



BlastLogic

BlastLogic System Upgrade Procedure

Copyright

© 2024 Maptek Pty Limited

Maptek, Vulcan, I-Site, BlastLogic, Eureka, PerfectDig, Evolution, Sentry, CaveLogic, PointStudio, DomainMCF, GeologyCore, MaterialMRT, PointModeller, GeoSpatial Manager, VisionV2X and the stylised Maptek M are registered and unregistered trademarks of Maptek Pty Limited; Maptek Computación Chile Ltda; Maptek Computación Chile Ltda, Sucursal Perú; Maptek S de RL de CV; Maptek Informática do Brasil Ltda and KRJA Systems, Inc. Registered marks are registered in one or more of the following countries: Australia, Brazil, Canada, Chile, China, Greece, India, Indonesia, Mexico, Peru, Russia, South Africa, Spain, the United Kingdom, and the United States of America.

ALL RIGHTS RESERVED. No part of this manual shall be reproduced, stored in a retrieval system, or transmitted by any means—electronic, mechanical, photocopying, recording, or otherwise—without written permission from Maptek™.

No patent liability is assumed with respect to the use of the information contained herein.

Although every precaution has been taken in the preparation of this manual, the publisher and author(s) assume no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein.


Trademarks


Due to the nature of the material, some hardware and software products are mentioned by name. The companies that manufacture the products claim many of these product names as trademarks. It is not the intention of Maptek™ to claim these names or trademarks as their own.


About Maptek Documents

The following conventions are typically used in training manuals and guides:

Example	Description
Design > Object Edit	Text in bold are commands or options selected from a menu, panel, or button.
Top Down or Bottom-Up design method	Text in bold is also used for emphasis, specific terms, tab names, column names, panel group names etc.
<LEVEL>_SURVEY_POINTS>	File names or extensions, variables, formulas, text entry, layers, triangulations, databases, scripts, macros, and data such as displayed in the Report window, are in code font.

 **Tip:** Designates a hint such as an effective use of an option.

 **Note:** Designates a point to draw attention to; an informational comment.

 **Important:** Designates an alert to draw particular attention to.

Contents

About Maptek Documents	ii
Contents	iii
Chapter 2: Introduction	1
2.1 Upgrade impacts	1
2.2 End-user training and familiarisation	2
2.3 Installation overview	2
2.4 Backwards compatibility	3
2.5 Tasks and responsibilities	3
Chapter 3: Upgrading BlastLogic Server	5
3.1 Prerequisites	5
3.2 Upgrade procedure	6
3.3 Rollback plan	10
Chapter 4: Upgrading BLIS	12

Introduction

BlastLogic releases are made available on a regular basis to promptly make available new functionality, provide improvements to existing functionality and bug fixes. Some backwards compatibility is provided to facilitate the transition to a newer version.

This document outlines the steps required to upgrade a BlastLogic server instance and subsequently rollout desktop, tablet and BlastLogic Integration Service (BLIS) upgrades to users.

Note: We highly recommend that the minimum hardware specifications are met to reduce any unpredictable or incompatibility results. Refer to the most recent *BlastLogic Technical Specifications* document for more information.

2.1 Upgrade impacts

When implementing a new version of BlastLogic, you need to have in mind the following impacts that can be caused by an upgrade:

- BlastLogic service may be unavailable from 5 to up to 30 minutes.
- The necessity to assure data integrity.
- The necessity to introduce new functionality to end users.

New software releases may contain features that impact all BlastLogic components. Each release includes an installer for the server, tablet, desktop, and BLIS component.

For more information about new features, see the BlastLogic release notes that are provided with each version.

Note: Some releases require new licenses to be issued. Maptek Technical Services can advise whether a new license is required.

Important: The BlastLogic server must be upgraded before the desktop and tablet clients.

When you install an upgrade, you must manage and control the change to reduce risk or potential negative impact that can result from the change.

