file
3. Publishing the Longview Tax application
4. Setting up permissions for the Longview Tax application
5. Setting the default homepage

Installing the Longview Tax Analytics files

To install Longview Analytics:

1. Navigate to the applications folder for Analytics, for example:

   ```
   C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions.
   ```

2. Create a folder named Longview Tax, if it does not exist.
3. Extract the Longview Tax Anlaytics - 26.x.zip, obtained in Required Installation Files, to the Longview Tax folder. For example,

   ```
   C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions\L
   ongview Tax
   ```

Updating the Longview Tax connection file

You must update the Longview Tax connection file (LongviewTax.apc) to connect to your Longview Data Server.

To update the Longview Tax connection file:

1. From the solutions folder used in the Installing the Longview Tax Analytics files section, open the file LongviewTax.apc in a text editor from within the Longview Tax folder.
2. Modify the following connection parameters:
   - DSN=(IPAddress)
   - SERVERPORT (Listener Port)
   - DATASERVER (LVID)
   - UID – A Longview UserID

Note:

- If you are using both Longview and Windows authentication, an additional parameter must be added: LogonType=4371.
- The LongviewTax.apc file may be write-protected. Make sure the file is not read-only.

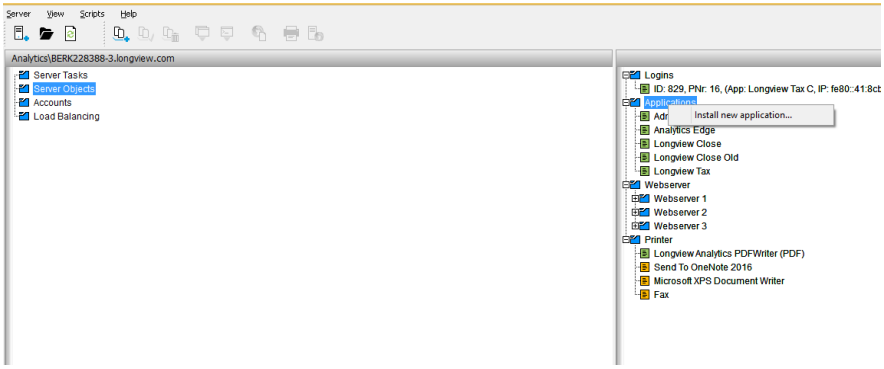
Caution: Do not change the order of the parameters in the LongviewTax.apc file.

Publishing the Longview Tax application

To publish the Longview Tax application:

1. From the start menu, select **Longview Analytics** > **Longview Analytics Administration Console**. The Longview Analytics Administration Console opens.
2. Go to Server à Connect...
3. The Longview Analytics Server Connection dialog appears. Click **OK**.
4. The Login dialog appears. Click **OK**.
5. On the left side, click **Server Objects**.

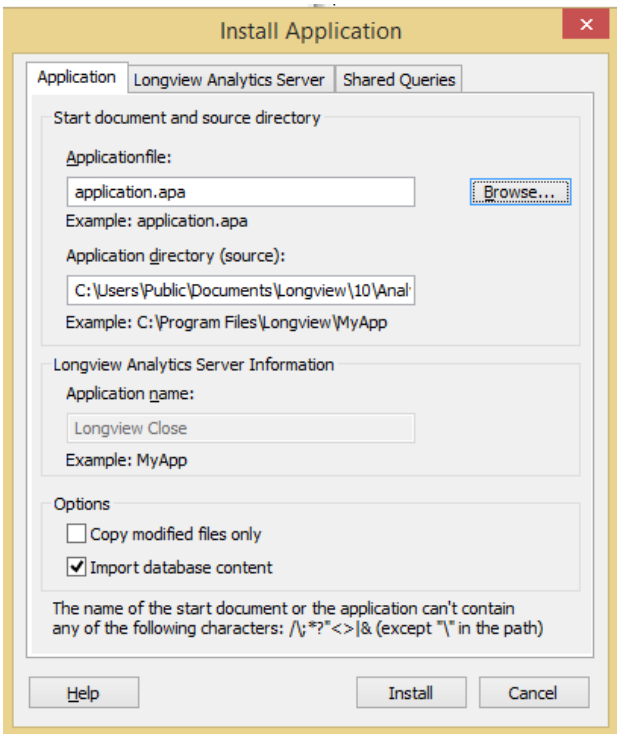
6. On the right side, right-click on **Applications** and select **Install new application**.



7. The Install Application dialog appears. For application file, **click Browse...**

8. From the solutions folder used in the Installing the Longview Tax Analytics files section, select the file **application.apa** from within the Longview Tax folder.

9. Leave all other items at default. Ensure the **Import database content** check box is selected.



10. Click **Install**.

11. An information dialog appears confirming that the installation has been successful. Click **OK**.

You should now see the Longview Tax application listed under the Applications folder in the Analytics Administration Console.

Setting up permissions for the Longview Tax application

Application specific settings must be set within Analytics Administrator, which is available via a web browser.

Setting up permissions for the Longview Tax application involves the following steps:

1. Accessing Analytics Administration App
2. Updating Administration permissions
3. Updating Longview Tax application permissions
4. Updating Longview Tax navigation permissions

Accessing Analytics Administration App

To access Analytics Administrator:

1. Start a Web Browser
2. Go to `http:/<Server>/Longview/10/Analytics/home/#startPage`
3. Click on the **My Analytics Applications** tile.
4. Click on the **Administration application** tile.

Updating Administration permissions

From Analytics Administrator:

1. Select **Applications** from the Navigation Pane.
2. Click the Administration tile.
3. Under Authentication type, select **Windows and Analytics authentication with login dialog if necessary.**

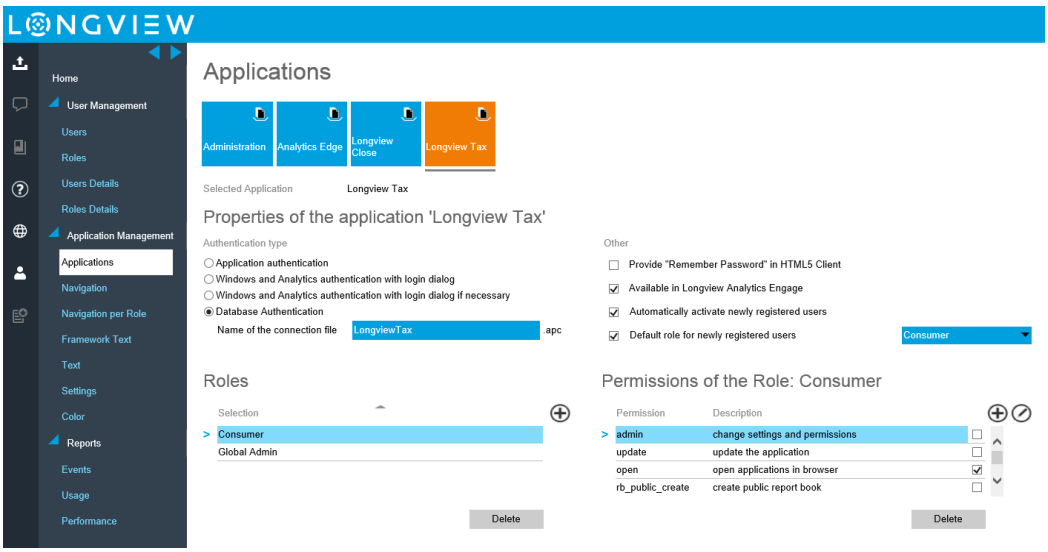
> **Note:**
>
> - This step is required for a Longview authenticated user to be able to access the Analytics Administrator component from the Longview home page.
> - For a Longview authenticated user to be able to access the Analytics Administrator component, they must be a part of the Global Admin role.

Updating Longview Tax application permissions

From Analytics Administrator:

1. Select **Applications** from the Navigation Pane.
2. Click the **Longview Tax** tile.
3. Under Authentication type, select **Database Authentication** and set the Name for the connection file to **LongviewTax**.

4. Select **Available in Longview Analytics Engage**.
5. Select **Automatically activate newly registered users**.
6. Select **Default role** for newly registered users and set the default role to **Consumer**.
7. Click the **add** icon under Roles and add the role Consumer (leave permissions of the role to only have the open permission enabled).
8. Click the **add** icon under Languages of the Selected application and select **English**.



Updating the Longview Tax Navigation Permissions

From Analytics Administrator:

1. Select **Navigation Per Role** from the Navigation Pane.
2. Click the **Longview Tax** tile.
3. For Selected Role, select **Consumer.**
4. Ensure the appropriate items are selected for the Navigation Pane depending on the components you have licensed:
   - Home
   - Task Management
   - Tax Analytics
   - Global Transparency
5. Click **Save**.

Setting the default homepage

Perform the following steps to default the Longview Analytics homepage to the Longview Tax application:

1. Edit the web.config folder in the following in your web directory. For example, `C:\inetpub\wwwroot\Longview\10\Analytics\home`

   Note: Ensure that you are in the correct folder, there are two web.config files. This file might be write-protected – make sure file is not read-only.

2. Search for the DefaultPage tag. Make the following edits to the DefaultPage and HomePage tags: Set AnalyticsClient to Longview Tax:

```
<add key="DefaultPage" value="AnalyticsClient:Longview Tax" />
<add key="HomePage" value="AnalyticsClient:Longview Tax" />
```

Snippet of web.config

```
    <!--
        Uncomment the following key to define the Longview Analytics Engage
default page.
        The default page is the page initially displayed when Longview
Analytics Engage is started, e.g.
        you open http://localhost/Longview/10/Analytics/home/ and will be
redirected to http://localhost/Longview/10/Analytics/#startPage.
        Valid values are:
            - startPage:            The Longview Analytics Engage Start Page
(DEFAULT)
            - biwalls:                The BI Walls Page
            - contentPage:            The My Content Page
            - AnalyticsApplications:    The My Analytics Applications Page
            - AnalyticsClient:ApplicationName:    Opens a predefined
application.
                                                The full key to open the
Administration application would be:
                                                <add key="DefaultPage"
value="AnalyticsClient:Administration" />
    -->
    <add key="DefaultPage" value="AnalyticsClient:Longview Tax"/>
    <!--
        Uncomment the following key to define the link of the Longview
Analytics Home Button.
```

```
        With this button you can easily return to the selected page from
every other page.
        Valid values are:
            - startPage:            The Longview Analytics Engage Start Page
(DEFAULT)
            - biwalls:                The BI Walls Page
            - contentPage:            The My Content Page
            - AnalyticsApplications:    The My arpclan Applications Page
            - AnalyticsClient:ApplicationName:    Opens a predefined
application.
                                                  The full key to open the
Administration application would be:
                                                  <add key="HomePage"
value="AnalyticsClient:Administration" />
    -->
    <add key="HomePage" value=" AnalyticsClient:Longview Tax"/>
```

Note: Ensure you remove the comment tags (<!-- … -->) before and after these lines to enable them.

Installing Longview Close Analytics

Note: To install Longview Close Analytics, the Longview Analytics Server must first be installed. For more information, see the Longview Analytics Install Guide.pdf.

Installing Longview Close Analytics involves the following steps:

- Installing the Longview Close Analytics files
- Updating the Longview Close connection file
- Publishing the Longview Close application
- Setting up permissions for the Longview Close application
- Setting the default homepage

Installing the Longview Close Analytics files

To install Longview Analytics:

1. Navigate to the applications folder for Analytics. For example:

```
C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions.
```

2. Create a folder named Longview Close, if it does not exist.
3. Extract the Longview Close Analytics - 26.x.ZIP, obtained in Required Installation Files, to the Longview Close folder. For example,

```
C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions\Longview Close
```

Updating the Longview Close connection file

You must update the Longview Tax connection file (Longview.apc) to connect to your Longview Data Server.

To update the Longview Close connection file:

1. From the solutions folder used in the Installing the Longview Close Analytics files section, open the file Longview.apc in a text editor from within the Longview Close folder.
2. Modify the following connection parameters:

```
DSN=(IPAddress)
SERVERPORT (Listener Port)
DATASERVER (LVID)
UID – A Longview UserID
```

Note:

- If you are using both Longview and Windows authentication, an additional parameter must be added: LogonType=4371.
- The LongviewTax.apc file may be write-protected. Make sure the file is not read-only.

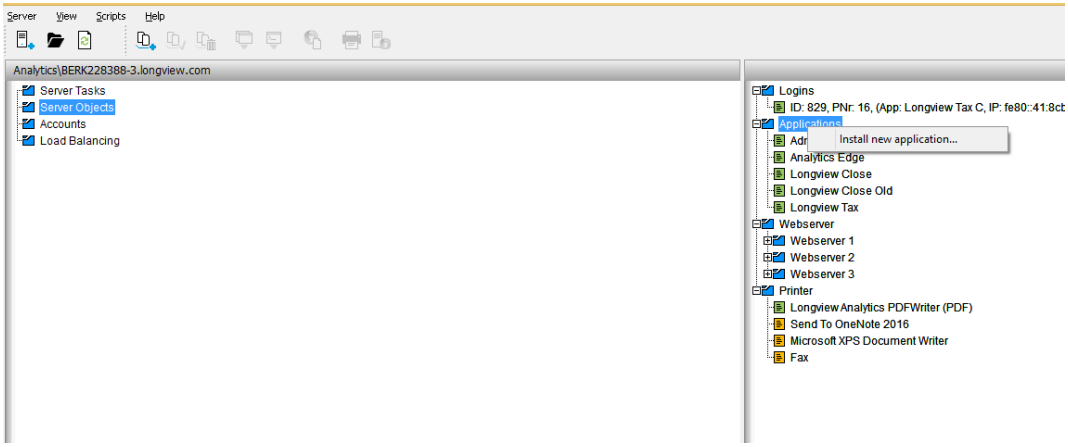
Caution: Do not change the order of the parameters in the LongviewTax.apc file.

Publishing the Longview Close application

To publish the Longview application:

1. From the start menu, select **Longview Analytics** > **Longview Analytics Administration Console**. Longview Analytics Administration Console opens.
2. Go to Server à Connect...
3. The Longview Analytics Server Connection dialog appears. Click **OK**.
4. The Login dialog appears. Click **OK**.
5. On the left side, click on **Server Objects**.

