

Burst Technology bt-LogAnalyzer SE[™]

Installation Guide

CONTENTS

WELCOME	3
1 SOFTWARE AND HARDWARE REQUIREMENTS	3
2 SQL DESIGN.....	3
3 INSTALLING BT-LOGANALYZER	4
3.1 STEP-BY-STEP INSTALLATION INSTRUCTIONS.....	4
3.2 RECOMMENDED INSTALLATION.....	7
3.3 CUSTOM INSTALLATION.....	11
3.4 REMOTE LOG DATA LOADER INSTALLATION	19
3.5 COMPLETING THE INSTALL	21
4 TROUBLESHOOTING	21
4.1 INSTALLING AND USING REMOTE LOG DATA LOADER COMPONENT.....	21
4.2 USING REMOTE SQL SERVER INSTANCE FOR LA SE™.....	22
4.3 ACCESSING LA SE™ USER INTERFACE REMOTELY.....	23
4.4 INSTALLING LA SE™ ON WINDOWS SERVER 2008 OR WINDOWS 7	23
4.5 RE-INSTALLING LA SE™ ALONG WITH SQL SERVER 2005 EXPRESS EDITION	23
4.6 ATTACHING PREVIOUS LA SE™ DATABASES TO A REINSTALLATION	23
5 “BASELINE” INSTALLATION SETTINGS	24
5.1 IIS OPTIONS	24
5.2 ACCOUNT RIGHTS	25
5.3 DCOM OPTIONS.....	25

Welcome

In this document, we describe how to install bt-LogAnalyzer SE™, an easy-to-use reporting tool that helps you evaluate employee Web and Email use in your organization.

The document contains the following sections.

- “Software and Hardware Requirements” — this section lists system requirements for bt-LogAnalyzer installation
- “Installing bt-LogAnalyzer” — this section provides instructions on installing and configuring the bt-LogAnalyzer software
- “Using ‘Config’ Files” – this section provides a usage guide to application’s configuration files.

1 Software and Hardware Requirements

bt-LogAnalyzer SE™ is designed to work with the following software:

- Microsoft® Windows Server 2003, Microsoft® Windows Server 2008, or Microsoft® Windows 7 with all latest service packs installed.
- Microsoft SQL Server 2005 SP3 or above. SQL Server 2005 Express Edition – a free version of Microsoft SQL Server 2005 – is shipped with the bt-LogAnalyzer installation package.

You can have Microsoft® SQL Server and bt-LogAnalyzer installed on the same machine or on different machines. If you install them on different machines, you do not need to install any portion of bt-LogAnalyzer on the machine running Microsoft® SQL Server.

2 SQL Design

Microsoft SQL Server best practices specify:

Isolate log from data at the physical disk level. When this is not possible (e.g., consolidated SQL environments) consider I/O characteristics and group similar I/O characteristics (i.e. all logs) on common spindles.

Combining heterogeneous workloads (workloads with very different IO and latency characteristics) can have negative effects on overall performance (e.g., placing Exchange and SQL data on the same physical spindles).

Always place log files on RAID 1+0 (or RAID 1) disks. This provides better protection from hardware failure and better write performance.

Note: In general RAID 1+0 will provide better throughput for write-intensive applications. The amount of performance gained will vary based on the HW vendor’s RAID implementations. Most common alternative to RAID 1+0 is RAID 5. Generally, RAID 1+0 provides better write performance than any other RAID level providing data protection, including RAID 5.

Prior to installing bt-LogAnalyzer, please make sure that:

- Microsoft® Internet Information Services (IIS) is installed on the computer where you are going to install the bt-LogAnalyzer web interface. The version of IIS should comply with the operating system running on this computer. IIS presence is not required when installing bt-LogAnalyzer in “Remote Log Data Loader” mode.
- Microsoft® ASP.Net 2.0 or 3.5 is installed on the computer where you are going to install the bt-LogAnalyzer web interface. The latest service pack for that version of ASP.Net must be installed as well.
- The LA7 services account has local admin rights.
- For Windows Server 2008 or Windows 7 operating systems, the following Windows components must be installed:
 - 'IIS 6 Management Compatibility'
 - 'IIS 6 Metabase Compatibility'
 - 'IIS 6 Scripting Tools'
 - 'IIS Management Scripts and Tools'
 - 'ASP.NET'
- Microsoft® SQL Server is installed on the computer where the bt-LogAnalyzer databases should be stored. Please note that you should also create a service account and define the connection credentials to use during the installation process. **Note:** The service account must be given the 'db_owner' role for all 3 databases.
- Install 'Basic Authentication' and 'Windows Authentication' under 'Security' in 'Add Role Services'

When choosing your system configuration, please consult the following pages to obtain the Microsoft® products hardware requirements:

Microsoft® Windows Server 2003:

<http://technet.microsoft.com/en-us/windowsserver/bb430827.aspx>

Microsoft® SQL Server 2005:

<http://www.microsoft.com/sqlserver/2005/en/us/system-requirements.aspx>

3 Installing bt-LogAnalyzer

The bt-LogAnalyzer SE™ installation program uses InstallShield Wizard. To install the bt-LogAnalyzer SE™ software, run the bt-LogAnalyzer Installation program **Setup.exe** and follow the onscreen instructions.

3.1 Step-by-Step Installation Instructions

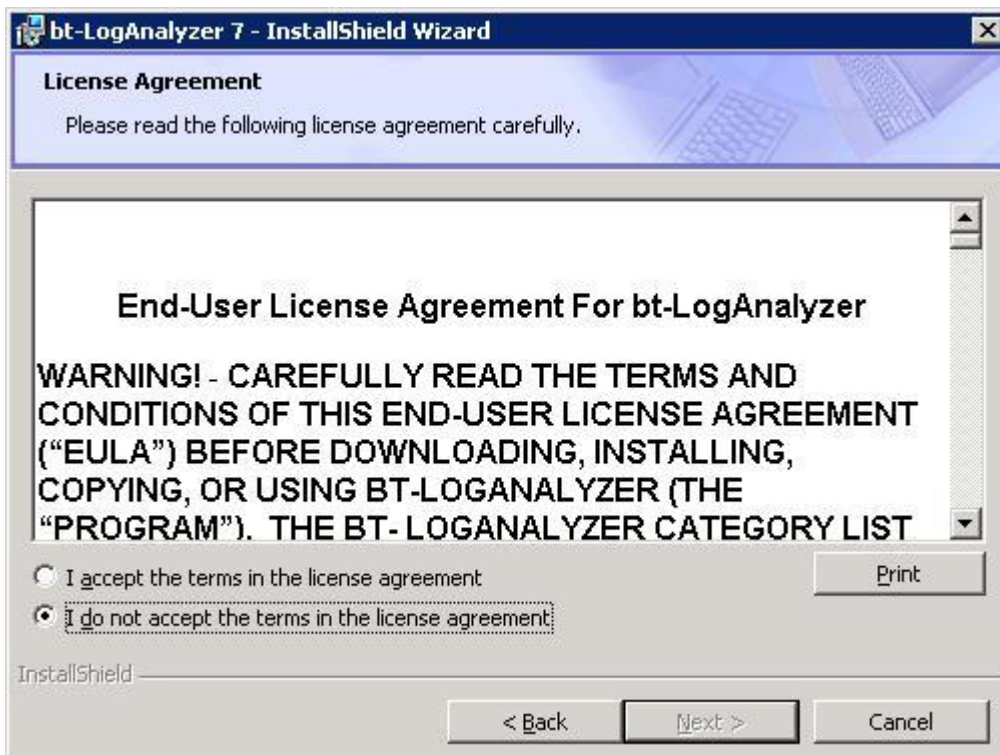
1. Start the bt-LogAnalyzer installation program **Setup.exe**.