Note: If you have a dedicated production and test environment, we recommend that you first restore your production databases to the test environment, upgrade your test environment, and then schedule the upgrade of the production environment. This will expose any issues ahead of time and provide an estimate of how long the production upgrade will take.

2.2 End-user training and familiarisation

We recommend the familiarisation training and implementation support to be delivered by a Maptek specialist (mine engineer) following the upgrade.

A consulting session taking up to two days at site, especially for new features and major changes, will help you to familiarise and adopt the concepts, which will positively affect your workflow. Consulting days will be agreed in advance and will include provision of Maptek's daily consulting rate plus travel, accommodation, and per diem expenses.

Courtesy visits to site will be provided on occasions a specialist mine engineer is in the area, and these will not be chargeable.

Maptek services can also be provided remotely, particularly for minor releases with limited number of new features. These are generally delivered via Webinar sessions (taking up to two hours) or a phone call.

Remote support for the technical change will be provided during business hours, with best efforts provided after hours or by special arrangement.

2.3 Installation overview

Upgrading the BlastLogic server typically involves changes to the BlastLogic database schemas as well as new executables, libraries, and other components. These changes make it impossible to revert to the previous version without restoring the databases to the state they were in before the upgrade.

For this reason, we recommend that you prepare full backups of your BlastLogic server databases. Optionally, you can also take an image for the BlastLogic server and BlastLogic Integration Service (BLIS) virtual machines. These actions should be performed by an IT Professional possessing the appropriate knowledge, rights, and authority to undertake recovery action should it be required.

We recommend that you update all client devices to the same BlastLogic version as the server as soon as practicable, once the server update is complete. For instructions regarding updating the client software, see the *BlastLogic Desktop Installation* and the *BlastLogic Tablet Installation* documents.

2.4 Backwards compatibility

From version 2.0.2 Update 5 onwards, each subsequent version of BlastLogic server is designed to be backwards compatible with earlier clients. In other words, older desktop and tablet client versions can continue to access the BlastLogic server without loss of functionality or data. However, any new features introduced in the upgrade will not be available until the clients are upgraded to the same version as the server.

For detailed information on backwards compatibility, see the BlastLogic release notes for each version combination.

2.5 Tasks and responsibilities

The following table maps the tasks that need to be performed during an upgrade with the responsible sides.

Task	Responsible side
Provide installation files and documentation.	Maptek
Provide updated license files (if required).	Maptek
Plan the upgrade and comply with IT Change Management policies.	Customer IT
Schedule a BlastLogic service outage and inform end users and Maptek about it.	Customer IT
Backup BlastLogic master and site databases, perform BlastLogic server upgrade.	Customer IT
Install and distribute new license files, if provided by Maptek.	Customer IT
Install updated client software on desktop computers and tablets.	Customer IT

Task	Responsible side
Confirm connectivity to the system and data accessibility.	End Users
Confirm acceptance of the upgrade or request rollback to previous version.	End Users
Perform the BLIS upgrade.	Customer IT
Uninstall any previous versions of desktop and tablet clients. Update shortcuts.	Customer IT
Familiarise users with new features and changes.	Maptek

Upgrading BlastLogic Server


You should proceed with upgrading the BlastLogic server before upgrading the desktop, tablet, and BLIS clients.

The upgrade must be performed on the server directly (or via a remote desktop application) by a user that is a member of the '**Local Administrators**' group on the server or virtual machine that runs BlastLogic server.

3.1 Prerequisites

As upgrades may require database schema changes, BlastLogic server upgrades should be performed by a suitably experienced application engineer, database administrator, or a person holding a similar IT role on the site, with the following permissions:

- Permission to change the database schema (for example, data base owner or system administrator).
- Permission to perform backups (for example, backup operator, database owner, or system administrator) or ability to request backups of the BlastLogic server databases.
- Local administrator rights on the machine running BlastLogic server and BLIS.
- Desktop login access to the machine where the BlastLogic server instance is installed.