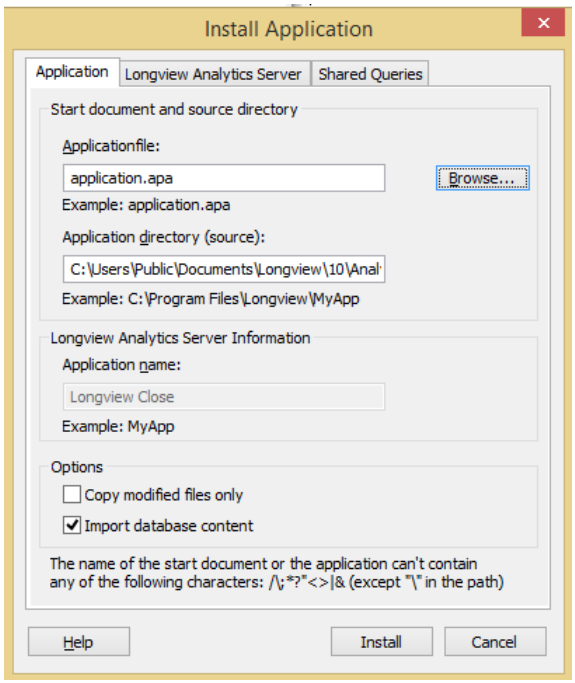
6. On the right side, right-click on **Applications** and select Install new application.



7. The Install Application dialog appears. For application file, click **Browse...**

8. From the solutions folder used in the Installing Longview Close Analytics files section, select the file **application.apa** from within the Longview folder.

9. Leave all other items at default. Ensure the **Import database content** check box is selected.



10. Click **Install**.

11. An information dialog appears confirming that the installation has been successful. Click **OK**.

You should now see the Longview Close application listed under the Applications folder in the Analytics Administration Console.

Setting up permissions for the Longview Close application

Application specific settings must be set within Analytics Administrator, which is available via a web browser.

Setting up permissions for the Longview Close application involves the following steps:

1. Accessing Analytics Administration App
2. Updating Administration permissions
3. Updating Longview Close application permissions
4. Updating Longview Close navigation permissions

Accessing Analytics Administration App

To access Analytics Administrator:

1. Start a Web Browser.
2. Go to http:/<Server>/Longview/10/Analytics/home/#startPage
3. Click on the **My Analytics Applications** tile.
4. Click on the **Administration** application tile.

Updating Administration permissions

From Analytics Administrator:

1. Select **Applications** from the Navigation Pane.
2. Click the **Administration** tile.
3. Under Authentication type, select **Windows and Analytics authentication with login dialog if necessary.**

Note:

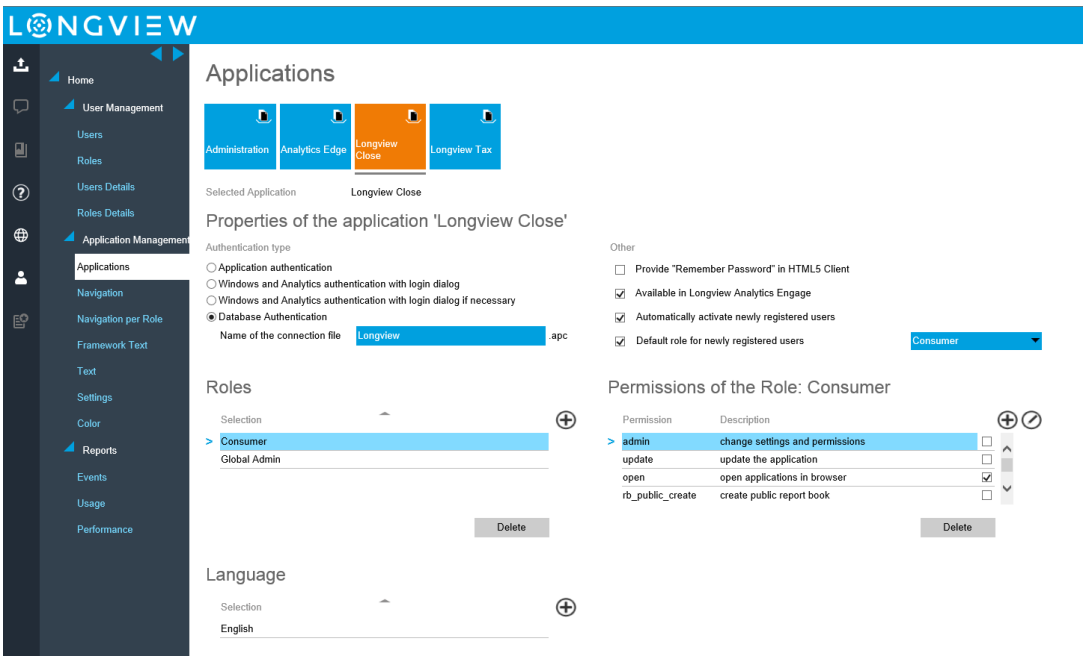
- This step is required for a Longview authenticated user to be able to access the Analytics Administrator component from the Longview home page.
- For a Longview authenticated user to be able to access the Analytics Administrator component, they must be a part of the Global Admin role.

Updating Longview Close application permissions

From Analytics Administrator:

1. Select **Applications** from the Navigation Pane.
2. Click the **Longview Close** tile.
3. Under Authentication type, select **Database Authentication** and set the Name for the connection file to **Longview**.

4. Select **Available in Longview Analytics Engage.**
5. Select **Automatically activate newly registered users.**
6. Select **Default role** for newly registered users and set the default role to **Consumer**.
7. Click the **add** icon under Roles and add the role Consumer (leave permissions of the role to only have the open permission enabled)
8. Click the **add** icon under Languages of the Selected application and select **English**.



Updating Longview Close navigation permissions

From Analytics Administrator:

1. Select **Navigation Per Role** from the Navigation Pane.
2. Click the **Longview Close** tile.
3. For Selected Role, select **Consumer.**
4. Ensure the appropriate items are selected for the Navigation Pane depending on the components you have licensed:
   - Home
   - KPI Cockpit (checked, if licensed)
   - P&L Variance Bridge
   - Finance Analytics (checked if Finance Analytics is licensed)
5. Click **Save**.

Setting the default homepage

Perform the following steps to default the Longview Analytics homepage to the Longview Close application:

1. Edit the web.config folder in the following in your web directory. For example,

   `C:\inetpub\wwwroot\Longview\10\Analytics\home`

   > **Note:** Ensure that you are in the correct folder, there are two web.config files. This file might be write-protected – make sure file is not read-only.

2. Search for the DefaultPage tag. Make the following edits to the DefaultPage and HomePage tags: Set AnalyticsClient to Longview Close:

```
<add key="DefaultPage" value="AnalyticsClient:Longview Close" />
<add key="HomePage" value="AnalyticsClient:Longview Close" />
```

Snippet of web.config

```
    <!--
        Uncomment the following key to define the Longview Analytics Engage
default page.
        The default page is the page initially displayed when Longview
Analytics Engage is started, e.g.
        you open http://localhost/Longview/10/Analytics/home/ and will be
redirected to http://localhost/Longview/10/Analytics/#startPage.
        Valid values are:
            - startPage:            The Longview Analytics Engage Start Page
(DEFAULT)
            - biwalls:                The BI Walls Page
            - contentPage:            The My Content Page
            - AnalyticsApplications:    The My Analytics Applications Page
            - AnalyticsClient:ApplicationName:    Opens a predefined
application.
                                                The full key to open the
Administration application would be:
                                                <add key="DefaultPage"
value="AnalyticsClient:Administration" />
    -->
    <add key="DefaultPage" value="AnalyticsClient:Longview Close"/>
    <!--
```

```
        Uncomment the following key to define the link of the Longview
Analytics Home Button.
        With this button you can easily return to the selected page from
every other page.
        Valid values are:
            - startPage:            The Longview Analytics Engage Start Page
(DEFAULT)
            - biwalls:                The BI Walls Page
            - contentPage:            The My Content Page
            - AnalyticsApplications:    The My arpclan Applications Page
            - AnalyticsClient:ApplicationName:    Opens a predefined
application.
                                                  The full key to open the
Administration application would be:
                                                  <add key="HomePage"
value="AnalyticsClient:Administration" />
    -->
    <add key="HomePage" value=" AnalyticsClient:Longview Close"/>
```

Note: Ensure you remove the comment tags (<!-- … -->) before and after these lines to enable them.

Installing Optional Clients

Optional client installations include:

- Installing Longview Application Framework

Installing Longview Application Framework

All required executables for Longview Application Framework are installed during server installation and reside on the server; however, you might find it useful to also install it on a local machine.

You can use Longview Application Framework on any platform supported by Longview.

To install Longview Application Framework:

1. Obtain the Application Framework(x64)-26.x.zip or Application Framework-26.x.zip file from the location provide by Longview Support Services.
2. Extract the .zip file to the local directory of your choice.

Note: You must have write-access to the folder that is created during extraction to successfully launch Longview Application Framework.

Upgrading Longview

This topic contains instructions on upgrading your system from the 23.3 or later release to Longview 26.x.

If you are on a Longview platform earlier than Longview 23.3, you must upgrade to Longview 23.3 in its entirety first. For information on upgrading previous versions Longview 23.3, see the Longview Installation Guide released with the version you are upgrading to.

See Required Installation Files for the components you are upgrading to ensure you have all the files you need before you begin.

Upgrading Longview consists of the following steps:

1. Upgrading Longview Servers
2. Upgrading Optional Servers
3. Upgrading Solutions Components
4. Upgrading Longview Tax Analytics
5. Upgrading Longview Close Analytics
6. Upgrading Optional Client

Upgrading Longview Servers

The Longview 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 Servers consists of the following steps:

1. Backing Up Longview Files
2. Upgrading Longview Servers
3. Upgrading the Java JDK

Backing up Longview files

Before you upgrade Longview, take a RDBMS backup of the database. Please refer to your company's internal DBA for assistance with this if needed.

In addition, you must back up the directory in which your Data Server is installed. For example,

`C:\Longview\DataServers\<LongviewIdentifier>\,`

where

`<LongviewIdentifier>` is the Longview Identifier for your system.

Caution: This upgrade moves files in the Data Server working directory as the structures have changed and the out of box files will be separated from other files as well as making

modifications to the lvsrvr.cfg. Do not skip backing up your Data Servers working directory so you can recover files in the case there is an issue with the upgrade.

Upgrading Longview Servers

The Longview Installer allows you to upgrade all Longview components in a step by step process or using a silent install approach.

Using the step-by-step process to upgrade Longview Servers

Upgrade Longview Servers by completing the following steps:

1. If you haven't previously changed Puser's password, you must change the password before continuing.
   a. Sign into Longview Dashboard and open the Longview Client.
   b. In the Navigation pane select **Profile/Change Password**.
   c. Complete the following fields and click **Apply**:
      - Old Password: Type your original password.
      - New Password: Type a new password for the user that complies with your company's security policies.
      - Confirm Password: Type the new password again.
2. Stop your Longview Servers.

   Note: Longview also recommends that you stop the Longview_LID service after you have stopped the servers. (**Administrative Tools** > **Services on the application server**.)
3. If either of the following parameters in the lvsrvr.cfg are set to use EXTERNAL, they will need to be updated to use either **CLIENT** or **OFF**.
   a. DOCUMENTATION_DEPLOYMENT
   b. HELPFILE_DEPLOYMENT
4. Double-click the **Longview Installer**-26.x.exe file received from Longview. The Longview 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**.
5. The Licensing Agreement for Longview software page opens.
   a. Read through the agreement and check **I accept the terms of the license agreement** to proceed.
   b. Click **Next**.

6. The Specify Installation Details page opens.
   a. Select the **Instance Name**.
   b. Select **Upgrade**.
   c. If the French software files were not previously installed, you can select the **FR** check box to install the files. If French is not required, leave this check box unselected.

      Note: If FR was previous installed the FR check box will be selected and deactivated.

   d. Click **Next**.

7. Database: The Configure Data Server page opens.
   a. SQL SERVER: Complete the following:

      - If no changes are required, enter the password for the DBO User and click **Next**. Otherwise, update the following, as required, to modify the settings for your current system:

   - Database Server [\Instance Name]
   - Database Name
   - DBO User Name
   - DBO Password (Required)

     Note: If using OS Authenticated database owner, enter 'system' for the DBO User Name and leave the DBO Password blank.

   b. ORACLE: Enter the password for the DBO User and click **Next**.

8. Executables:
   a. SQL SERVER only: The Data Server Configuration page opens.

   i. If no changes are required, click **Next**. Otherwise, update the ODBC Data Source to change the name and click **Next**.

9. The Completing Longview Server Setup page opens.
   a. Optionally, check **View install log file**.
   b. Database: Optionally, check **View database log file**.
   c. Click **Finish**.

Using the silent option to upgrade Longview Servers

You may use the install configuration file to perform the upgrade, with the following modification:

- Change the InstallType parameter from New to **Upgrade**.

  If you don't have a configuration file you can make one, with the following lines:

```
[Setup]
Dir=C:\Longview
[Instance]
InstanceName=<Install Instance Name>
InstallType=Upgrade
[Database]
DBOPassword=<Password of the DBO for the Longview Database>
```

Note: The Dir and InstanceName parameters must match the values of the original installation.

Additionally, the following lines are optional and can be added if you need to make any changes to the existing installation for these settings during the upgrade:

```
[Instance]
InstallLanguages=en,fr
[DATA SERVER]
DataServerDataSource=(Default)
[Database]
DBOUser=lvdbo
SQLServerInstanceName=(Default)
DatabaseName=(Default)
```

To upgrade Longview Servers using the silent option, complete the following:

1. If you haven't previously changed Puser's password, you must change the password before continuing.
   a. Sign into Longview Dashboard and open the Longview Client.
   b. In the Navigation pane select **Profile/Change Password**.
   c. Complete the following fields and click **Apply**:
      - Old Password: Type your original password.
      - New Password: Type a new password for the user that complies with your company's security policies.
      - Confirm Password: Type the new password again.

2. Stop your Longview Servers.

   Note: Longview also recommends that you stop the Longview_LID service after you have stopped the servers. (**Administrative Tools** > **Services on the application server**.)