The InstallShield Wizard screen is displayed.



2. Click "Next".

The License Agreement screen is displayed.



3. Read the License Agreement, click "I accept the terms in this license agreement" and click "Next" to continue with the install.

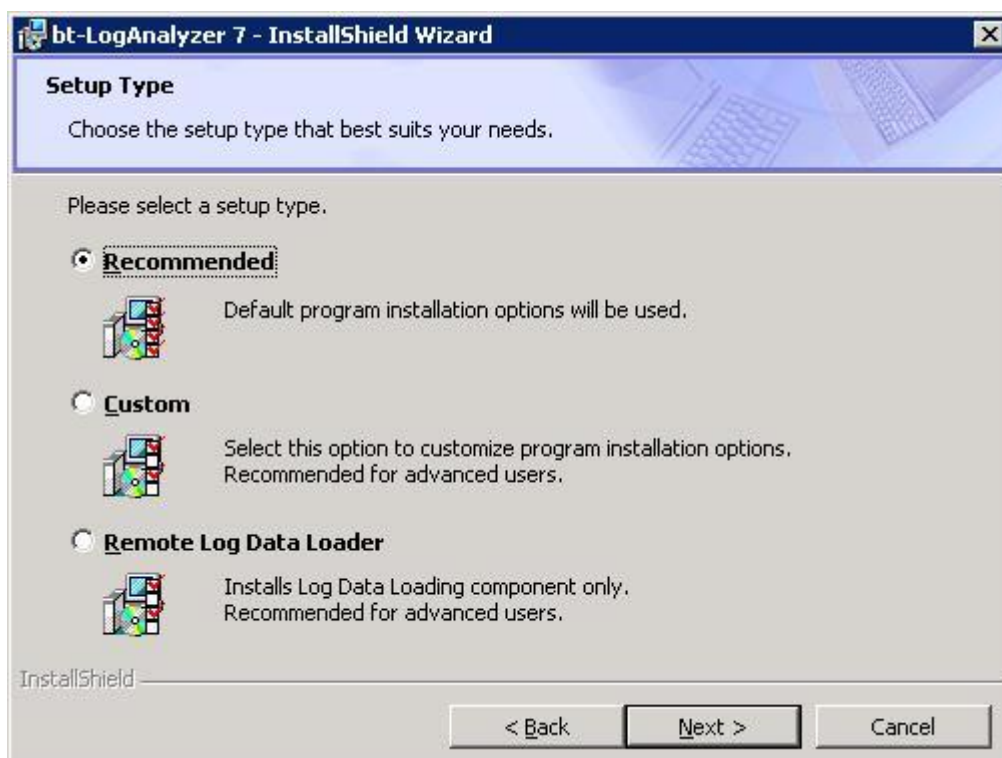
The Destination Folder screen is displayed.



Note: By default, the bt-LogAnalyzer program will be installed in **C:\Program Files\Burstek\bt-LogAnalyzer**. To install the bt-LogAnalyzer program in a different folder, click “Change...” and select the folder.

4. After you select the installation folder, click “**Next**” to continue with the install.

The Setup Type screen is displayed.



5. Choose the Setup Type that best fits your needs.

- If you select “**Recommended**”, the default configuration of bt-LogAnalyzer SE™ will be installed (see “If you select “**Remote Log Data Loader**”, only log data loading components of bt-LogAnalyzer SE™ will be installed.
- Recommended Installation”.)

Note: If you choose the recommended installation, you will not be able to select the database server engine. Instead Microsoft® SQL Server 2005 Express Edition will be installed. If you want to use already existing instance of Microsoft® SQL Server 2000/2005, please select “**Custom**”.

- If you select “**Custom**”, the bt-LogAnalyzer SE™ installation program will allow you to customize product installation options as following:
 - Specify SQL Server instance to be used for bt-LogAnalyzer SE™ data storage
 - Customize bt-LogAnalyzer SE™ database names
 - Select bt-WebFilter integration mode to use the same URL Control List managed by specified instance of bt-WebFilter
 - Specify bt-LogAnalyzer SE™ Web based user interface name
- If you select “**Remote Log Data Loader**”, only log data loading components of bt-LogAnalyzer SE™ will be installed.

3.2 Recommended Installation

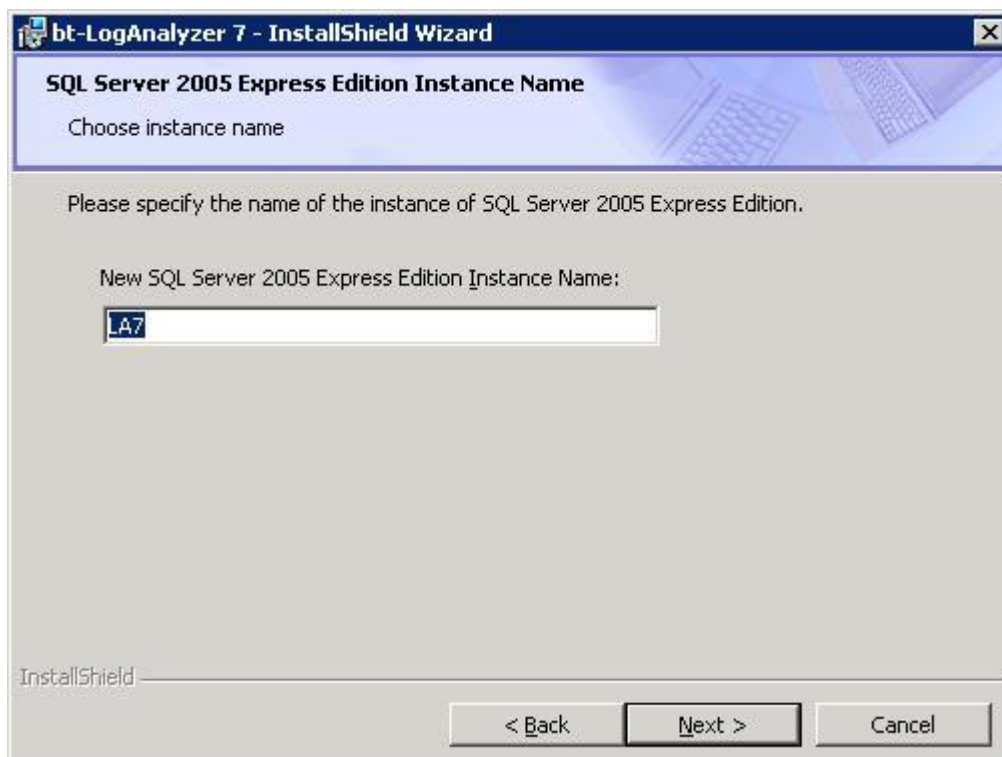
6. From the bt-LogAnalyzer Setup Type screen, select “**Recommended**” and click “**Next**” to continue with the install.

The Select SQL Server Type screen is displayed. (The options on this screen have default values and are not available when performing a “Recommended” Install.)