 **Note:** You can access the machine via a remote desktop application.

- The account credentials for the service account used to run the BlastLogic server and BLIS Windows services.
- The installation files for the currently installed version together with the installation files for the new version (in case the currently installed version needs to be reinstalled).
- Database administrator permissions to restore databases in case a rollback is required.

After the upgrade is complete, desktop and tablet client end users should test the new version to check if the upgrade has been successful and the data is accessible and valid.

Note: BlastLogic Server version 2021 and newer require an outgoing firewall rule to allow BlastLogic Server to account.maptek.com and api.account.maptek.com.

Note: To run BlastMCF on your on-premises server, you need to ensure that the network allows the server application to access <https://api.mcf.account.maptek.com>.

3.2 Upgrade procedure

We recommend that you proceed with a full backup of the BlastLogic server's SQL server database before commencing the upgrade. Alternatively, you can perform backup during the update process.

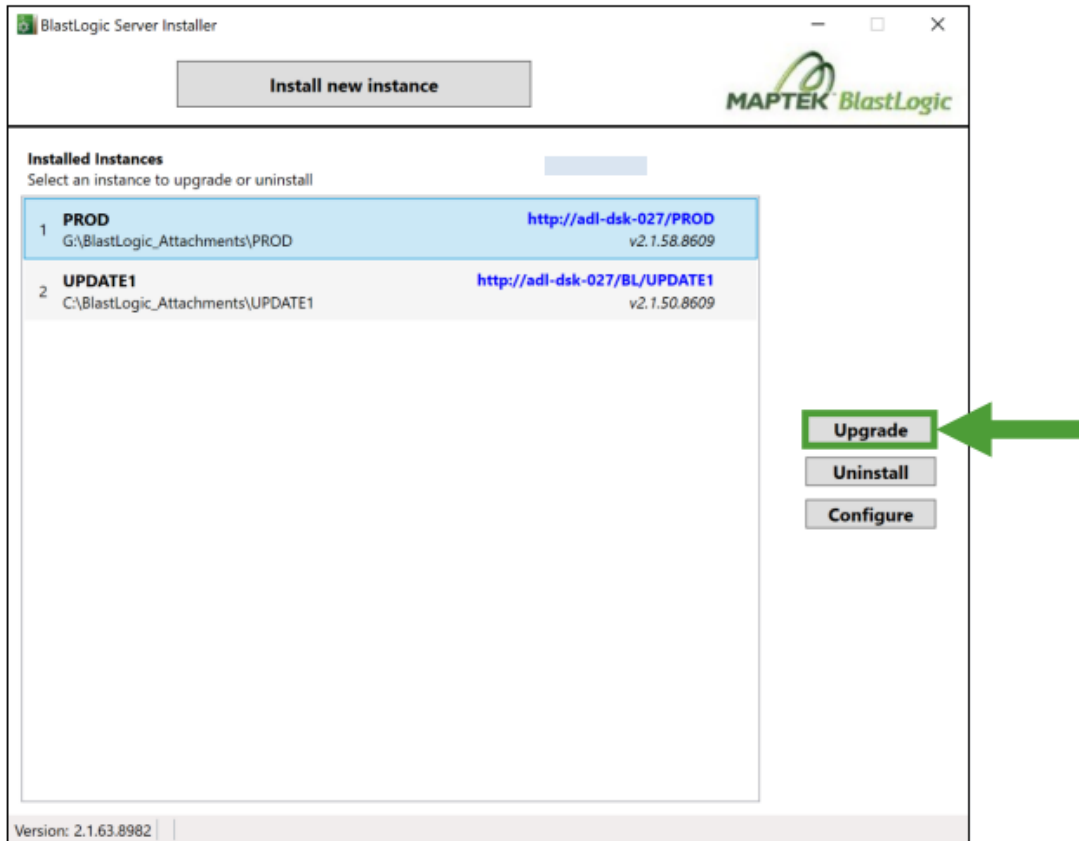
Follow these steps need to proceed with the BlastLogic system upgrade:

1. Locate the BlastLogic ZIP archive (.zip) file provided by Maptek.
2. Right-click on the file .zip file and select **Extract All...**
3. Run the **Setup.exe** file.