3. If either of the following parameters in the lvsrvr.cfg are set to use EXTERNAL, they will need to be updated to use either **CLIENT** or **OFF**.
   a. DOCUMENTATION_DEPLOYMENT
   b. HELPFILE_DEPLOYMENT

4. Open an administrator command prompt.

5. Execute the Longview Installer- 26.x.exe with the /LOADINF=<config.ini>
   a. Specify /silent or /verysilent.

Upgrading the Java JDK

You must obtain a supported version of the Java JDK and place it in the appropriate folder of the Longview Data Servers. For more information, see Supported client platforms. If your previous JAVA version is no longer supported, you will need to upgrade.

To upgrade the Java JDK:

1. Delete the Java JDK zip file from the \software folder of the Longview Data Servers working directory.

2. Obtain a supported version of the Java JDK in .zip file format.

3. Copy the Java JDK zip file to the \software folder of the Longview Data Servers working directory.

4. In the File Location section of the server configuration file, update the JAVA_FILENAME to the name of the new Java JDK zip file.

Upgrading Optional Servers

Upgrading Longview Grid

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

To upgrade the Longview Grid node:

1. Stop the Grid Node service.

2. Navigate to the installation folder on grid node host. For example:

   ```
   C:\Longview\<LongviewIdentifier>
   ```

3. Extract the Grid Node file appropriate to your version of SQL server in this folder:
    a. 2019
        - ODBC Drive for SQL Server Version: 18
        - File: Grid_Nodes_win(x64)-26.x.zip
    b. 2022
        - ODBC Drive for SQL Server Version: 18
        - File: Grid_Nodes_win(x64)-26.x.zip
4. Start the Grid Node service.

Upgrading Longview Data Server Web Service

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

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

- A supported version of the Java JDK must be installed.
- The JAVA_HOME environment variable must be set.
- If you have the JRE_HOME environment variable set, it must also be set to the same value as the JAVA_HOME environment variable.

Note: If you have multiple versions of Java installed, the latest version of the JDK must be first in the Path environment variable. For example, if you have JDK 11.0.2 and JRE 1.8 installed, Java 11.0.2 must be before JRE 1.8 in the variable.

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

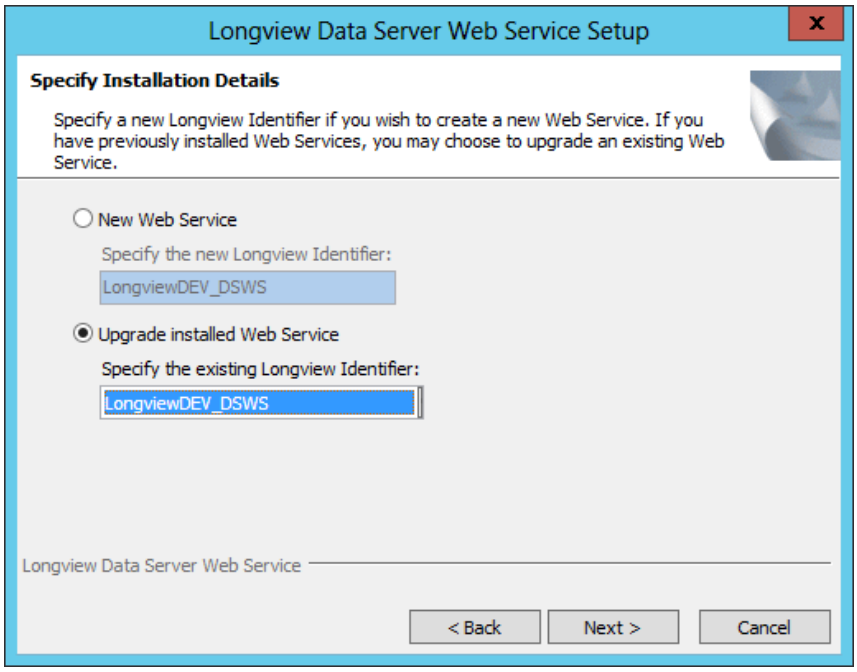
To upgrade the Data Server Web Service:

1. Double-click the **Longview Data Server Web Service Setup-**26.x.exe received from Longview.

    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. Click **Next**.
3. The Licensing Agreement for Longview software page opens. Read through the agreement and choose your agreement option.
4. Click **Yes** to agree. The Check for Prerequisites page opens, indicating the success or failure of the installer to locate required resources.

5. Click **Next**. The Specify Installation Details screen opens, as shown below:



6. 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.
7. Click **Next**. The Collecting Information screen opens.
8. Click **Next**. The Installing page opens, displaying the progress of the upgrade process. When the upgrade is complete, the Longview Data Server Web Service Setup Complete page opens.
9. Click **Finish** to exit the wizard.

Upgrading Solutions Components

Depending on your system type and additional add-on products purchased, the following solution components can be upgraded or installed:

Solution	Description
Solutions Framework	Provides database structures, tools, and templates. Required for all solution component installs or upgrades. **Note:** Solutions Framework is deployed as part of Upgrading Longview Servers.
Longview Tax Provision	Provides database structures and settings, editors, and calculation logic for Longview Tax Provision.
Longview Task Management	Provides database structures and settings, editors, and calculation logic for Longview Task Management.

Solution	Description
Longview Global Transparency	Provides structures, editors, and calculation logic for Longview Global Transparency.
Longview Multi-Regional Provision	Provides database structures and settings, editors, and calculation logic for Longview Multi-Regional Provision.
Longview Tax Planning	Provides structures, editors, and calculation logic for Longview Tax Planning.
Longview Close and Plan	Provides structures, editors, and calculation logic for Longview Close and Plan.
Longview Transfer Pricing	Provides structures, editors, and calculation logic for Longview Transfer Pricing.
Longview Pillar Two	Provides structures, editors, and calculation logic for Longview Pillar Two.

Note: Global Transparency and Tax Planning currently require Tax Provision or Multi-Regional Provision. A Tax Provision system can be upgraded to use the Multi-Regional Provision product. Pillar Two, Task Management and Transfer Pricing may be installed without the Tax Provision or Multi-Regional Provision base.

The steps required to upgrade solutions components are the same steps required to install solutions components. For more information, see Installing Solution Components.

Supplemental Steps When Upgrading From a Version Prior to 22.2

As part of the upgrade to 22.2, rule merge and rule dependency files were updated to allow for multiple source files. As part of this update, the out-of-box rule merge and rule dependency files were deployed under different names.

Custom rule merge and rule dependency configuration is now stored only in the default files (RuleMerges.txt and Rule Dependencides.txt).

Depending on your system, you may see the following additional files in the config folder of the data server working directory after upgrading:

Solution	Files
Tax Provision (ASC)	RuleDependencies_ASC.txt RuleMerges_ASC.txt RuleMerges_Common.txt
Tax Provision (IAS)	RuleDependencies_IAS.txt RuleMerges_IAS.txt RuleMerges_Common.txt

Solution	Files
Multi-Regional Tax Provision (ASC)	RuleDependencies_ASC.txt RuleDependencies_MRP_ASC.txt RuleMerges_ASC.txt RuleMerges_Common.txt RuleMerges_MRP_ASC.txt
Multi-Regional Tax Provision (IAS)	RuleDependencies_IAS.txt RuleDependencies_MRP_IAS.txt RuleMerges_IAS.txt RuleMerges_Common.txt RuleMerges_MRP_IAS.txt
Global Transparency	RuleDependencies_GT.txt RuleMerges_GT.txt
Pillar Two	RuleDependencies_P2.txt RuleMerges_P2.txt
Close and Plan	RuleDependencies_CPM.txt RuleMerges_CPM.txt

To create a custom rule merge and rule dependency, complete the following steps:

1. Open PowerShell in the data sever working directory.
2. Execute the following command: `.\CreateCustomRulesFiles.ps1`.
3. The PowerShell script will perform the following:
    a. Backup the RuleDependencie.txt file to old_RuleDependencies.txt.
    b. Backup the RuleMerges.txt file to old_RuleMerges.txt.
    c. Read in the out of box rule files for merges and dependencies.
    d. Generate a RuleDependecies.txt containing only custom rule dependencies configuration.
    e. Generate a RuleMerges.txt containing only custom rule dependencies configuration.
4. If there is no custom rule dependency configuration, the RuleDependencies.txt file will not be generated.
5. If there is no custom rule merge configuration, the RuleMerges.txt file will not be generated.
6. If you have configured FILES_CUSTOM_ROOT_PATH in the Longview data server configuration file (lvsrvr.cfg):

a. Move the RuleDependencies.txt file, if any, from the data server working directory to the location specified by FILES_CUSTOM_ROOT_PATH.

b. Move the RuleMerges.txt file, if any, from the data server working directory to the location specified by FILES_CUSTOM_ROOT_PATH.

7. Once you are satisfied that the custom rules files are correct, you can delete the old_ RuleDependencies.txt and old_RuleMerrges.txt files from the data server working directory.

8. You can also delete the CreateCustomRulesFiles.ps1 script.

If you need to rerun the custom rule file creation for some reason:

1. Delete the generated RuleDependencies.txt and RuleMerges.txt files if they exist.

2. Rename old_RuleDependencies.txt to RuleDependencies.txt.

3. Rename old_RuleMerges.txt to RuleMerges.txt.

4. Execute the steps to create a custom rule merge and rule dependency file.

Upgrading Longview Tax Analytics

Note: In order to upgrade Longview Tax Analytics, the Longview Analytics Server must first be installed. For more information, see the Longview Analytics Installation Guide.

To upgrade Longview Tax Analytics, complete the following:

1. Backup Longview Tax Analytics Reports
2. Upgrading the Longview Tax Analytics Application
3. Merge Customized Reports Into thTe Updated Longview Tax Analytics Application
4. Publish the updated Longview Tax Analytics Application

Backup Longview Tax Analytics reports

To back up your existing Longview Tax analytics application:

1. Navigate to the folder the application was published from. For example:

   `C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions`.

2. Rename the Longview Tax folder, for example to Longview Tax Backup.

Upgrading the Longview Tax Analytics application

To upgrade Longview Tax Analytics, complete the following:

1. Navigate to the folder the application was published from,

   for example:

   `C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions`.

2. Create a folder named Longview Tax, if it does not exist.

3. Extract the Longview Tax Analytics - 26.x.zip, obtained in Required Installation Files, to the Longview Tax folder. For example:

   `C:\Users\Public\Documents\Longview\Applications\10\Solutions\LongviewTax`

Merge customized reports into the updated Longview Tax Analytics application

Copy files as required from the Longview Tax Backup folder to the Longview Tax folder. This includes:

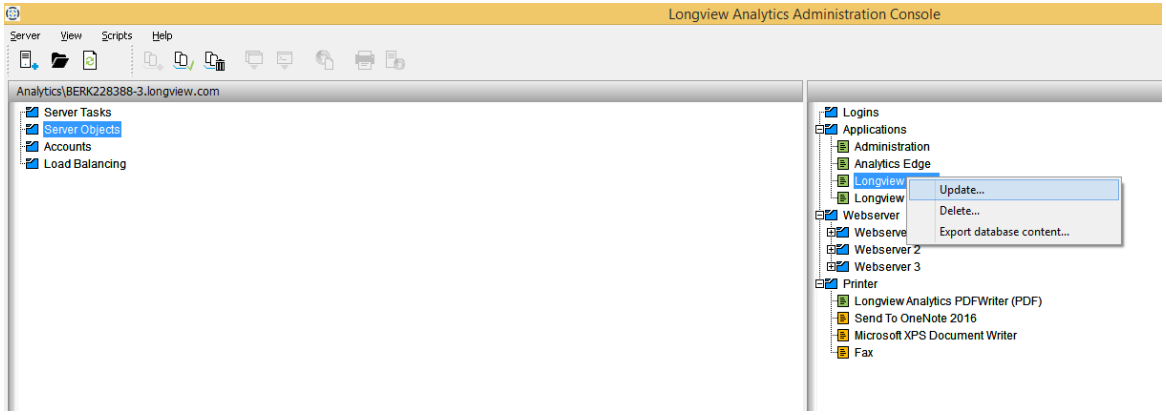
- The file “LongviewTax.apc”, which contains the connection parameters to the Longview Data Server.
- Any reports in the Longview Tax application that were customized (.apd files).
- Any custom reports that have been created (.apd files).

Publish the updated Longview Tax Analytics application

To publish the updated Longview Tax application:

1. From the start menu, select **Longview Analytics** > Longview **Analytics Administration Console**.
2. Longview Analytics Administration Console opens. Go to Server à Connect...
3. The Longview Analytics Server Connection dialog appears. Click **OK**.
4. The Login dialog appears. Click **OK**.
5. On the left side, click on **Server Objects**.
6. On the right side, expand **Applications** and right-click on **Longview Tax**.

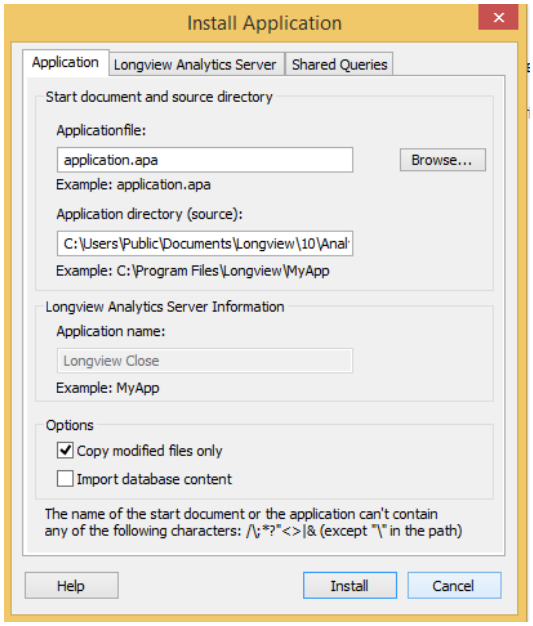
7. Select **Update**.



8. The Install Application dialog appears. Ensure the Application file is set to **application.apa** and the Application directory (source) is set to your **Longview Tax application folder**. For example:

`C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions\Longview Tax)`.