7. Click **"Next"**.

The SQL Server 2005 Express Edition Instance Name screen is displayed. (The options on this screen have default values and are not available when performing a "Recommended" Install.)



8. Click **"Next"**.

The Setup Integration Mode screen is displayed. (The options on this screen have default values and are not available when performing a "Recommended" Install.)



9. Click "**Next**".

The Setup Report Generator Credentials screen is displayed.

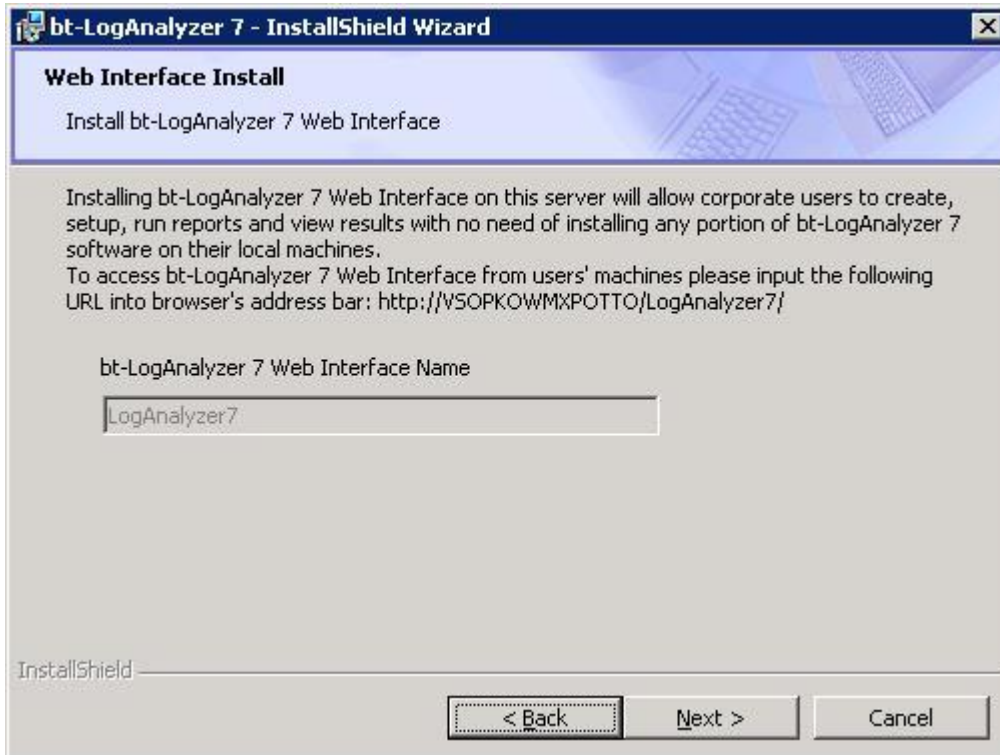


Note: If log files are stored on a network drive, provide a network account and password that will have access to the log files.

- If your log files are stored on a local machine, click "**Next**" to continue with the install.

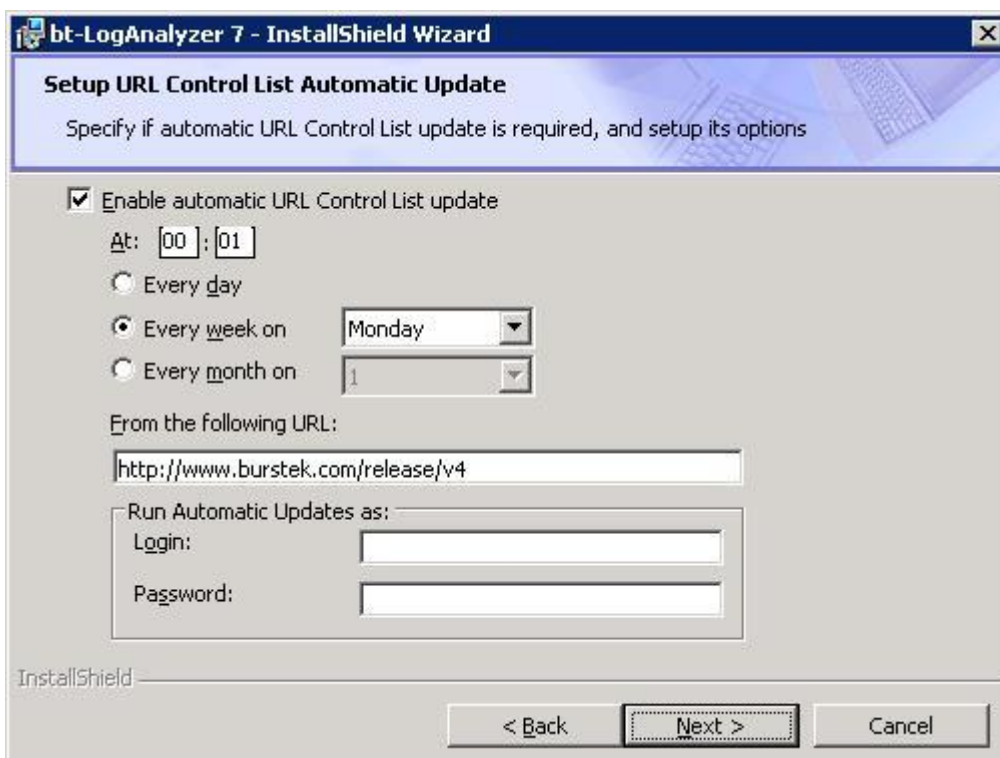
- If log files are stored on a network drive, provide a network account and password which will have access to the log files. This account must also have Administrator privileges for the machine where bt-LogAnalyzer SE™ is being installed and be in the format "Domain\User". Click "Next" to continue with the install.

The Web Interface Install screen is displayed. (The options on this screen have default values and are not available when performing a "Recommended" Install.)



10. Click "Next".

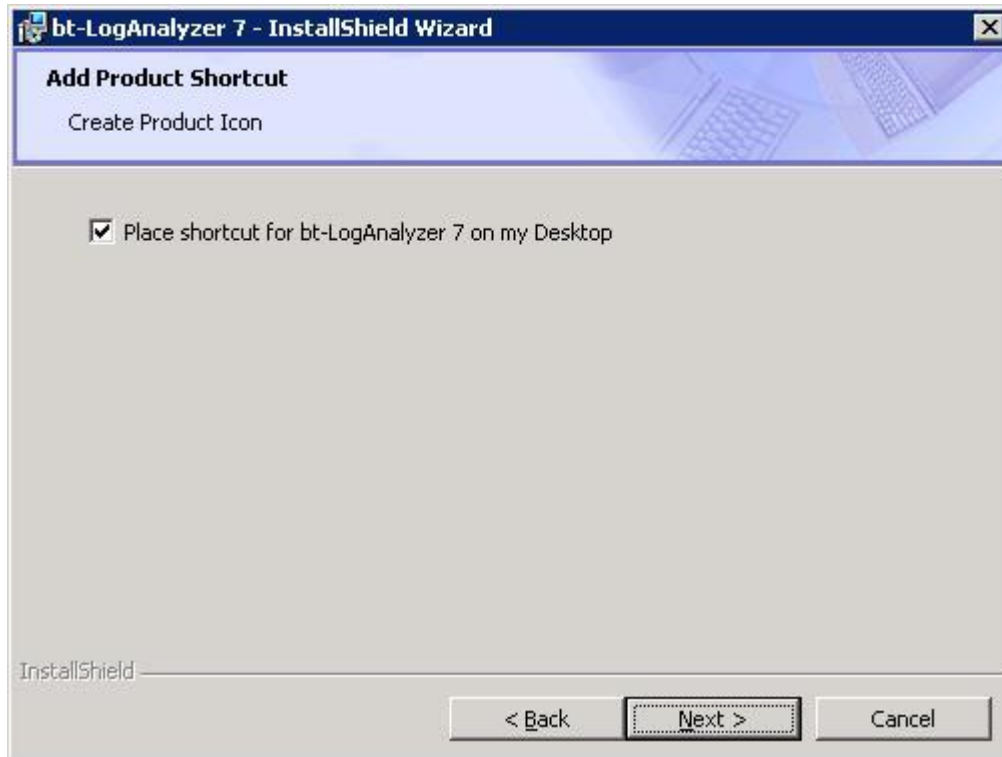
The Setup URL Control List Automatic Update screen is displayed.