Name	Date modified	Type	Size
MSI	28/11/2017 3:06 PM	File folder	
log.txt	28/11/2017 3:06 PM	TXT File	220 KB
Microsoft.Deployment.WindowsInstaller.dll	28/11/2017 3:06 PM	Application extension	176 KB
Microsoft.SqlServer.SqlEnum.dll	28/11/2017 3:06 PM	Application extension	1,387 KB
SC.exe	28/11/2017 3:06 PM	Application	20 KB
Server.Common.dll	28/11/2017 3:06 PM	Application extension	110 KB
Server.Instances.dll	28/11/2017 3:06 PM	Application extension	20 KB
Setup.exe	28/11/2017 3:06 PM	Application	118 KB



4. In the **BlastLogic Server Installer** panel, select the instance from the list and click **Upgrade**.

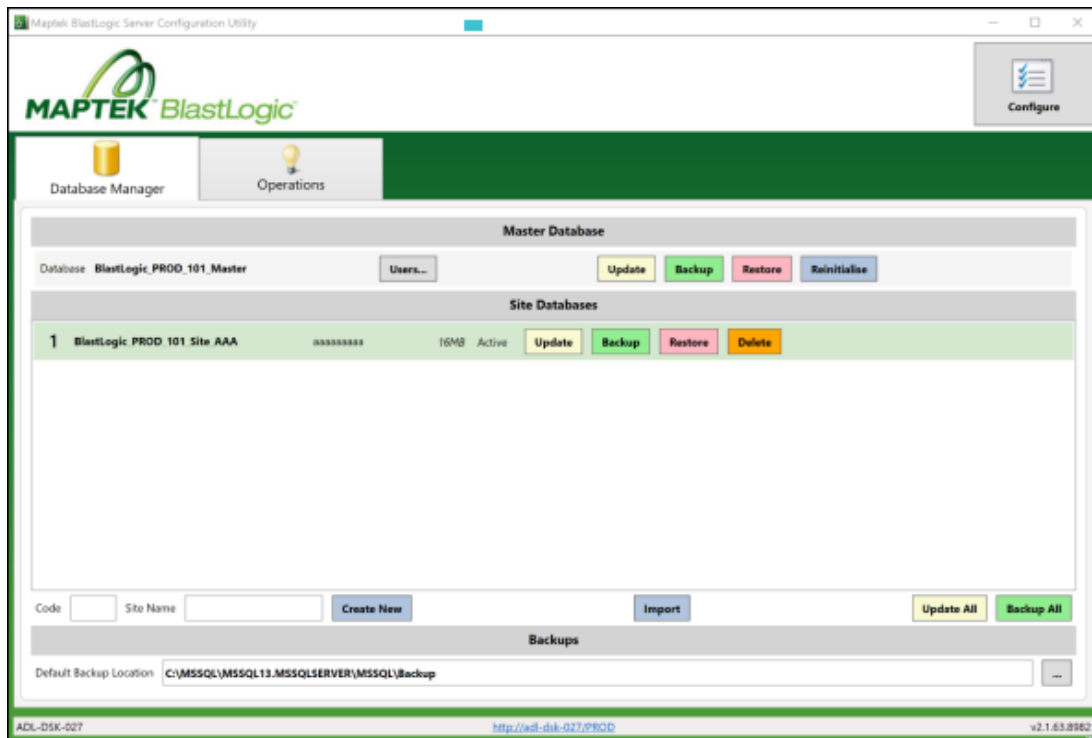


This will upgrade the selected BlastLogic server instance.