9. From the solutions folder, select the file **application.apa** from within the Longview folder.
10. Under options, select the **Copy modified files only** check box.
11. Make sure the “Import database content” option is not selected.



12. Click **Install**.
13. An information dialog appears confirming that the installation has been successful. Click **OK**.

Upgrading Longview Close Analytics

Note: To upgrade Longview Close Analytics, first the Longview Analytics Server must be installed. For more information, see the Longview Analytics Installation Guide.

To upgrade Longview Close Analytics, complete the following:

1. Backup Longview Close Analytics reports
2. Upgrading the Longview Close Analytics application
3. Merge customized reports into the updated Longview Close Analytics application
4. Publish the updated Longview Close Analytics application

Backup Longview Close Analytics reports

To back up your existing Longview Close analytics application:

1. Navigate to the folder the application was published from. For example:

```
C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions
```

2. Rename the Longview Close folder, for example to Longview Close Backup.

Upgrading the Longview Close Analytics application

To upgrade Longview Close Analytics, complete the following:

1. Navigate to the folder the application was published from. For example:

   `C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions`.

2. Create a folder named Longview Close, if it does not exist.

3. Extract the Longview Close Analytics - 26.x.zip, obtained in Required Installation Files, to the Longview Close folder. For example:

   `C:\Users\Public\Documents\Longview\Applications\10\Solutions\Longview Close`

Merge customized reports into the updated Longview Close Analytics application

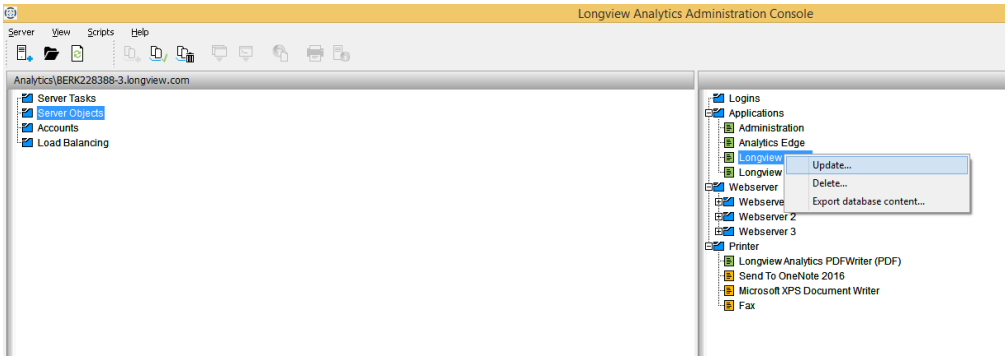
Copy files as required from the Longview Close Backup folder to the Longview Close folder. This includes:

- The file “Longview.apc”, which contains the connection parameters to the Longview Data Server.
- Any reports in the Longview Close application that were customized (.apd files).
- Any custom reports that have been created (.apd files).

Publish the updated Longview Close Analytics application

To publish the updated Longview Close application:

1. From the start menu, select **Longview Analytics** > **Longview Analytics Administration Console**.
2. Longview Analytics Administration Console opens. Go to Server à Connect...
3. The Longview Analytics Server Connection dialog appears. Click **OK**.
4. The Login dialog appears. Click **OK**.
5. On the left side, click on **Server Objects**.
6. On the right side, expand **Applications** and right-click on **Longview Close**.
7. Select **Update**.

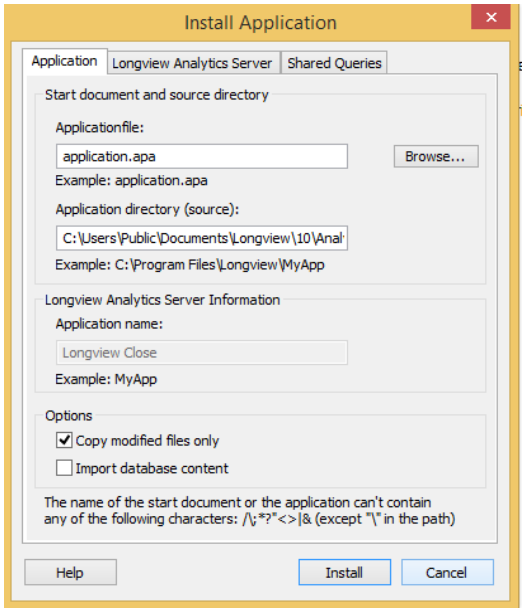


8. The Install Application dialog appears. Ensure the Application file is set to application.apa and the Application directory (source) is set to your Longview Close application folder. For example:

```
C:\Users\Public\Documents\Longview\10\Analytics\Applications\Solutions\Longview Close
```

9. From the solutions folder, select the file **application.apa** from within the Longview folder.
10. Under options, select the **Copy modified files only** check box.

11. Make sure the “Import database content” option is not selected.



12. Click **Install**.
13. An information dialog appears confirming that the installation has been successful. Click **OK**.

Upgrading Optional Clients

Optional client upgrades include:

- Upgrading Longview Application Framework

Upgrading Longview Application Framework

If you have Longview Application Framework installed on a local machine.

To upgrade Longview Application Framework:

1. Obtain the Application Framework(x64)-v26.zip or Application Framework-v26.zip file from the location provided by Longview Support Services.
2. Extract the .zip file to the local directory where the previous version of Longview Application Framework is installed.

Uninstalling Longview

Uninstalling Longview consists of the following steps:

1. Uninstalling Longview Server
2. Uninstalling the Data Server Web Service
3. Uninstalling Longview Client

Uninstalling Longview Server

Running the uninstall process removes Longview Data Server, web components and HTTP Proxy from your system, with the option of leaving the databases and logins, or removing them as well.

To uninstall Longview Server:

1. Open Programs and Features and select Longview Server - <Instance> and click **Uninstall**. Alternatively, navigate to the install location and open the `LongviewUninstallers\<Instance>` folder and double-click **unins000.exe**.

   > **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. A confirmation prompt appears. Click **Yes**.
3. The Longview Server Uninstall window appears. Depending on what was installed in the instance some options may be disabled. Choose one of the options:

   a. 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.

   b. 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.

   c. 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.

   d. Remove local group <groupName>: If a group was created or selected with the install that is being uninstalled, this check box will be enabled. Selecting it will delete the group from Windows.

4. Click **Next**. If you chose to remove the database, a confirmation will appear. Click **Yes** to continue. The uninstall process executes.
5. The completion message appears. Click **OK**.

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. After status of the installed Data Server Web Service is checked, the Uninstall process removes the Longview Data Server Web Service.
3. When the Longview Data Server Web Service is uninstalled, the Uninstall Complete page opens. Click **Finish** to exit the wizard.

Uninstalling Lonngview Client

Client uninstalls consists of:

- Uninstalling Longview Add-In for Office

Uninstalling 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, 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>\ Documents\Longview\Office	■ Excel folder ■ AddIn.config file
C:\Users\<UserName>\AppData\ Roaming\Microsoft\Excel\XLSTART	■ Longview folder ■ LongviewExcelAddIn-packed.xll file
C:\Users\<UserName>\ AppData\Local\Apps	■ 2.0 folder **Caution:** 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.
This folder may contain other	■ This folder may contain other

Note: <UserName> is your current username

Longview Enterprise Deployment

Hardware and software requirements

Before you begin, review the Hardware and Software Requirements .

This contains information on these main topics:

- Supported client platforms
- Supported languages

For more information, refer to Supported client platforms and Supported languages

> **Note:** Third party components and versions, such as operating systems, browsers etc., no longer in mainstream support by the third-party provider are not supported by Longview as well.

Before you begin

Obtaining the Install files

The following file is required from Longview to install the Longview Components to the client machines:

- Longview Deployment-26.x.zip

The Longview Deployment-26.x.zip contains 2.msi files:

- Longview Components-26.x.msi
- Longview Add-in for Office-26.x.msi

The Longview Components-26.x.msi is used to install the following:

- Longview Client
- Longview Smart Client
- Longview Report Viewer
- Longview Launcher (Longview Analysis and Reporting, Longview Journal Entries, Longview Workflow, Longview Application Administrator, Longview Server Manager)

The Longview Add-In for Office-26.x.msi is used to install the following:

- Longview Add-In for Office

Set USE_WEB_DEPLOYMENT to FALSE

To use Enterprise Deployment, the USE_WEB_DEPLOYMENT must be set to FALSE.

You can set this parameter to FALSE using either the Server Manager or modifying directly in the lvsrvr.cfg file on the Longview Data Server.

Using Server Manager

1. Launch Longview Server Manger.
2. Right click on your server in the server explorer window.
3. Select Server Configuration.
4. Select Application under Server Configuration.
5. Deselect the Use Web Deployment checkbox.
6. Click OK to save changes.
7. Click OK to the Information dialog "You must restart the server for the changes to take effect."
8. Stop and Start the Data Servers.

Modifying in the lvsrvr.cfg file

1. Stop the Longview Data Servers
2. Open the lvsrvr.cfg file found in the config folder in the Files Custom Root Path directory.
3. Set the USE_WEB_DEPLOYMENT parameter to FALSE.
4. Save the file.
5. Start the Longview Data Servers

Installing Longview using the .msi

For more information on how to use the .msiexec, refer to Microsoft Support.

Single instance setup

If your company does not have multiple instances of Longview or the user is only required to connect to one instance of Longview then the single instance deployment can be used.

If it is required for the user to connect to multiple Longview instances, see the Multiple instance setup section.

Note: The msi install requires Administrator privileges.

1. Extract the Longview Deployment-26.x.zip
2. Open a command line with administrator privileges and navigate to either the Longview Components or Longview Add-In for Office subfolder from the extracted package.
3. Run one of the following commands:
   a. For Longview Components:

```
msiexec -lv <logfile> -i "Longview Components-26.x.msi" LVID=<lvid>
[TARGETDIR=<installdir>]
```

b. For Longview Add-In for Office:

```
msiexec -lv <logfile> -i "Longview Add-In forOffice-26.x.msi" LVID=<lvid>
[TARGETDIR=<installdir>]
```

where:

logfile is the name of the installation log file.

lvid is the Longview identifier.

installdir is optional and is the path where the files will be installed. If this parameter is not set the default location will be C:\Longview.

> **Caution:** The installdir cannot be set to a system folder, such as C:\Program Files. Doing so may cause our software to not work once installed.

4. The software is installed in a subfolder called <lvid> in the installation directory.
5. If you have installed the Longview Components, you must continue to Installing the Java JDK
6. If you have installed the Longview Add-In for Office, you must launch the first time through the Longview Dashboard or by clicking on the executable located in "<installdir>/Longview Add-In for Office\LongviewAddIn.Office.exe". Once this is completed you only need to launch Excel to see the Longview Add-In for Office.

Multiple instance setup

Since an MSI can only be installed once on a machine, you will need to run a Longview utility to generate a new MSI specific to the Longview Identifier the components will connect to.

1. Extract the Longview Deployment-26.x.zip
2. Open a command line with administrator privileges and navigate to either the Longview Components or Longview Add-In for Office subfolder from the extracted package.
3. Create the instance specific file using the following command:

```
LVMSIGenerator.exe <lvid>
```

where:

lvid is the Longview identifier.

4. Install the MSI with the newly generated .msi file using one of the following commands:
   a. For Longview Components:

```
msiexec -lv <logfile> -i "Longview Components_<lvid>-26.x.msi"
[TARGETDIR=<installdir>]
```

   b. For Longview Add-In for Office:

```
msiexec -lv <logfile> -i "Longview Add-In for Office_<lvid>-26.x.msi"
[TARGETDIR=<installdir>]
```

   where:

   logfile is the name of the installation log file.

   lvid is the Longview identifier.

   installdir is optional and is the path where the files will be installed. If this parameter is not set the default location will be C:\Longview.

> **Caution:** The installdir cannot be set to a system folder, such as C:\Program Files. Doing so may cause our software to not work once installed.

5. The software is installed in a subfolder called <lvid> in the installation directory.
6. If you have installed the Longview Components, you must continue to Installing the Java JDK
7. If you have installed the Longview Add-In for Office, you must launch the Longview Add-In for the first time either by the Longview Dashboard or by clicking on the Longview Add-In application located in "<installdir>/Longview Add-In for Office\LongviewAddIn.Office.exe". Once this is completed you only need to launch Excel to see the Longview Add-In for office.

Installing the Java JDK

The Longview Components deployment also requires the Java JDK. The Java JDK must be configured before any of these components may be used. You must obtain a supported version of the Java JDK and install using one of the following 2 methods:

Configuring the Java JDK using JDK zip

If the user does not have the JDK installed on their machine the following steps can be used to deploy the required JDK for the Longview Components:

1. Obtain a supported version of the Java JDK in .zip file format.

   Extract the Java JDK to <InstallDir>/<LVID>/Longview Launcher/Software

   where:

   InstallDir is the directory where the Longview Components were installed. If the TargetDir option was not used, then the install directory will be C:/Longview.

   LID is the Longview identifier that was specified when using the .msi isntall.

2. Rename the extracted folder JDK-<Version> found in the <InstallDir>/<LVID>/Longview Launcher/Software to be Java. For example: C:/Longview/LVClose/Longview Launcher/Software/Java

> **Caution:** Longview requires the JDK files to be in the folder Java without the JDK-<version> subfolder. If you do not rename the version folder to be Java, the Longview Components will not work

Configuring UJavaHome Attribute to find the Java JDK

If the user already has the Java JDK installed on their machine, the following steps can be used to configure Java to work with the Longview Components:

1. Set the Longview User Attribute UJavaHome to the path the JDK was extracted to.

> **Note:** If the JDK is in the same location for all users then you can set the Longview User Attribute UJavaHome default value to this location.

Upgrading Longview using the .msi

When a new version of Longview software is available, you will need to get the new version of the MSI and perform an upgrade.

Upgrade when single instance setup was used

If the previous installed MSI is a Single instance setup, follow the following steps to upgrade:

1. Extract the Longview Deployment-.zip
2. Open a command line with administrator privileges and navigate to either the Longview Components or Longview Add-In for Office subfolder from the extracted package.
3. Run the MSI for the new .msi file using one of the following commands to upgrade:
   a. For Longview Components

```
msiexec -lv <logfile> -i "Longview Components-26.x.msi" LVID=<lvid>
[TARGETDIR=<installdir>]
```

   b. For Longview Add-In for Office:

```
msiexec -lv <logfile> -i "Longview Add-In for Office-26.x.msi"
LVID=<lvid> [TARGETDIR=<installdir>]
```

   where:

   logfile is the name of the installation log file.

   lvid is the Longview identifier.