Note: Check the “**Enable automatic URL Control List update**” box and define the updates schedule, the URL the updates are available at (this is provided by Burstek), and the Run Automatic Updates login and password, if necessary (this will enable you to automatically download Control List updates if you require authentication for permission to download files).

11. Click “**Next**”.

The Add Product Shortcut screen is displayed.



Note: Check the “**Place shortcut for bt-LogAnalyzer 7 on my Desktop**” box if you want the installation program to create a shortcut for bt-LogAnalyzer SE™ Web based user interface and place on your currently logged on user’s Desktop.

12. Click “**Next**”.

Note: The Ready to Install the Program screen is displayed (see ‘Remote Log Data Loader Installation’)

3.3 Custom Installation

13. From the bt-LogAnalyzer Setup Type screen, select “**Custom**” and click “**Next**” to continue with the install.

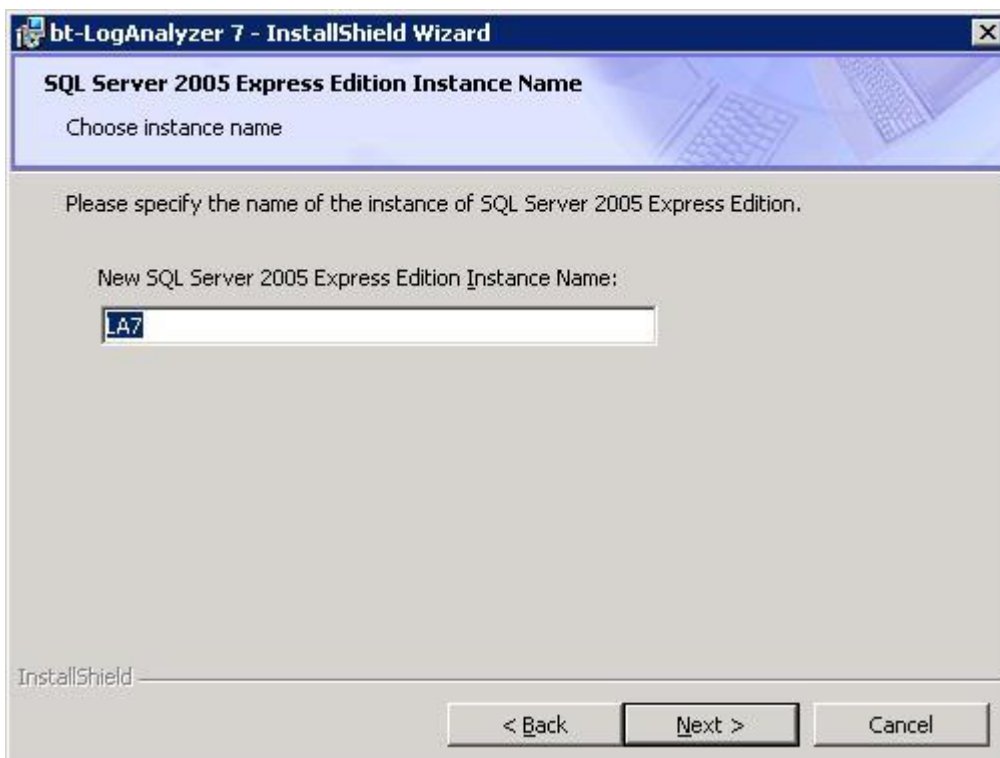
The Select SQL Server Type screen is displayed.

Select the type of database server to store the bt-LogAnalyzer SE™ database — either new instance of Microsoft SQL Server 2005 Express Edition or already existing instance of Microsoft SQL Server 2000/2005.



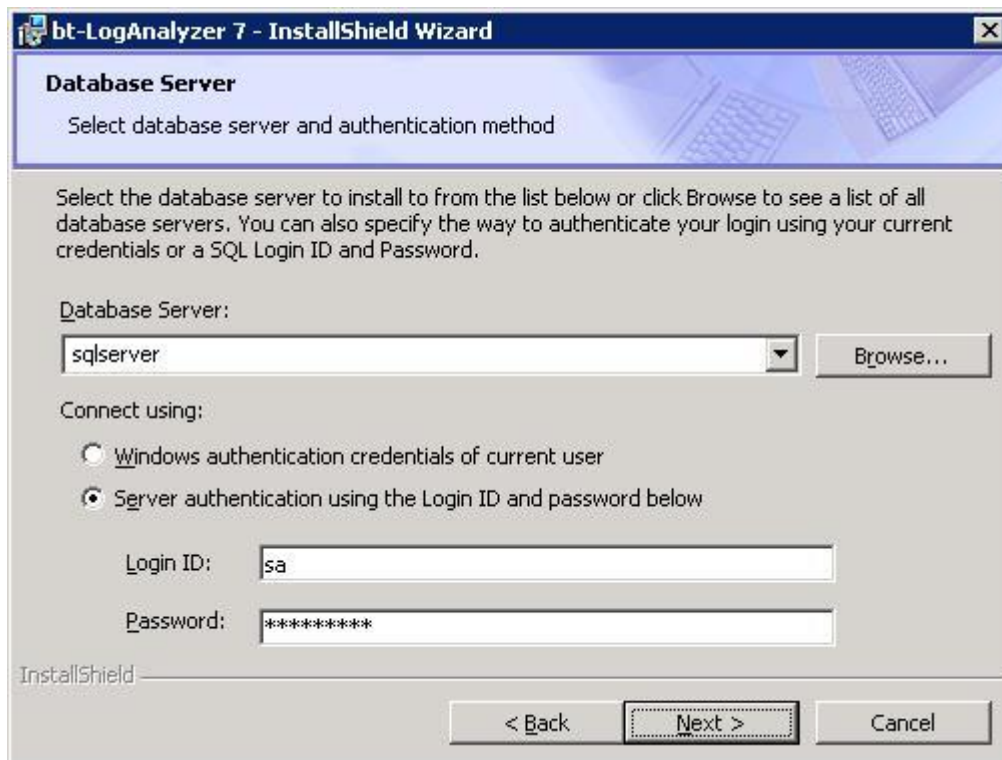
14. Click "Next".

If the **SQL Server 2005 Express Edition** option was selected, this free version of MS SQL Server 2005 will be installed later during bt-LogAnalyzer SE™ Installation. In this case, the SQL Server 2005 Express Edition Instance Name screen is displayed.