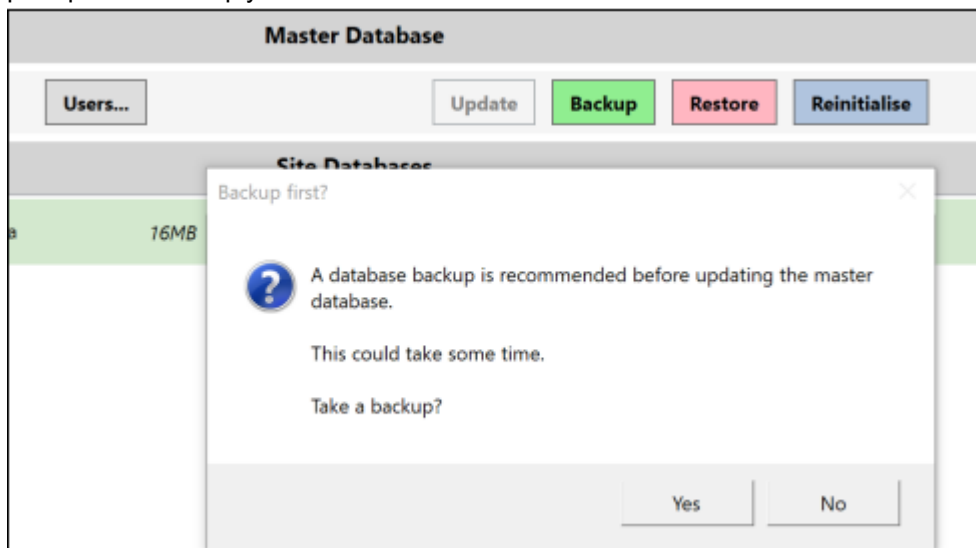
Note: If multiple instances exist on the same server, you must upgrade each instance separately.

Note: No database changes are made during this stage.

5. Upon successful completion of the previous step, the **Maptek BlastLogic Server Configuration Utility** panel will open. Depending on the versions before and after the upgrade, the **Master Database** and each database listed under the **Site Databases** may have the **Update** button enabled (which will be indicated by yellow colour). This signifies that database schema updates are pending and must be applied to complete the upgrade.



6. Update the **Master Database** if required. After clicking the **Update** button, you will be prompted to backup your database.



Important: SQL Server instances that use log shipping, clustering, or availability groups should be backed up by the database administrator in charge. In any case, the database administrator may prefer to take the backups using SSMS or other tool.

Click **Yes** if the database administrator has not already backed up the database. This will initiate an SQL server full backup of the master database.

The backup is executed on the database server and the file is written to the SQL server machine in the path displayed at the bottom of the main window. The updates will then be applied and a progress bar will be displayed.

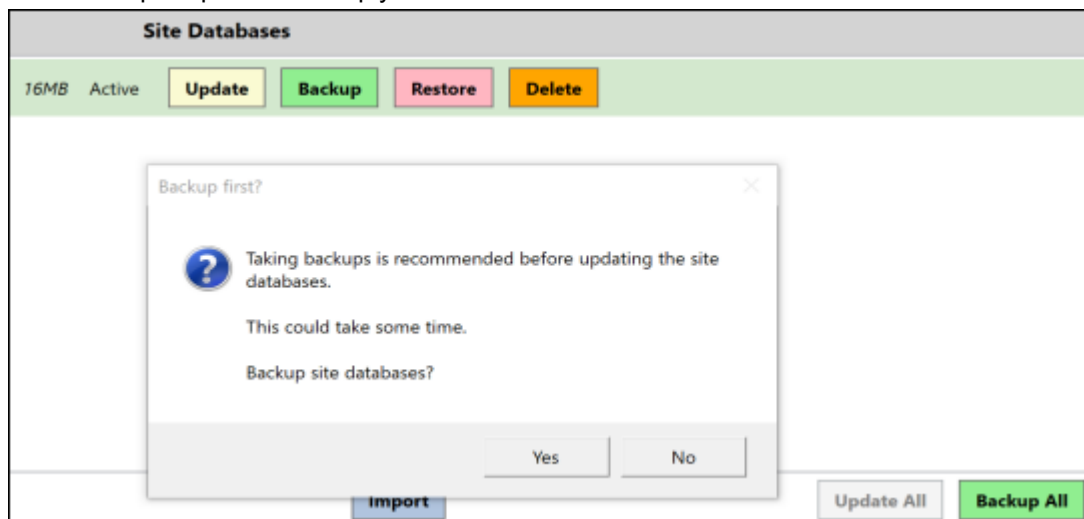
Once you update the master database, the **Update** button under the **Master Database** will no longer be enabled.