InstallDir is the directory where the Longview Components were installed. If the TargetDir option was not used, then the install directory will be C:/Longview.

Upgrade when multiple instance setup was used

If the previous installed MSI is a Multiple instance setup, follow the following steps to upgrade:

1. Extract the Longview Deployment-.zip
2. Open a command line with administrator privileges and navigate to either the Longview Components or Longview Add-In for Office subfolder from the extracted package.
3. Create the instance specific file using the following command:

```
LVMSIGenerator.exe <lvid>
```

where:

lvid is the Longview identifier.

4. Run the MSI for the newly generated .msi file using one of the following commands to upgrade:
   a. For Longview Components

```
msiexec -lv <logfile> -i "Longview Components_<lvid>-26.x.msi"
[TARGETDIR=<installdir>]
```

   b. For Longview Add-In for Office:

```
msiexec -lv <logfile> -i "Longview Add-In for Office_<lvid>-
26.x.msi" [TARGETDIR=<installdir>]
```

   where:

   logfile is the name of the installation log file.

   lvid is the Longview identifier.

   InstallDir is the directory where the Longview Components were installed. If the TargetDir option was not used, then the install directory will be C:/Longview.

Custom Links

If you want to use custom cards that have custom links to Longview software on the dashboard the following is the syntax to use when using Enterprise Deployment.

Note: Depending on your system configuration, you may need to use https instead of http

Longview Client

```
LV.Client.<%[[WEBVARIABLE,LongviewIdentifier]]%>:?LongviewIdentifier=<%
[[WEBVARIABLE,LongviewIdentifier]]%>&LongviewWebBridge=<http://<%
[[WebServer]]%><%[[WebBridge]]%>&LongviewWebSID=<%
[[WEBVARIABLE,LongviewWebSID]]%>
```

Longview Launcher

Longview Launch custom link is used to launch the Longview Application Administrator, Longview Analysis and Reporting, Longview Journal Entries, Longview Server Manager or Longview Workflow Designer.

In the sample link, replace the <LongviewComponentName> with the component you want to launch. The following are valid options:

- AnalysisReporting
- ApplicationAdministrator
- JournalEntries
- ServerManager
- Workflow

```
LV.Launcher.<%[[WEBVARIABLE,LongviewIdentifier]]%>:?LongviewIdentifier=<%
[[WEBVARIABLE,LongviewIdentifier]]%>&LongviewWebBridge=<http://<%
[[WebServer]]%><%[[WebBridge]]%>&LongviewWebSID=<%
[[WEBVARIABLE,LongviewWebSID]]%>&LongviewComponentName=<LongviewComponentNam
e>
```

Longview Report Viewer

```
LV.ReportViewer.<%
[[WEBVARIABLE,LongviewIdentifier]]%>:?LongviewIdentifier=<%
[[WEBVARIABLE,LongviewIdentifier]]%>&LongviewWebBridge=<http://<%
[[WebServer]]%><%[[WebBridge]]%>&LongviewWebSID=<%
[[WEBVARIABLE,LongviewWebSID]]%>&LongviewReportName=<ReportTemplateName>.rtp
```

Longview Smart Client

```
LV.SmartClient.<%[[WEBVARIABLE,LongviewIdentifier]]%>:?LongviewIdentifier=<%
[[WEBVARIABLE,LongviewIdentifier]]%>&LongviewWebBridge=<http://<%
[[WebServer]]%><%[[WebBridge]]%>&LongviewWebSID=<%
[[WEBVARIABLE,LongviewWebSID]]%>&LongviewApp=<AppName>.lvapp
```

Longview Add-In for Office

```
LV.AddInOffice.<%[[WEBVARIABLE,LongviewIdentifier]]%>:?LongviewIdentifier=<%
[[WEBVARIABLE,LongviewIdentifier]]%>&LongviewWebBridge=<http://<%
[[WebServer]]%><%[[WebBridge]]%&LongviewWebSID=<%
[[WEBVARIABLE,LongviewWebSID]]%>
```

Troubleshooting

There are some limitations of the Enterprise Deployment and limited error handling. Below are listed limitations you may run into, to help you troubleshoot.

Multiple instance setup

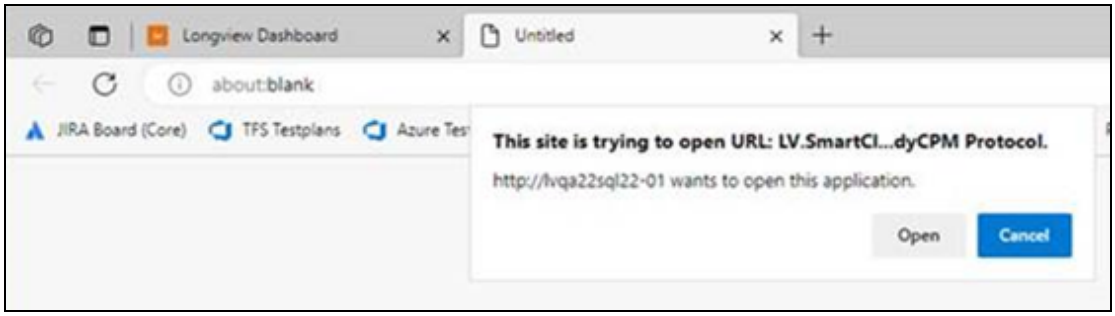
- To provide the ability to install Longview for multiple Longview instances, we needed to provide a utility to create and generate a unique .msi installer for each LVID (i.e., one per Longview instance; LongviewDev, Longview, LongviewProd, etc..) you need to install for. The .msi that is generated by the utility is not signed, since it is a generated msi from the original signed one. Therefore, when running a generated .msi, the UAC prompt (with unknown publisher) is displayed when it is not Run as Administrator.

  All the files deployed by the installer are signed.

- The install process must be Run as Administrator when running msi in quiet mode (/quiet) on cmd window. When not run as an Administrator, as the UAC prompt cannot be presented, the install will fail due to the lack of Administrator permissions.

Limited error handling in first release

- No error handling for an invalid LVID (Longview Identifier).
- No error handling on TARGETDIR for deployment if it is set to an existing installation.
- If a user tries to launch a component from the Longview Dashboard without the Longview software for the matching LVID (Longview Identifier) being installed to their machine they will get either a blank tab page, or the following popup that will close the tab when they click Open:



- If you only install the Longview Add-In for Office and not the Longview Components, nothing will happen if you try to launch the Locks or the Submission tools from Longview Add-In for Office.

Installs, uninstalls and upgrades

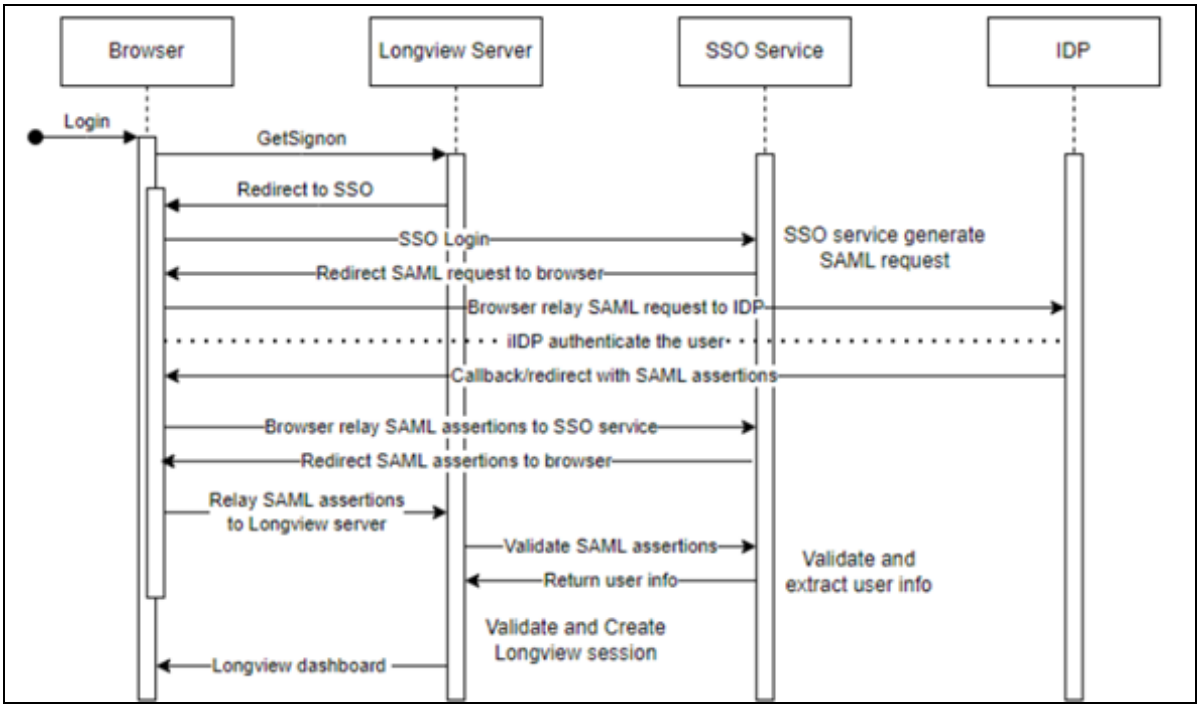
- The <installdir> cannot be set to system folders such as C:\Program Files etc. This will result in Longview not working.
- The <installdir> cannot be a mapped drive or a UNC Path.
- When installing using quiet mode (/quiet), if the LVID (Longview Identifier) is not specified, the installation will fail without a proper error message in the Install.log.
- Uninstall currently does not remove all files. Temporary files created by our software (cache, copies of .dlls, etc..) will remain.
- The install process must be Run as Administrator when running msi in quiet mode (/quiet) on cmd window. When not run as an Administrator, as the UAC prompt cannot be presented, the install will fail due to the lack of Administrator permissions.
- The uninstall for the Longview Add-In for Office only removes the "stub" that was installed to handle the launching of the Addin (this was previously the ClickOnce stub)

Longview SSO Service Installation

The Longview Single Sign-On Service enables users to use SAML or OpenID/OAuth protocols for their Single Sign on solution. The Single Sign-On Service can be shared between your multiple instances of Longview and does not need to be installed on the same machine as your Longview Servers.

The following diagram shows you how the SAML authentication flow works with Longview:

SAML Authentication Flow Diagram



Installing Longview Single sign-on Service

The following steps are to be done on the server that will host the Longview single sign-on service:

1. Download and install Node.js, version v20.12.2 (LTS) or later, from the npm website.
2. Create a folder to setup the Longview single sign-on in, for example `C:\Longview\SSO`.
3. Unzip the Longview SSO Service .zip into the folder created in the previous step.
4. Rename `config_template.json` to `config.json`
5. Open the `config.json` and set the parameters as listed below.
6. Once the changes have been made, save, and close the `config.json` file.

Settings for all configuration types

Parameter	Description
relayUrls	Specify the URL to the Longview Servers' web bridge that are going to use single sign-on authentication. Example: `"https://srvr2039/cgi-bin/LVTaxPrd/lvweb.cgi"` This parameter supports multiple URLs. You can add the Longview Data server web bridge for the additional Longview data servers that will use this Longview SSO service. Only Longview Servers with URL registered in the list can authenticate against the SSO service
port	This is the port the Longview SSO service will use to communicate on. The default is 4000.
refreshSchedule	This is an optional parameter. If it is not set it will be ignored. This parameter schedules a job at a specified time to refresh the services configuration, ensuring that any changes take effect. The value of this parameter must be set using cron-style scheduling. For example, 1 refresh every 10 minutes would be set to: `0 */10 * * * *` For more information on cron-style schedule syntax, refer to https://www.npmjs.com/package/node-schedule

Settings for Proxy

Parameter	Value
URL	This is an optional parameter that only needs to be set if the host environment of the Longview SSO service enforces all outbound HTTP/HTTPS requests to route through a proxy server. If your company requires all outbound traffic to go through a proxy, specify the proxy server address. This allows the Longview SSO service to successfully communicate with the external Identity Provider (IDP). For example: "http://proxy.company.com:3128" ▪ If no proxy is required, leave this parameter blank.

Settings for SAML

Parameter	Value
metadataFile	Specify the name of the metadata xml that was created from the IDP Provider. The metadata file must exist in the Longview SSO root directory. Example: `LongviewSAML.xml` **Note:** The Longview SSO Service will either use metadataFile or metadataUrl, if both are set then the metadataFile will be used.
MetadataUrl	Specify the URL to the IDPs metadata. It is best practice to use the metadataUrl over the metadataFile to ensure that the latest metadata is always being used. **Note:** The Longview SSO Service will either use metadataFile or metadataUrl, if both are set then the metadataFile will be used.
idKey	idKey uses the IDP application attribute that will be mapped to the Longview username. Longview recommends using the email attribute and is the default value if not specified. If your IDP application require a different attribute to be used, set this parameter to the required attribute.
issuer	Set this parameter to the Audience Restriction set on the IDP SAML Application. Example of how this could be set is: `https://srvr1201sql01.domain.com/sso`
callbackUrl	Set this parameter to the Longview SSO service callback URL. For example: `"https://srvr1201sql01.domain.com/sso/login/callback"`
wantAssertionsSigned	These parameters are optional parameters that you can modify to match your SAML IDP Application setup if you are using this additional functionality. If not, you can just leave these as their defaults.
wantAuthnResponseSigned	
failureFlash	
failureMessage	
failureRedirect	

Settings for OpenID

Parameter	Description
issuer	Set this parameter to the IDP URL. Example: `"https://okta.com/oauth2/default"`
client_id	Set this to the OpenID application ID. Example: `"0oagmxfz3aoTCyPUc5d7"`
Redirect_uri	Set this parameter to the Longview SSO service callback URL. For example: `"https://srvr1201sql01.domain.com/sso/login/callback"`
idKey	idKey uses the IDP application attribute that will be mapped to the Longview username. Longview recommends using the email attribute and is the default value if not specified. If your IDP application require a different attribute to be used, set this parameter to the required attribute.