Note: If bt-LogAnalyzer SE™ is installed with SQL Server 2005 Express Edition, the install program will use default values for the product's databases and for database server administrator account.

If the **SQL Server** option was selected, the Database Server screen is displayed. Please be aware that Microsoft SQL Server should be already installed prior to installing bt-LogAnalyzer SE™.

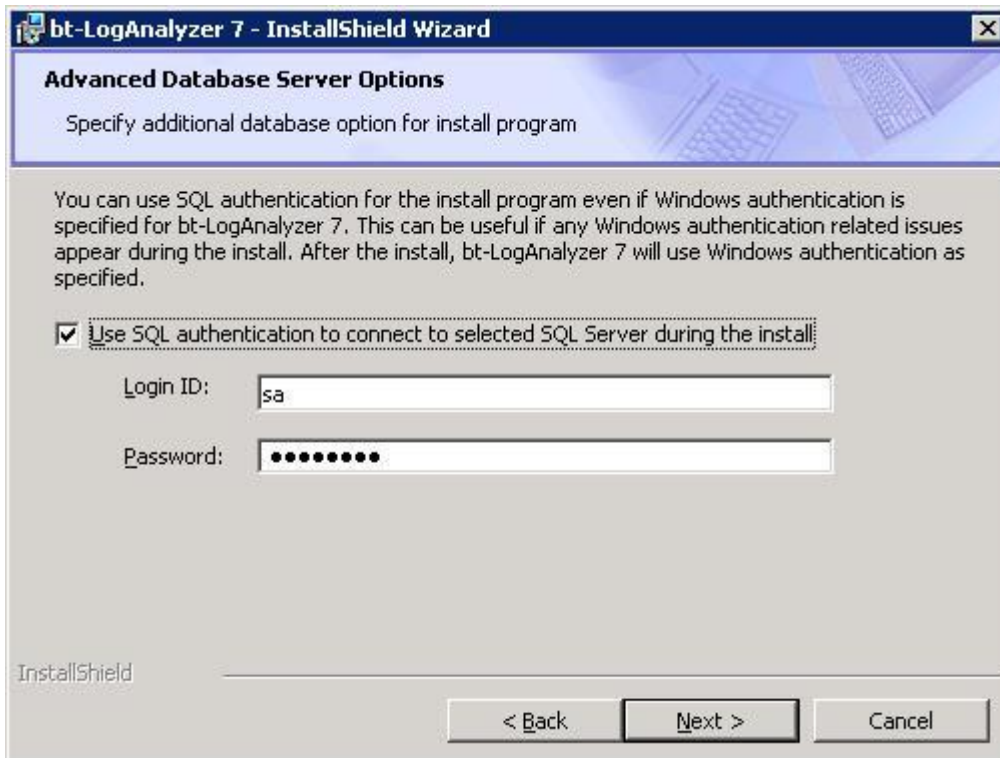


Specify the database server name and connection credentials to connect to the database server.

Note: If you select **Windows authentication credentials** option, it is necessary to specify appropriate Windows account on **Setup Report Generator Credentials** screen. That account must have permissions for connecting to specified MS SQL Server instance.

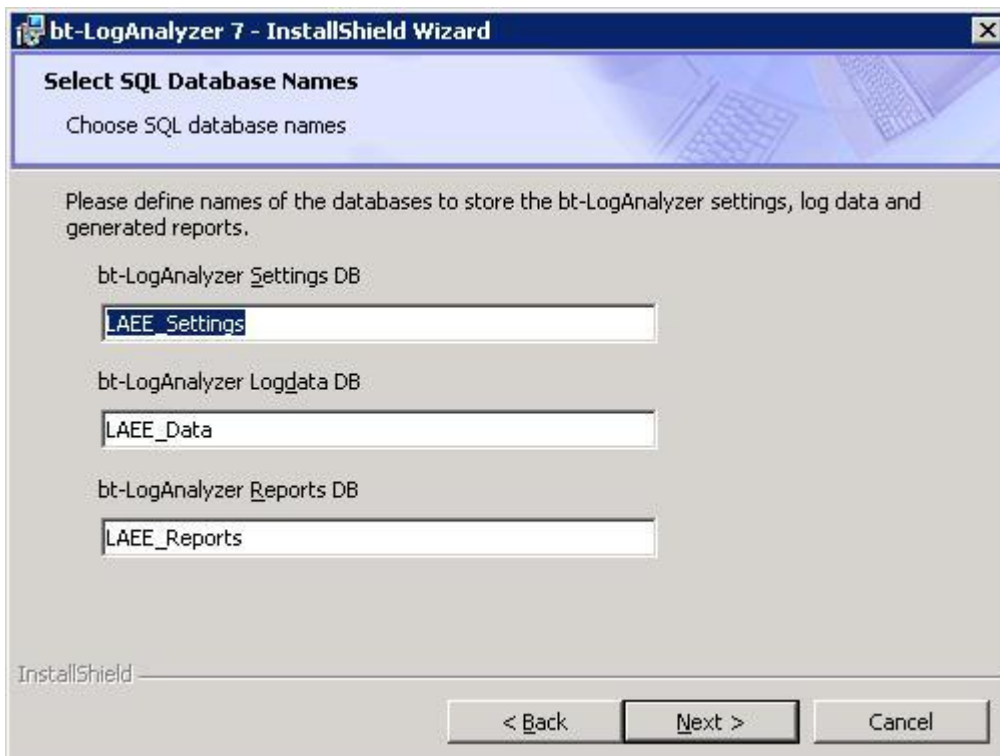
15. Click "**Next**".

If the **Windows authentication** option was selected, the install program displays Advanced Database Server Options screen allowing user to specify SQL authentication credentials to be used by the install program itself. This option should be used if the install program cannot connect to the selected SQL Server instance using Windows authentication. After the install, LA SE™ will use Windows authentication as specified on Database Server screen.



16. Click "Next".

The Select SQL Database Names screen is displayed.