! **Important:** At this point, database schema changes have been made and a rollback to the previous version will require the master database to be restored from the backup you have done earlier.

7. Update the site databases of required.

💡 Tip: Click the **Update All** button at the bottom of the panel to update all site databases at once. Alternatively, update each site separately to reduce load on the SQL server instance.

You will be prompted to backup your database.



! **Important:** SQL Server instances that use log shipping, clustering, or availability groups should be backed up by the database administrator in charge. In any case, the database administrator may prefer to take the backups using SSMS or other tool.

Click **Yes** if the database administrator has not already backed up the databases. This will initiate an SQL server full backup of the site databases.

The backups are executed on the database server and the files are written to the SQL server machine in the path displayed at the bottom of the main window.

! Important: At this point, database schema changes have been made and a rollback to the previous version will require the site databases to be restored from the backup you have done earlier.

8. After all pending database updates have been applied, select the **Operations** tab and confirm that the service is running. If the status is shown as **Stopped**, click **Start**.

3.3 Rollback plan

If the upgrade has been unsuccessful, you must reinstate the previous server version immediately before you create any new data.

A rollback to a previous version requires restoring the master and site databases. To do so, click the **Restore** button in the **Configuration** utility if you have sufficient permissions on the SQL server instance. If you do not have such permissions, request performing the rollback to the database administrator in your organisation.

! Important: Any changes that you have made in the data after the upgrade will be lost when you rollback to the previous version.

Follow these steps to proceed with rollback:

1. Inform the site users about the rollback requirement and the BlastLogic unavailability that will result from it.
2. Open the **Server Configuration Utility** and click **Stop the Service**.
3. Take note of the BlastLogic Server instance parameters, in particular the **Instance name**, URL Host / Scheme / Port / Path, the **Attachments** folder path, and the service account credentials.
4. Uninstall the BlastLogic server instance.
5. Reinstall and configure the previous BlastLogic server version using the same BlastLogic server instance parameters.
6. Click **Restore** for the **Master Database** and select the previous backup.
7. Click the **Restore** button for each site to restore its previous backup.
8. Click **Start** to restart the service.
9. Uninstall the new desktop client.
10. Uninstall the new tablet client.
11. Inform the site users that BlastLogic is available again.
12. Ask end users to check the following:

- Confirm that the connection to BlastLogic server is working for desktop and tablet clients.
- Confirm that the data can be accessed.

Upgrading BLIS

The BlastLogic Integration Service (BLIS) is a separate Windows service that extracts drilling data from drill navigation source systems and loads it into BlastLogic.

Versions 2.1 and later do not utilise SQL server directly, so no database schema updates are required.

! **Important:** BLIS should have the same version as the Blastlogic server and should be upgraded after upgrading the server.

Follow these steps to upgrade the BlastLogic Integration Service:

1. Execute the MSI file provided on the server running BLIS.
2. Follow the prompts, providing the appropriate details such as service account and password (if prompted to do so).
3. Upon successful completion, use the Windows Microsoft Management Console (MMC) service to check if BlastLogic Integration Service is running.
4. Check the `systemLog.csv` log file in `C:\ProgramData\Maptek\BlastLogic\Integration\logs` for errors or messages.