Settings for OAuth

Parameter	Value
issuer	Set this parameter to the IDP URL. Example: `"https://okta.com/oauth2/default"`
idKey	idKey uses the IDP application attribute that will be mapped to the Longview username. Longview recommends using the azp attribute and is the default value if not specified. If your IDP application require a different attribute to be used, set this parameter to the required attribute.
audience	This is an optional parameter and only needs to be set if your using this feature in IDP application.
scope	This is an optional parameter to define the permissions of the access token. Use this feature if you have defined a scope in your app api and want to restrict the permissions of the application. **Note:** Longview Single Sign-on Service only supports one application scope. If you want to use multiple applications with a different scope for each Data server then you will need to install multiple Longview SSO Services.

9. Open the `install.js` and replace `<sso-root>` with the root directory of your Longview SSO Service, for example, `C:\\Longview\\sso`

Note: If you want to change the name and description the Service that will be installed, you can also modify the name and description. For example you installing a second Longview SSO Service on the same machine.

10. Open a command line with Administrator privileges.
11. Run the following commands from the Longview SSO Service root directory:

```
npm install
node install.js
```

Note: To uninstall the Longview SSO Service run the following in the command line with Administrator privileges:

```
node uninstall.js
```

Setting up Longview SSO proxy

1. On the SSO web server, install Microsoft's Application Request Routing extension for IIS. You can download this extension from: http://www.iis.net/downloads/microsoft/applicationrequest-routing
2. On the SSO web Server, open Internet Information Services (IIS) Manager.
3. In the Connections pane, select the Web Server Root.
4. In the content pane, double click Configuration Editor.
5. Select `system.webServer/proxy`
6. Set `preserveHostHeader` to `True` and click Apply to save the changes.
7. In the Connections pane, navigate to, and select the appropriate web server.
8. In the content pane, double click URL Rewrite.
9. In the Action pane, click Reverse Proxy.
10. Enter `localhost:4000` in the Inbound Rules edit box.

    Note: Localhost could be set to the Longview Web Server if it's not on the same machine as the Longview SSO Service.

    4000 is the default port used for setup, if you provided a different port during setup then specify the port that was used.

11. Click OK to save.
12. Double click on the rule that was created to modify it.

13. Update the Pattern to contain `sso/(.*)`
14. Click Apply to save then changes, and then click Back to Rules to return to the contents window.

Longview SSO Service Version Verification

To verify the Longview Single Sign-On (SSO) service version, please follow the steps below:

1. Navigate to the folder where you set up the Longview SSO Service (for example, C:\Longview\SSO). For more information, refer to Installing Longview Single Sign-On Service.

2. Open the sso.log file.

3. In the sso.log file, locate the Longview SSO Service version number, which is logged during the service startup.

Configuring the Longview Data Servers

1. Open the `lvsrvr.cfg` for the Longview Data Servers that will use single sign-on authorization.
2. Set the following and save the `lvsrvr.cfg`.

Parameter	Value

SSO_SERVICE_URL	Set to the URL to the Longview SSO Web Service. The URL will either be setup for saml or openid.
	For example:
	SAML:
	`https://srvr1201sql01.domain.com/sso/saml`
	OpenID:
	`https://srvr1201sql01.domain.com/sso/openid`

3. Restart the Longview Data Servers for the changes to take effect.

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.

Note: You may need to revisit the manual configuration file during implementation or during regular system maintenance.

For information on recommended configuration settings, see Updating the Longview Data Server Configuration File.

To configure your Longview Data Server:

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

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

4. Review the parameters.

The following tables list the parameters in the configuration file. The **Mapped UI Option in Longview Server Manager** column in the tables identifies the parameters that you can also configure via the Server configuration page of Longview Server Manager. For those parameters, see Server Configuration for detailed explanation about its usage.

General server parameters

Parameter	Value
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).

Parameter	Value
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.

Application Logic Switches

Parameter	Mapped UI Option in Longview Server Manager	Value	Description
ACCOUNTING_NDD	Application > N-dimensional distribution (NDD)	TRUE or FALSE Default: FALSE	Specifies whether to use N-Dimensional Distribution in this system. For more information, see N-Dimensional Distribution.
ACCOUNTING_PAC	Application > Period activity calculation (PAC)	TRUE or FALSE Default: FALSE	Specifies whether to use Period Activity Calculation logic in this system. For more information, see Period Activity Calculation.
ACCOUNTING_REC	Application > Retained earnings calculation (REC)	TRUE or FALSE Default: FALSE	Specifies whether to use Retained Earnings Calculation logic in this system. For more information, see Retained Earnings Calculation.
ACCOUNTING_TRN	Application > Foreign exchange (TRN)	TRUE or FALSE Default: FALSE	Specifies whether to use data translation in this system. For more information, see Translation.
ACCOUNTING_YTD	Application > Year to date calculation (YTD)	TRUE or FALSE Default: FALSE	Specifies whether to use accounting year-to-date (YTD) logic in this system. For more information, see Year-to-date.

Parameter	Mapped UI Option in Longview Server Manager	Value	Description
DO_ ELIMINATIONS	Application > Intercompany eliminations (Elim)	TRUE or FALSE Default: FALSE If you use TRUE for this parameter, you must also set USE_JOURNAL_ ENTRIES to TRUE.	Specifies whether to use the Elimination Server in this system.
USE_DATA_ CACHE	Recalculation > Store calculated data in cache files	TRUE or FALSE Default: FALSE	Specifies whether to store calculated data in cache files. ■ TRUE — Stores calculated data in cache files. ■ FALSE — Loads all data to the database.
USE_AGENT_ DATA_CACHE	Recalculation > Use agent data cache	TRUE or FALSE Default: FALSE	Specifies whether to store the data cache for agents and web agents in RAM. ■ TRUE — Stores the data cache for agents and web agents in RAM. ■ FALSE — Stores the data cache for agents and web agents in the KSA along with other server data caches.
USE_JOURNAL_ ENTRIES	Application > Journal entries	TRUE or FALSE Default: FALSE If the value of DO_ ELIMINATIONS is TRUE, the value for this parameter must also be TRUE.	Specifies whether to use the Journal Entry Server in this system.
USE_MODEL	Application > Model rules	TRUE or FALSE Default: TRUE	Specifies whether to use server model rules in this system.

Parameter	Mapped UI Option in Longview Server Manager	Value	Description
USE_QUERY_ RULES	Application > Query rules	TRUE or FALSE Default: TRUE	Specifies whether to use query rules in this system.
USE_ROLLUP_ RULES	Application > Rollup rules	TRUE or FALSE Default: TRUE When this parameter is set to TRUE, the calculation of data areas is subject to INCLUSION or EXCLUSION as set in the ROLLUP_RULES_ METHOD parameter.	Specifies the rollup rule method, in conjunction with the **Rollup rules** parameter. ■ TRUE — Only the DataArea specified by a rollup rule rolls up. All other areas of the database do not roll up to their parents. ■ FALSE — All areas of the database roll up, except for those specified by a rule. Areas specified by a rule do not roll up to their parents.
USE_VALIDATION	Application > Validation rules	TRUE or FALSE Default: TRUE	Specifies whether to use validation rules in this system.
USE_TRN_ ROUNDING	Application > Round foreign exchange results	TRUE or FALSE Default: FALSE If this parameter is specified as TRUE, ACCOUNTING_TRN must also be specified as TRUE.	Specifies whether to use translation rounding in the system. If this parameter is set to TRUE, **Foreign exchange (TRN)** must also be set to TRUE.
USE_RDBMS_ TEMPTABLES	System > Use RDBMS temporary tables	TRUE or FALSE Default: FALSE	Specifies whether the system uses Oracle Global Temporary temp tables instead of regular temp tables (for Oracle databases only).
USE_GRID_ PROCESSING	Recalculation > Use grid processing	TRUE or FALSE Default: FALSE	Specifies whether grid processing should be used when running restatements.

Parameter	Mapped UI Option in Longview Server Manager	Value	Description
GRID_ PROCESSING_ TYPE		If USE_GRID_ PROCESSING 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	Specifies whether grid processing should be used when running restatements.
USE_WEB_ DEPLOYMENT	Application > Use web deployment	TRUE or FALSE Default: TRUE	Specifies whether to deploy the Longview components using Web Deployment or Enterprise Deployment. ■ TRUE - Deploys the Longview components using ClickOnce. ■ FALSE - Uses Enterprise Deployment to install and upgrade the Longview components. **Note:** Enterprise Deployment is not supported with legacy dashboard.

Parameter	Mapped UI Option in Longview Server Manager	Value	Description
USE_MEMORY_CACHE	System > Use memory cache	TRUE or FALSE Default: FALSE	Specifies whether to enable caching data in memory if the MemoryCacheSizes.cfg file is present in the location specified by the **Memory cache files location** parameter. **Note:** Longview recommends caching data in memory only as part of a full-system performance strategy. Review Caching Data in Memory before implementing this feature.
USE_FLOWS	Application > Use flows	TRUE or FALSE Default: FALSE	Specifies whether to use FLOWS dimension in this system.
USE_WORKFLOW	Application > Workflow	TRUE or FALSE Default: FALSE	Specifies whether to enable Longview Workflow.
USE_JE_WORKFLOW	Application > Use journal entry workflow	TRUE or FALSE Default: FALSE If this parameter is set to TRUE, the value of USE_JOURNAL_ENTRIES must also be TRUE.	Specifies whether users receive emails notifying them of journal entry activity. ■ TRUE — Sends users notification emails. If this parameter is selected, **Journal entries** must also be selected. ■ FALSE — Disables email notifications.
USE_EVENT_RULES	Events & data monitoring > Use event rules	TRUE or FALSE Default: TRUE	Specifies whether to enable Event-based rules in this system.

Parameter	Mapped UI Option in Longview Server Manager	Value	Description
DELTA_MATH_LOGIC	Application > Perform calculations on delta values	TRUE or FALSE Default: TRUE	Specifies whether the system uses deltas when processing math logic to eliminate rounding errors caused by using the delta values for math processing. ■ TRUE — The system uses the difference in the deltas for math processing. ■ FALSE — The system zeroes out the area to which users are submitting data, and then submits the new value.
ROLLUP_RULES_METHOD	Application > Use inclusion method for rollup rules	INCLUSION or EXCLUSION Default: EXCLUSION This parameter works in conjunction with the USE_ROLLUP_RULES parameter	Specifies the rollup rule method, in conjunction with the **Rollup rules** parameter. ■ TRUE — Only the DataArea specified by a rollup rule rolls up. All other areas of the database do not roll up to their parents. ■ FALSE — All areas of the database roll up, except for those specified by a rule. Areas specified by a rule do not roll up to their parents.

Parameter	Mapped UI Option in Longview Server Manager	Value	Description
USE_SESSION_LOCKS	Application > Session locks	TRUE or FALSE Default: TRUE	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.
USE_DATA_AUDIT_TRAIL **Note:** This parameter is now stored in the database and must be set in the Longview Server Manager from version 25.2.	Application > Data audit trail	TRUE or FALSE Default: FALSE	Specifies 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.

Parameter	Mapped UI Option in Longview Server Manager	Value	Description
USE_DATA_ AREA_ MONITORING	Events & data monitoring > Data area monitoring	TRUE or FALSE Default: FALSE If you set this parameter to TRUE, you must specify at least one dimension for DATA_AREA_ MONITORING_ DIMENSIONS. Optionally, you can also specify a dimension for data area status tracking via DATA_ AREA_STATUS_ DIMENSION.	Specifies whether to track and store batch and event activity for a given data area. If you set the value to TRUE for this parameter, you must specify at least one dimension for **Data area monitoring dimensions**. Optionally, you can also specify a dimension for report status tracking (**Data area status dimension**).
USE_METADATA_ AUDIT_TRAIL	Application > Metadata audit trail	TRUE or FALSE Default: FALSE	Specifies whether metadata audit trail is enabled in this system. Metadata audit trail captures metadata changes in the system, such as user and group maintenance, symbol maintenance and attribute maintenance. The changes are stored in the LV_AUDIT_ METADATA table. This table can grow, and it is recommended that this table is archived occasionally.
USE_DATA_ EVENT_ SEQUENCING	Events & data monitoring > Data event sequencing	TRUE or FALSE Default: FALSE If you use data event sequencing, the DEFAULT_ACTIONS_ TIME_INTERVAL parameter is ignored.	Specifies whether to use sequencing for events. If you use data event sequencing, the **Default actions time interval** setting is ignored. For more information on data event sequencing, see the Longview Application Administrator Guide.

General System Parameters

Parameter	Mapped UI Option in Longview Server Manager	Value
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	System > Database server	Identifies the name of the server on which the database is hosted. The maximum length for this parameter is 253 characters. If it is not set, the default is "localhost".
DATABASE_ PORT		Specify the port through which the Longview Data Server connects to the database. This parameter applies to PostgreSQL environments only. If it is not set, the default value is 5432.
DATABASE_ NAME		Specify the name of the database for PostgreSQL environments. By default, this value is blank and must be updated to specify the target PostgreSQL database.
LISTENER_PORT	System > Server 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	Recalculation > Grid listener port	This parameter applies when GRID_PROCESSING_TYPE is LVGRID.
WEB_AGENT_ PROTOCOL	Web > Web agent protocol	IPC (shared memory) or TCP (TCP/IP) Default: IPC
SMTP_SERVER	System > SMTP server	If you are using email notification, specify the name of the SMTP server.
COMPRESS_ WEB_CONTENT	Web > Compress web content	TRUE or FALSE Default: TRUE
GRID_SERVICE_ NAME	Recalculation > Grid service name	This parameter applies only when GRID_PROCESSING_TYPE is set to DATASYNAPSE.