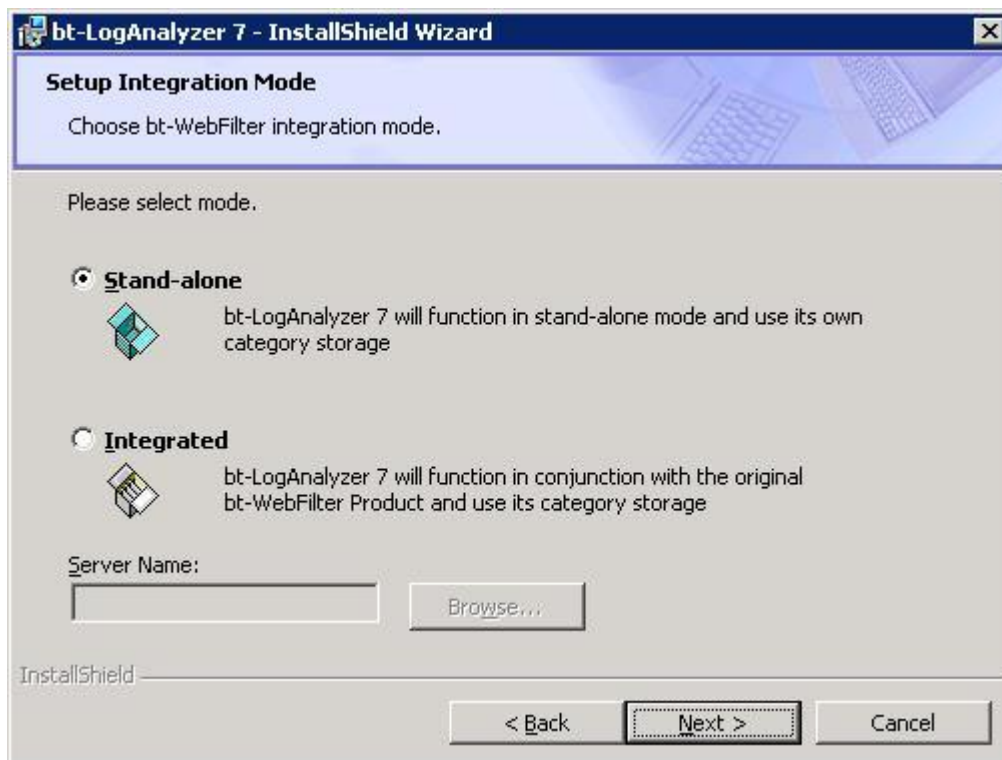


Specify the names of the databases to store (1) the application settings, (2) data loaded from logs and (3) generated reports, or leave default values.

17. Click "Next".

Note: If using SQL Server, the service account used to run the LA SE™ services must be given the db_owner role for the 3 databases on the SQL Server.

The Setup Integration Mode screen is displayed.



Note:

- **If you do not have the bt-WebFilter software installed** on another server across the local network (LAN), select **standalone**. The bt-LogAnalyzer components and category storage (URL Control List) components will be installed.
- **If you have the bt-WebFilter software installed** on another server across the local network (LAN), and you want bt-LogAnalyzer SE™ to share the same URL Control List with that instance of bt-WebFilter software, select **Integrated**. Enter the Server Name of the computer where the bt-WebFilter software resides. The bt-LogAnalyzer SE™ software will function in conjunction with the original bt-WebFilter software and use the bt-WebFilter category storage.
- **If you have the bt-WebFilter software installed** with Microsoft TMG Server:
 - Uncheck the 'Enforce Strict RPC Compliance' in the properties of the TMG system policy rule labeled "Allow RPC from Forefront TMG to trusted servers"
 - Allow RPC communication between the TMG and LogAnalyzer servers.

NOTE: The local firewall on the TMG server must be configured to allow RPC communication from the LogAnalyzer server. Since RPC uses dynamic port allocation, extra configuration may be required to control which ports RPC is using so that the firewall can be configured to forward only these Transmission Control Protocol (TCP) ports. This can be configured by following the steps in the following article: <http://support.microsoft.com/kb/154596>

18. Click **Next**.

The Setup Report Generator Credentials screen is displayed.



Note: If log files are stored on a network drive, provide a network account and password that allows access to the log files.

- If your log files are stored on a local machine, click “**Next**” to continue with the install.
- If log files are stored on a network drive, provide a network account and password that allows access to the log files. This account must also have Administrator privileges for the machine where bt-LogAnalyzer SE™ is being installed and be in the format “**Domain\User**”.

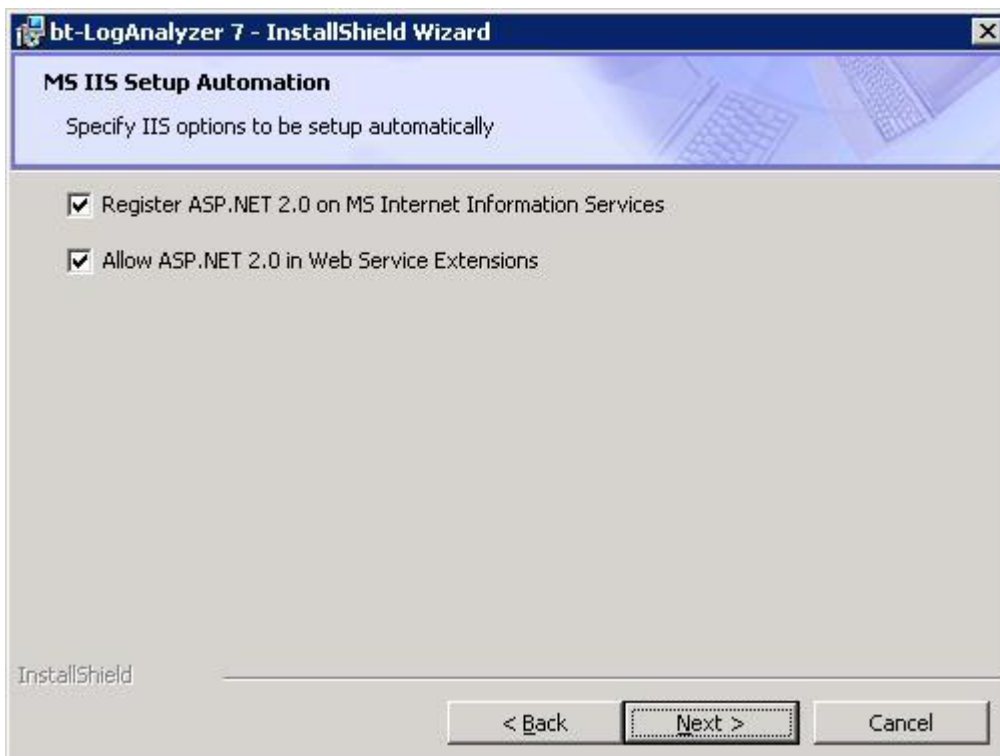
Click “**Next**” to continue with the install.

The Web Interface Install screen is displayed.



19. Click "**Next**" to continue with the install.

The IIS Setup Automation screen is displayed.



Marking checkboxes on this screen causes the install program to automatically detect if ASP.NET 2.0 is registered properly on the machine, allows IIS Extensions, and to make all necessary adjustments automatically.

20. Click "**Next**" to continue with the install.

The Setup URL Control List Automatic Update screen is displayed.

bt-LogAnalyzer 7 - InstallShield Wizard

Setup URL Control List Automatic Update
Specify if automatic URL Control List update is required, and setup its options

Enable automatic URL Control List update

At: 00:01

Every day

Every week on Monday

Every month on 1

From the following URL:

http://www.burstek.com/release/v4

Run Automatic Updates as:

Login: _____

Password: _____

InstallShield

< Back Next > Cancel

Check the “**Enable automatic URL Control List update**” box and define the updates schedule, the URL the updates are available at (this is provided by Burstek), and the Run Automatic Updates login and password, if necessary (this will enable you to automatically download Control List updates if you require authentication for permission to download files).

21. Click “**Next**”.

The Download Latest URL Control List Update screen is displayed.

bt-LogAnalyzer 7 - InstallShield Wizard

Download Latest URL Control List Update
Specify if the install program shall download the latest URL Control List update

Download the latest URL Control List

From the following URL:

http://www.burstek.com/release/v4

InstallShield

< Back Next > Cancel

Check the “**Download the latest URL Control List**” box if you want the install program to download the latest URL Control List updates from Burstek’s Web site.

22. Click “**Next**”.

The Add Product Shortcut screen is displayed.



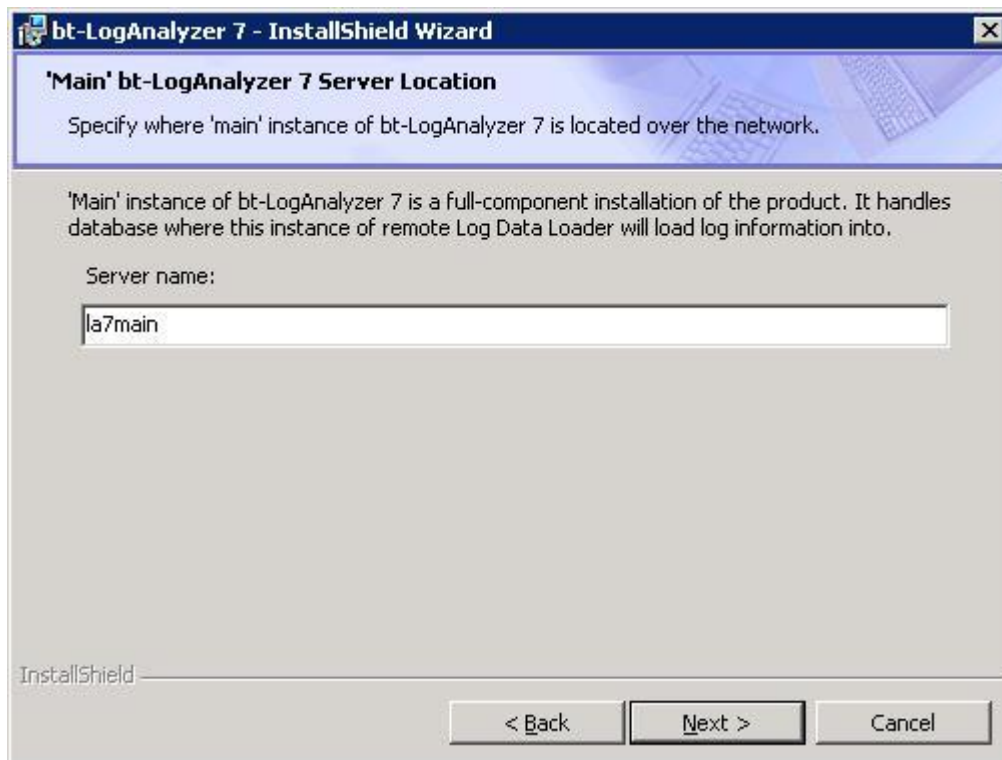
Note: Check the “**Place shortcut for bt-LogAnalyzer 7 on my Desktop**” box if you want the installation program to create shortcut for bt-LogAnalyzer SE™ Web based user interface.

Note: The Ready to Install the Program screen is displayed. (See Completing the Install)

3.4 Remote Log Data Loader Installation

23. From the bt-LogAnalyzer Setup Type screen, select “**Remote Log Data Loader**” and click “**Next**” to continue with the install.

The ‘Main bt-LogAnalyzer SE™ Server Location’ screen is displayed.



Specify host name or IP address of the server where the 'main' version of bt-LogAnalyzer SE™ is installed.

24. Click "Next".

The Setup Report Generator Credentials screen is displayed.



Note: If log files are stored on a network drive, provide a network account and password that allows access to the log files.

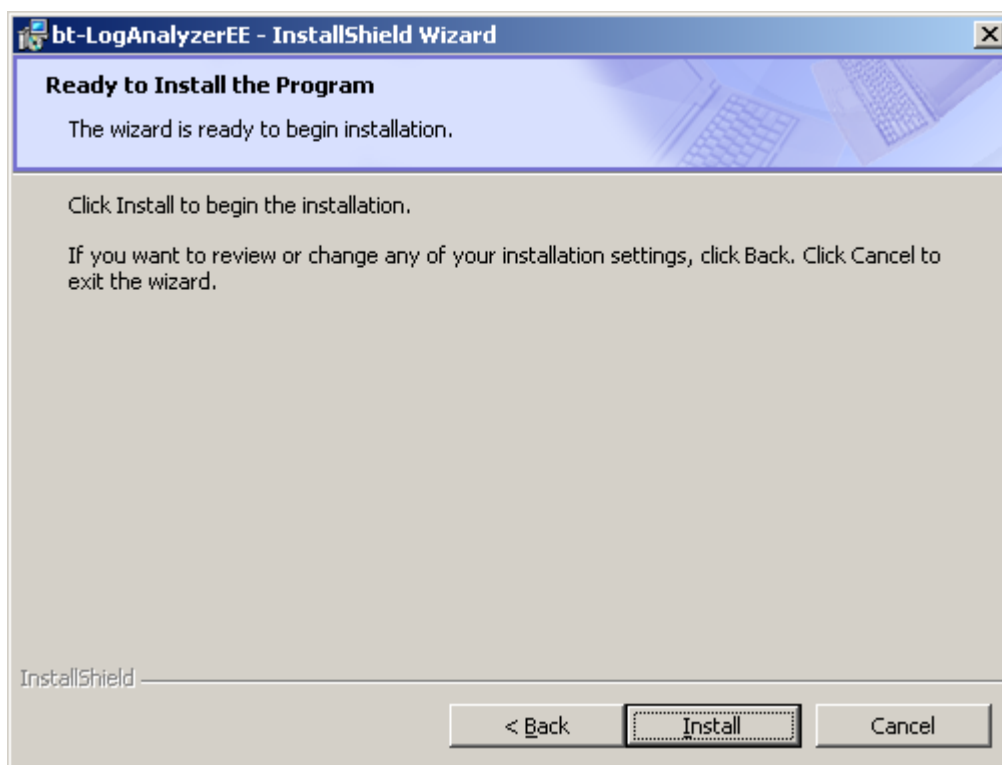
- If your log files are stored on a local machine, click “**N**ext” to continue with the install.
- If log files are stored on a network drive, provide a network account and password, which allows access to the log files. This account must also have Administrator privileges for the machine where bt-LogAnalyzer SE™ is being installed and be in the format “**D**omain**U**ser”.

25. Click “**N**ext”.

The Ready to Install the Program screen is displayed.

3.5 Completing the Install

The application is ready to be installed, when the Ready to Install the Program screen appears.



26. Click “**I**nstall” to install the bt-LogAnalyzer Program.

27. When the install is completed, click “**F**inish” to exit the Wizard.

Installation is now complete!

4 Troubleshooting

This section provides solutions to the most common issues experienced by bt-LogAnalyzer SE™ users during product installation and/or usage.

4.1 Installing and Using Remote Log Data Loader Component

1. It is recommended that ‘main’ instance of the product be already installed prior to installing Remote Log Data Loader Component.

2. The following protocols must be enabled on ISA Server:

IP Port	Direction	Destination Host	Client Host	Description
1433	TCP/Outbound	SQL Server machine	ISA Server machine	Allows 'remote' LA SE™ instance to access LA SE™ SQL Server for reading product settings and to write loaded log data. Note: Specific SQL Server's IP port can vary, so it is necessary to check the exact IP port value. Note: Using SQL Server 2005/2008 Express Edition may require enabling 'Microsoft SQL (UDP)' protocol on ISA Server.
8082	TCP/Outbound	'Main' LA SE™ machine	ISA Server machine	Allows 'remote' LA SE™ instance to read SQL Server connection settings from 'main' LA SE™.
8083	TCP/Outbound	'Main' LA SE™ machine	ISA Server machine	Allows 'remote' LA SE™ instance to interact with 'main' LA SE™ task scheduler.
8083	TCP/Outbound	ISA Server machine	'Main' LA SE™ machine	Allows main' LA SE™ instance to interact with 'remote' LA SE™ task scheduler.
8086	TCP/Outbound	ISA Server machine	'Main' LA SE™ machine	Allows 'Test Log Source' feature on 'main' LA SE™ instance to work with 'remote' LA SE™ instance.