Parameter	Mapped UI Option in Longview Server Manager	Value
WRITER_ ASYNC_IO	Recalculation > Writer async IO	This parameter applies when the value of WRITER_SERVER_ RAM is a positive integer. Default: TRUE
APPLICATION_ SERVER	System > Application server	Maximum length: 253 characters
WEB_SERVER	System > Web server	Maximum length: 253 characters
CLIENT_HTTP_ PROXY	Web > Client HTTP proxy server	For example: "https://srvr1201sql01:8080/listenerportproxy/"
ADMIN_HTTP_ PROXY	Web > Admin HTTP proxy server	For example: "https://srvr1201sql01:8080/adminportproxy/"
LOCAL_ADMIN_ GROUP		Specify the name of a Windows local group to use to stop and start the Longview Servers. If the group name contains a space, it must be enclosed in double quotes. Local Admin Group will not work with a Windows default local group.
ALTERNATE_ SYSTEM_ LANGUAGE	System > Alternate system language	EN or FR Default: FR
SSO_SERVICE_ URL	User security > SSO service url	For example: ■ For SAML: "https://srvr1201sql01.domain.com/sso/saml" ■ For OpenID: "https://srvr1201sql01.domain.com/sso/openid"

File Location

Parameter	Mapped UI Option in Longview Server Manager	Value
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.
JAVA_FILENAME	System > Java file name	For example: "openjdk-16_windows-x64_bin.zip"
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	Web > Web server bridge	Default: "/cgibin/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.

Parameter	Mapped UI Option in Longview Server Manager	Value
APPLICATION FRAMEWORK_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.
PASSWORD_DICTIONARY_ LOCATION	User security > Password dictionary location	This parameter applies only when PASSWORD_COMPLEXITY is set to TRUE.
MEMORY_CACHE_LOCATION	System > Memory cache files location	This parameter applies only when USE_ MEMORY_CACHE is set to TRUE.

System Maximums

Parameter	Mapped UI Option in Longview Server Manager	Value
ELIM_QUEUE_MAX	System limits > Elimination queue	Value range: 32 to 100000000 Default: 500
MATH_QUEUE_MAX	System limits > Math queue	Value range: 32 to100000000 Default: 10000
MAX_DATA_LOCKS	System limits > Maximum base data locks	Value range: 100 to 100000000 Default : 500
MAX_MATH_ITERATIONS	System limits > Math iterations	Value range: 100 to 100000000 Default: 500

Parameter	Mapped UI Option in Longview Server Manager	Value
MAX_SCHEDULE_LOCKS	System limits > Maximum schedule data locks	Value range: 100 to 100000000 Default: 100
MAX_SCHEDULES	System limits > Maximum schedules	Value range: 1 to 5000 Default: 100
MAX_HOMEPAGE_LOCKS	System limits > Maximum homepage	Value range: 1 to 1024 Default: 1024
MAX_WEBPANELS_LOCKS	System limits > Maximum panels	Value range: 1 to 4096 Default: 1024
MAX_SESSIONS	System limits > Maximum sessions	Value range: 8 to 100000000 Default: 2000
SUBMISSION_QUEUE_MAX	System limits > Submission queue	Value range: 32 to 100000000 Default: 500
WRITER_QUEUE_MAX	System limits > Writer queue	Value range: 32 to 100000000 Default: 50000
EVENT_QUEUE_MAX	Events & data monitoring > Event queue max	Value range: 32 to 100000000 Default: 5000
GRID_CURSORS_MAX	Recalculation > Grid cursors maximum	Value range: 1 to 12 Default: 4
GRID_OUTPUT_MAX_THREADS	Recalculation > Grid output maximum threads	Value range: 1 to 80 Default: 5

Parameter	Mapped UI Option in Longview Server Manager	Value
MAX_FILE_ATTACHMENT_SIZE	System limits > Maximum file attachment size	Value range: 5 to 25 Default: 20
MAX_PERSISTENT_EVENTRULES	Events & data monitoring > Maximum persistent event rules	Value range: 0 to 999 Default: 999
MAX_DATA_EVENT_ITERATION_TIME	Events & data monitoring > Maximum data event iteration time	Value range: 0 to 1440 Default: 2:00
DATA_CACHE_COMPRESSSION_LEVEL	System limits > Data cache compression level	Value range: 1 to 9, where 1 corresponds to the best speed and 9 corresponds to the best compression. Default: 6

Query Tuning

Parameter	Mapped UI Option in Longview Server Manager	Value
DATA_FETCH_SIZE	Performance > Query fetch size	Value range: 1000 to 1024000 Default: 96000
STRING_DATA_FETCH_SIZE	Performance > Query string data fetch size	Value range: 1000 to 16000 Default: 2500
RANGE_CONVERSION_LIMIT	Performance > Range conversion limit	Numeric value (0 to 16) or AUTO Default: 0

Parameter	Mapped UI Option in Longview Server Manager	Value
RANGE_CONVERSION_MAX	Performance > Range conversion max	Value range: 1 to 32000 Default: 32000
IN_CLAUSE_MAX	Performance > In clause max	Value range: 10 to 32000 Default: 10
GATHER_ORACLE_STATISTICS	Performance > Gather Oracle statistics	This parameter applies only to Oracle systems. Default: FALSE
MAX_QUERY_RULE_DATA	Performance > Maximum query rule data	Value range: 0 to 1000000000 Default: 0 (unlimited)

Submission Tuning

Parameter	Mapped UI Option in Longview Server Manager	Value
WRITER_BATCH_SIZE	Performance > Writer batch size	Value range: 500 to 1000000000 Default: 50000
WRITER_HASH_VALUE	Performance > Writer hash value	Value range: 1 to 256 Default: 1
TEMP_BATCH_SIZE	Performance > Temp batch size	Value range: 200 to 1000000000 Default: 5000

Restatement/Import/Export Parameters

Parameter	Mapped UI Option in Longview Server Manager	Value
COMPRESS_TEMP_FILES	Recalculation > Compress temporary files	TRUE or FALSE Default: TRUE
EXTERNAL_LOAD	Recalculation > Load data table externally	TRUE or FALSE Default: FALSE
JE_RECALC_FETCH_SIZE	Recalculation > JE recalculation batch size	Value range: 1000 to 128000 Default: 25000
MAX_EXPORT_FILE_SIZE	System limits > Maximum export file size	Value range: 1024 to 2097151 Default: 2097151
RECALC_FILE_DELIMITER	Recalculation > File delimiter	This parameter applies only when RECALC_FILE_TYPE is set to DELIMITEDASCII. Default: {
RECALC_FILE_TYPE	Recalculation > File type	BINARY or DELIMITEDASCII Default: BINARY

Parameter	Mapped UI Option in Longview Server Manager	Value
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 are 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”. The default value for this parameter is "C:\Longview\DataServers\LID\recalc", where LID is the Longview Identifier for the system.
RECALC_HASH_ DIMENSION	Recalculation > Hash dimension	Valid dimension name or AUTO Default: AUTO
RECALC_HASH_VALUE	Recalculation > Hash value	Value range: 1 to 256 Default: 32

System Policies

Parameter	Mapped UI Option in Longview Server Manager	Value
AGENT_IDLE_TIMEOUT	Timeouts > Agent idle timeout	Value range: 1 to 1440 Default: 120
WEB_IDLE_TIMEOUT	Timeouts > Web idle timeout	Value range: 5 to 1440 Default: 120
WEB_IDLE_TIMEOUT_ WARNING	Timeouts > Web idle timeout warning	Value range: 0 to 1440 (must less than the value set for WEB_IDLE_TIMEOUT) Default: 10
LISTENER_ASSIGNMENT_ TIMEOUT	Timeouts > Listener assignment timeout	Value range: 0 to 120 (setting to 0 will wait for agent/web agent's reply infinitely) Default: 30
WEB_VIEWACTION_ TIMEOUT	Timeouts > Web viewaction timeout	Value range: 0 to 1440 Default: 0 (web requests can run for an unlimited amount of time)
CLIENT_KEEPALIVE_TIME	Timeouts > Client keepalive timeout	Value range: 0 to 1440 Default: 0 (client sockets do not send TCP keepalive packets)

Parameter	Mapped UI Option in Longview Server Manager	Value
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

Parameter	Mapped UI Option in Longview Server Manager	Value
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	System > Server error action	IGNORE or WARNING Default: WARNING
SERVER_TIMEOUT	Timeouts > Server timeout	Value range: 1 to 120 Default: 10
PASSWORD_COMPLEXITY	User security > Password complexity checking	TRUE or FALSE Default: TRUE When this parameter is set to FALSE, passwords are still restricted by the value set for PASSWORD_MINIMUM_LENGTH.
PASSWORD_MINIMUM_LENGTH	User security > Password minimum length	Value range: 1 to 63 Default: 8
PASSWORD_EXPIRY	User security > Password days before expiry	Value range: 1 to 10000 Default: 30
PASSWORD_EXPIRY_WARNING	User security > Password days before warning	Value range: 1 to 10000 Default: 5

Parameter	Mapped UI Option in Longview Server Manager	Value
PASSWORD_ FORCECHANGE	User security > Password force change after creating or resetting	TRUE or FALSE Default: TRUE
PASSWORD_DAYS_ BEFORE_REUSE	User security > Password number of days before reusing	Value range: 0 to 3650 Default: 1
PASSWORD_CHANGES_ BEFORE_REUSE	User security > Password number of changes before reuse	Value range: 0 to 1000 Default: 1 A password cannot be reused until both the number of days set in PASSWORD_DAYS_ BEFORE_REUSE and the number of changes set in PASSWORD_CHANGES_ BEFORE_REUSE has been exceeded.
PASSWORD_FAIL_ ATTEMPTS	User security > Password failed attempts before lockout	Value range: 1 to 100 Default: 3
ACCOUNT_LOCK_TIME	User security > Account lock time	Value range: 0 to 1440 (when set to 0, the account is locked until the administrator resets the password) Default: 10
ENABLE_PASSWORD_ RESET	User security > Enable password reset	TRUE or FALSE Default: FALSE
PASSWORD_RESET_ EMAIL_ADDRESS	User security > Password reset email address	This parameter applies only if ENABLE_PASSWORD_ RESET is set to TRUE. Default: "lvWebAgent@longview.com"
PASSWORD_RESET_ EMAIL_DESCRIPTION	User security > Password reset email description	This parameter applies only if ENABLE_PASSWORD_ RESET is set to TRUE. Default: "Longview Web Agent"

Parameter	Mapped UI Option in Longview Server Manager	Value
PASSWORD_RESET_TIME_LIMIT	User security > Password reset time limit	This parameter applies only if ENABLE_PASSWORD_RESET is set to TRUE. Value range: 0 to 1440 Default: 60
WEB_IP_SECURITY	Web > Web IP security	TRUE or FALSE Default: FALSE
WEB_COOKIE_SECURITY	Web > Web cookie security	TRUE or FALSE Default: TRUE
TICKET_SECURITY	Web > Ticket security	TRUE or FALSE Default: FALSE
TICKET_TIMEOUT	Web > Ticket security timeout	Value range: 2 to 10 Default: 2
WEB_HTTPS	Web > Web HTTPS	TRUE or FALSE Default: FALSE
DEFAULT_ACTIONS_TIME_INTERVAL	Events & data monitoring > Default actions time interval	This parameter applies only if USE_DATA_EVENT_SEQUENCING is FALSE. Value range: 0 to 1440 Default: 00:05
DATABASE_RECONNECT_TIMEOUT	Timeouts > Database reconnect timeout	Value range: 0 to 60 Default: 10
DATABASE_INITIATION_TIMEOUT	Timeouts > Database initiation timeout	Value range: 0 to 60 Default: 10
DATA_AREA_MONITORING_DIMENSIONS	Events & data monitoring > Data area monitoring dimensions	This parameter applies only if USE_DATA_AREA_MONITORING is set to TRUE. Comma-delimited list of dimensions (spaces are not supported) For example: Accounts,Entities,TimePer

Parameter	Mapped UI Option in Longview Server Manager	Value
DATA_AREA_STATUS_DIMENSION	Events & data monitoring > Data area status dimension	This parameter applies only if USE_DATA_AREA_MONITORING is set to TRUE. The dimension must be included in those specified for DATA_AREA_MONITORING_DIMENSIONS. For example, Entities.
AUTO_ARCHIVE_LOG_SIZE	System limits > Auto archive log size	Value range: 0 to 400 (when set to 0 the lv_dataserver.log will not auto archive) Default: 50

Diagnostics

Note: From version 25.2, please refer to the Diagnostics page in the Longview Server Manager guide since the Diagnostics section no longer applies in 25.2 to the lvsrvr.cfg file.

The following table includes parameters with their Mapped UI option in Longview Server Manager and the respective values:

Parameter	Mapped UI Option in Longview Server Manager	Value
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.

Parameter	Mapped UI Option in Longview Server Manager	Value
WEB_TRACE_FILE_ LOCATION		This parameter is valid only when ENABLE_WEB_TRACE is set to TRUE. Specify the full path name of the output trace file, which must be 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, consult Support Services at Longview. The default location is "C:\longview\dataservers\LID\tmp".
DIAGNOSTIC_SERVICE_ TRACKING	Diagnostics > Service tracking	TRUE or FALSE Default: FALSE
DIAGNOSTIC_SERVICE_ DETAIL	Diagnostics > Service detail	TRUE or FALSE Default: FALSE
DIAGNOSTIC_SERVICE_ LOGGING	Diagnostics > Service logging	TRUE or FALSE Default: FALSE
DIAGNOSTIC_QUERY_ STATISTICS	Diagnostics > Query statistics	TRUE or FALSE Default: FALSE.
DIAGNOSTIC_QUERY_ LOGGING	Diagnostics > Query logging	TRUE or FALSE Default: FALSE
DIAGNOSTIC_RDBMS_ LOGGING	Diagnostics > RDBMS logging	TRUE or FALSE Default: FALSE.
DIAGNOSTIC_EVENT_ PROFILING	Diagnostics > Event profiling	TRUE or FALSE Default: FALSE

Partitioning

Parameter	Value
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.

Memory Configuration

Parameter	Mapped UI Option in Longview Server Manager	Value
DATA_CACHE_RAM	Memory & pooling > Data cache	Value range: 1024 to 2048000 (in KB) Default: 102400
HIER_SERVER_RAM	Memory & pooling > Hierarchy server memory	Value range: 1024 to 1245184 (in KB) Default: 10240

Parameter	Mapped UI Option in Longview Server Manager	Value
MATH_NDD_RAM	Memory & pooling > NDD memory	This parameter applies only if ACCOUNTING_NDD is set to TRUE. Value range: 1024 to 2048000 (in KB) Default: 1024
MATH_SERVER_RAM	Memory & pooling > Math server memory	Value range: 1024 to 2097151 (in KB) Default: 102400 Optimal: 262144
MATH_TRN_RAM	Memory & pooling > Foreign exchange memory	This parameter applies only if ACCOUNTING_TRN is set to TRUE. Value range: 1024 to 1024000 (in KB) Default: 10240
MODEL_SERVER_RAM	Memory & pooling > Rules	This parameter applies only if USE_MODELS is set to TRUE. Value range: 10 to 102400 (in KB) Default: 10240

Parameter	Mapped UI Option in Longview Server Manager	Value
WRITER_SERVER_RAM	Memory & pooling > Writer memory	This parameter applies only if WRITER_ASYNC_IO is set to TRUE. Value range: 10240 to 2097151 (in KB) Default: 102400

Scaling

Note: Scaling is not currently supported.

Parameter	Value
CONTROLLER_HOST	Specify the name of the controller host.
CONTROLLER_PORT	Specify the port used by the controller.
CONTROLLER_URL	Specify the URL of the controller.
USE_ENGINES_RECALCMATH	Specify whether this controller is used for math recalculation jobs. ■ TRUE — This controller can process math recalculation jobs. ■ FALSE — This controller does not process math recalculation jobs. The default value for this parameter is FALSE.
USE_ENGINES_EVENTS	Specify whether this controller is used for event processing. ■ TRUE — This controller can process events. ■ FALSE — This controller does not process events. The default value for this parameter is FALSE.

Pooling

Parameter	Mapped UI Option in Longview Server Manager	Value
AGENT_POOL	Memory & pooling > Number of server agents	Value range: 0 to 250 Default: 40
WEB_AGENT_POOL	Memory & pooling > Number of web agents	Value range: 0 to 250 Default: 40
JE_WORKERS	Memory & pooling > Number of journal entry workers	This parameter applies only if USE_JOURNAL_ENTRIES is set to TRUE. Value range: 1 to 100 Default: 1
MATH_POOL	Memory & pooling > Number of math servers	Value range: 1 to 100000 Default: 1 Optimal: number of CPUs
SUBMISSION_POOL	Memory & pooling > Number of submission servers	Value range: 1 to 100000 Default: 2

Parameter	Mapped UI Option in Longview Server Manager	Value
WRITER_POOL	Memory & pooling > Number of writer servers	Value range: 1 to 100000 Default: 2 Optimal: large as possible
MAX_ACTIVE_DATA_EVENTS	Events & data monitoring > Maximum active data events	Value range: 0 to 999 Default: 999

Appendix B: The Installation Configuration File

If you are using the silent installer option, you may want to modify values provided in the sample configuration file or use values other than (Default) for some of the parameters.

The following tables explain each parameter, its valid values, and its default value.

Note: If using accented characters you must use either ANSI or UTF 16 LE encoding when creating editing the .ini file.

Setup parameters

Parameter	Values	Notes
Lang	English	
Dir	Target folder for installation files	Spaces are not allowed in the path
Group	(Default)	
NoIcons	0	
SetupType	Full	
Components	(Default)=database,executables,web database - RDBMS executables - data server proxy - HTTP proxy server web - web bridge and client components	Any combination of the values can be specified separated by a comma.
Tasks		This parameter is always blank

Instance parameters

Parameter	Values	Notes
InstanceName	(Default) = Longview	from 1 to 32 characters Any characters except those not supported in windows for directory/folder names / \ ; ? * ' < > | %
InstallType	New Upgrade	
InstallLanguages	(Default) = en en fr	Any combination of the values can be specified separated by a comma.

Dataserver parameters

Parameter	Values	Notes
LongviewID	(Default) = InstanceName or Longview if the InstanceName does not meet the requirements	from 4 to 32 characters Alphanumeric and underscore
DataServerHost	(Default) = <Device Name>	For HTTP Proxy server configuration.
DataServer AdminPort	(Default) = 27999	numeric value between 1025-65535
DataServer ListenerPort	(Default) = 28000	numeric value between 1025-65535
DataServerWeb ListenerPort	(Default) = 28001	numeric value between 1025-65535
DataServer DataSource	(Default) = LongviewIdentifier	from 1 to 32 characters Alphanumeric and all special characters except for: []{},;?*=!@\<> and space
ApplicationServer	(Default) = <Device Name>	

Data Server Configuration

Parameter	Values	Notes
DataServerConfigFIle		Name of an existing data server configuration file to use The subsequent data server configuration parameters will be ignored
JAVA_FILENAME		Name of the JRE zip file
CLIENT_HTTP_ PROXY		This parameter specifies the secure listener port URL (HttpProxyServerListenerPortURL) for your HTTP Proxy Server. This parameter should only be set if using the Longview HTTP-RPC Proxy
ADMIN_HTTP_ PROXY		This parameter specifies the secure admin port URL (HttpProxyServerAdminPortURL) for your HTTP Proxy Server. This parameter should only be set if using the Longview HTTP-RPC Proxy

Parameter	Values	Notes
FILES_CUSTOM_ ROOT_PATH	(Default)=< Dir>/<LongivewID>	This parameter specifies the location of where custom code files will be stored. For example: applications, templates, and workflow This path cannot be set to the dataservers working directory or a default folder within.
LOCAL_ADMIN_ GROUP		This parameter specifies a Windows local group to use to start and stop the Longview Servers If the group does not exist the install will create it. It will also assign the user running the install to the group if not already assigned. This is an optional parameter. **Note:** Local Admin Group will not work with a Windows default local group.

SQL SERVER Database parameters

Parameter	Values	Notes
BaseDimensions	(Default) = 8	4 to 16
ScheduleDimensions	(Default) = 3	1 to 8
Partitions	(Default) = 1	1 to 1000
DimensionNames	(Default) = ACCOUNTS|TIMEPER| ENTITIES|DIMENSION3|…| DIMENSION7	1 to 31 characters for each dimension name Alphanumeric characters and underscore
DimensionDescriptions	(Default) = Accounts|Time Periods|Entities|Dimension 3|…|Dimension 7	1 to 100 characters for each dimension description
FrenchDimension Descriptions	(Default) = Comptes|Période|Entités| Dimension 3|…|Dimension 7	1 to 100 characters for each dimension description InstallLanguages parameter must include fr for this parameter to be used.
SQLServerUse WindowsAuth	(Default)=Yes Yes No	
SQLServerUser	System if using Windows authentication	
SQLServerPassword		Leave blank if using Windows authentication

Parameter	Values	Notes
DBOUser		Name of the DBO for the Longview database If using OS Authentication enter system. The DBO Username cannot contain the pound sign (#), percent sign (%), angle brackets (< >), forward slash (/), colon (:), question mark (?), asterisk (*), double quotation mark (") or pipe (|)
DBOPassword		Password of the DBO for the Longview database If using OS Authentication, leave this blank. The DBO Password cannot contain the pound sign (#), percent sign (%), angle brackets (< >), forward slash (/), colon (:), question mark (?), asterisk (*), double quotation mark (") or pipe (|)
DatabaseViewUse DBOAuth	(Default)=Yes Yes No	Yes, to use the DBO for view access
DatabaseViewUser		Leave blank if using the DBO
DatabaseView Password		Leave blank if using the DBO
DBMS	SQL Server	
SQLServer InstanceName	(Default) = <Device Name>	<Device Name>[\Instance Name] if using instance names or the database is on a different device
DatabaseName	(Default) = lvdataserver	The Database Name cannot contain the pound sign (#), percent sign (%), angle brackets (< >), forward slash (/), colon (:), question mark (?), asterisk (*), double quotation mark (") or pipe (|)
OnDatabaseExists	(Default)=Terminate Terminate Continue	
RepoPrimaryFile	(Default) = defined by RDBMS	If parameter CloudProviderManaged is set to Yes, then this parameter will not be used
RepoBaseFile	(Default) = defined by RDBMS	If parameter CloudProviderManaged is set to Yes, then this parameter will not be used
RepoDerivedFile	(Default) = defined by RDBMS	If parameter CloudProviderManaged is set to Yes, then this parameter will not be used
RepoLogFile	(Default) = defined by RDBMS	If parameter CloudProviderManaged is set to Yes, then this parameter will not be used

Parameter	Values	Notes
ContainedDatabase	Default=No No Yes	Yes, will create the database as a contained database.
CloudProviderManaged	Default=No No Yes	Use Yes when creating the database in an Azure Managed instance. If this option is set to Yes then the following parameters are not used: ▪ RepoPrimaryFile ▪ RepoBaseFile ▪ RepoDerivedFile ▪ RepoLogFile Longview only supports Azure managed systems.

ORACLE Database parameters

Parameter	Values	Notes
BaseDimensions	(Default) = 8	4 to 16
ScheduleDimensions	(Default) = 3	1 to 8
Partitions	(Default) = 1	1 to 1000
DatabaseServer	(Default) = <Device Name>	
DimensionNames	(Default) = ACCOUNTS|TIMEPER|ENTITIES|DIMENSION3|…|DIMENSION7	1 to 31 characters for each dimension name Alphanumeric characters and underscore
DimensionDescriptions	(Default) = Accounts|Time Periods|Entities|Dimension 3|…|Dimension 7	1 to 100 characters for each dimension description
FrenchDimension Descriptions	(Default) = Comptes|Période|Entités|Dimension 3|…|Dimension 7	1 to 100 characters for each dimension description InstallLanguages parameter must include fr for this parameter to be used.
OracleUser		
OraclePassword		

Parameter	Values	Notes
DBOUser		Name of the DBO for the Longview database The DBO Username cannot contain the pound sign (#), percent sign (%), angle brackets (< >), forward slash (/), colon (:), question mark (?), asterisk (*), double quotation mark (") or pipe (|)
DBOPassword		Password of the DBO for the Longview database The DBO Password cannot contain the pound sign (#), percent sign (%), angle brackets (< >), forward slash (/), colon (:), question mark (?), asterisk (*), double quotation mark (") or pipe (|)
DatabaseViewUse DBOAuth	Yes No	Yes, to use the DBO for view access
DatabaseViewUser		Leave blank if using the DBO
DatabaseViewPassword		Leave blank if using the DBO
DBMS	Oracle	
OracleServiceName	(Default) = <Device Name>	Specify the service name for the Oracle database to connect to
TablespaceName	(Default) = LVDAT	
TablespaceDirectory	(Default) = defined by RDBMS	
TablespaceSize	(Default) = 1000	
DatabaseName	(Default) = lvdataserver	The Database Name cannot contain the pound sign (#), percent sign (%), angle brackets (< >), forward slash (/), colon (:), question mark (?), asterisk (*), double quotation mark (") or pipe (|)
OnDatabaseExists	(Default)=Terminate Terminate Continue	This setting is used to determine what the installer should do if the DBOUser defined already exists.
OnTableSpaceExists	(Default)=Terminate Terminate Continue	

Web parameters

Parameter	Values	Notes
WebType	Default=(IPC) IPC TCP	TCP can only be used when only web is defined for components parameter
WebServerHost	(Default) = <Device Name>	
WebDirectory	(Default) = C:\inetpub\wwwroot\cgi-bin\<LongviewIdentifier>	

Longview HTTP-RPC Proxy Server parameters

Parameter	Values	Notes
ProxyDirectory	(Default) = <Dir>\ProxyServers\ <LongviewIdentifier>	
ProxyClientURL		The URL to be set in the HttpProxyServerListenerPortUrl parameter of the Longview.HttpProxyServer.exe.config file. The URL must end in "/"
ProxyAdminURL		The URL to be set in the HttpProxyServerAdminPortUrl parameter of the Longview.HttpProxyServer.exe.config file. The URL must end in "/"
ProxyServiceName	(Default) = <LongviewIdentifier>Proxy	

Appendix C: Longview Database Tables

This topic contains information about the Longview database tables and objects. A database object is one of the elements of a database.

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.

Views

A view is the result set of a stored query against actual Longview tables or views. A view contains rows and columns, just like a real table, but can be used to join or display data in a different layout.

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 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.

Table name	Description
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 most of the 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).

Table name	Description
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.
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.
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.
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_LICENSES	This user table contains the user's license(s). This table is only used when Longview is configured to be on the platform.
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.

Table name	Description
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.
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 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 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.
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.

Table name	Description
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.
LV_ APPTABLES	This system table lists the App tables and views in the database. For more information, see Understanding metatables related to App tables.
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
LV_AUDIT_ METADATA	This table stores metadata changes in the system, such as user and group maintenance, symbol maintenance and attribute maintenance. The USE_ METADATA_AUDIT_TRAIL application switch must be TRUE to enable this feature.

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 metastable 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 in App tables
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 or DimensionColumn: DimensionColumnName 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 information on Longview data types, see Longview data types.

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. For information on the corresponding SQL and Oracle data types, see Longview Table security.

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 specify 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.

The following table lists the cell controls along with the valid Longview, SQL, and Oracle data types for Tables.

Cell Control	Object Type	SQL data type	Oracle data type
check box	boolean	int	number(10)
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)
drop-down list populated with users in the system	user	int	number(10)
multiple-selection list box populated with users in the system	userlist	varchar	varchar2
drop-down list populated with the dimensions in the system	dimension	int	number(10)
Longview Symbol Selector for the dimension or linked dimension column specified by DATAVALUES (for more information on DATAVALUES syntax, see Understanding metatables related to App tables.	symbol	int	number(10)
button that opens the Longview File Attachments dialog	file	varchar	varchar2

Cell Control	Object Type	SQL data type	Oracle data type
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.	autointeger	int	number(10)
read-only text box with the username of the currently connected user	autouser	int	number(10)

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 to retrieve a record. In addition, the user's read/write access to the symbol determines whether 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 application 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 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:

Table letter	Description
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:

Table letter	Description
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:

Table letter	Description
N	Numeric data.
S	String data.

The application stores data in the following tables:

Note: NNN below = 000-999

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).

Table name	Description
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.
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).

Table name	Description
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).
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).

Table name	Description
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).

Web Tables

The application stores information related to the web interface in the following tables:

Table letter	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.