3. Ensure that SQL Server instance used by LA SE™ is available across the network. Please refer to 'Using Remote SQL Server Instance for LA SE™' section for more information.
4. If 'main' LA SE™ machine location in 'remote' LA SE™ settings is specified using hostname, it is necessary to ensure that ISA Server allows 'DNS', 'NetBios Datagram', and 'NetBios Name Service' protocols. Otherwise, it is necessary to use IP addresses or to setup 'hosts' file accordingly.
5. ISA Server's Monitoring feature can be used to determine specific ports requested by 'main' or 'remote' LA7 instances.
6. If LA SE™ related ISA Server rules are configured after LA SE™ Remote Log Data Loader installation, 'LA7DataLoader' and 'LA7Main' LA SE™ services on ISA Server machine should be re-started.

4.2 Using Remote SQL Server Instance for LA SE™

1. If remote SQL Server instance is selected during LA SE™ setup, or if 'LA7 Remote Log Data Loader' feature is used, it is necessary to ensure that SQL Server instance used by both 'main' and 'remote' instances of LA SE™ has 'TCP/IP' protocol enabled. Also, 'SQL Server Browser' service must be enabled and running on 'main' LA SE™ machine. 'SQL Server Configuration Manager' may be used also.

4.3 Accessing LA SE™ User Interface Remotely

- When LA SE™ is configured to work with a remote SQL Server using 'Windows' authentication mode, accessing product's user interface from a remote (non-LA SE™) machine could be an issue.
- To enable remote access to LA SE™ user interface, the following adjustments should be done:
 - Setup LA SE™'s Application Pool to run under the same account as other LA SE™ services.
 - Expand the Application Pools folder under IIS manager
 - Right-click 'LAEEAppPool' and click 'Properties'
 - Select the 'Identity' tab
 - Click the 'Configurable' option and enter the account that is running the LA SE™ services
 - Add the same account to local 'IIS_WPG' group
 - Set 'identity impersonate' to 'false' in the 'Web.Config' file. The default install location is 'C:\Program Files\Burst Technology\bt-LogAnalyzer 7\Web Interface\Web.Config'
- Starting from v1.36, LA SE™ install program automatically sets up Web based user interface to allow remote access in the way described above. Upgrading from previous versions requires the same settings to be done manually.

4.4 Installing LA SE™ on Windows Server 2008 or Windows 7

- When installing LA SE™ on a Windows Server 2008 or Windows 7 under user account other than built-in local 'Administrator,' the install program may not register or 'enable' ASP.NET properly. Corresponding notification will be displayed while the install process continues.
- If the issue appears, it will be necessary to manually register or 'enable' ASP.NET after the install process completes.
- To avoid this issue, the install program should be run under built-in local 'Administrator' account.

4.5 Re-installing LA SE™ along with SQL Server 2005 Express Edition

- When re-installing LA SE™ with SQL Server 2005 Express Edition ('Recommended' setup mode), the install program may fail if LA SE™ database files were left from a previous installation. The error message would say 'Error 27506. Error executing SQL script <...> The database '<>' does not exist. <...>'.
 - To avoid this issue, remove LA SE™ database files from SQL Server 2005 Express Edition installation folder. Files of both MDF and LDF type should be deleted.
 - If only LA SE™ is being re-installed while leaving already existing instance of SQL Server 2005 Express Edition, LA SE™ database files must not be deleted.

4.6 Attaching previous LA SE™ databases to a reinstallation

NOTE: Prior to reinstalling LA SE™, make sure that the version being installed matches already existing prior LA SE™ databases.

To Verify LA SE™ database version:

1. Navigate to the services folder in the LA SE™ installation directory (Default install location is C:\Program Files\Burst Technology\bt-LogAnalyzer 7\Services)
2. Run the 'BurstTechnology.LogAnalyzerEE.LogsExporter.exe' executable.
3. The 'LAEESettings_BaseVersion_*.csv' file will show the database version.

To reinstall LA SE™ and use the prior databases:

1. Reinstall LA SE™ with TEMP databases (Do NOT name them with prior names as it will cause the old databases to be overwritten).
2. After the LA SE™ installation, run the log exporter utility again to verify identical database versions
3. Once the database versions have been verified as identical, open the LAEEConnectionStrings.config file in both the 'Services' and 'Web Interface' sub-folders. (Default install location is C:\Program Files\Burst Technology\bt-LogAnalyzer 7)
4. Please note there are three entries in both files. Each of them references one of three LA SE™'s databases in the 'Initial Catalog' sub-string. After reinstalling LA SE™, it is necessary to change those references to match 'older' (original) database names for both files.
5. Delete TEMP databases and restart LA7Main service.

5 “Baseline” Installation Settings

This section provides details on the default product and environment settings for the most typical installation configurations for MS Windows Server 2003 R2 and Windows Server 2008 R2 operating systems.

5.1 IIS Options

1. 'LogAnalyzer7' Virtual directory
 - 'LAEEAppPool' Application pool should be specified for the 'LAEEApplication' Web application.
 - ASP.NET 2.0 should be installed and registered on the Virtual directory.
 - 'Basic' and/or 'Integrated' authentication methods should be enabled on the Virtual directory.
2. 'LAEEAppPool' Application pool
 - 'Network Service' account should be specified for the Application pool's 'Identity' if no user account was specified during product install. If particular user was specified during product install, that user should be specified for the Application pool's 'Identity'.
 - 'Managed Pipeline Mode' for Windows Server 2008 R2 operating system should be set to 'Classic'.
 - '.Net Framework Version' for Windows Server 2008 R2 operating system should be set to '2.0'.

5.2 Account Rights

1. LA7 Services

- If particular user account was specified during product install, the following LA7 services should be running under that account:
 - LA7DataCategorizer
 - LA7DataLoader
 - LA7Main
 - LA7ReportGenerator
- If no user account was specified during product install, the above services should be running under the 'Local System' account.

2. SQL Server connections

- If 'Windows' authentication method is used for LA7 connections to SQL Server, the following accounts should be granted with necessary rights to connect and work with SQL Server:
 - If particular user account was specified during product install, that account should have 'db_owner' role for every LA7 database.
 - If no user account was specified during product install, LA7's machine name should have 'db_owner' role for every LA7 database.
- If 'SQL' authentication method is used for LA7 connections to SQL Server, the SQL Server user used should have 'db_owner' role for every LA7 database.

5.3 DCOM Options

1. 'FStorageSrv' Service

- 'FStorageSrv' service should be running under 'Local System' account, regardless of whether any particular user account was specified during the product install.
- All the security principals listed below should have 'Launch and Activation' permissions as follows:
 - Local machine's 'Administrators' group
 - 'INTERACTIVE'
 - 'NETWORK SERVICE'
 - 'SYSTEM'
- All the security principals listed below should have 'Access' permissions as follows:
 - 'SELF'
 - 'SYSTEM'