

MYOB Greentree

Jade 2022 Upgrade Instructions

October 2023



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Introduction

The 2023.3.0 release of Greentree upgrades its Jade platform from Jade 2020 to Jade 2022.

This document explains how to upgrade Greentree systems to Jade 2022, which is critical to the security of your data and information system capability. The process is like other Greentree upgrades, but has additional steps:

- Ensure you have reliable meta certification – see important note below.
- Install a new Visual C++ Redistributable library to match the version of Jade.
- Use a new Packman version to apply the 2023.3.0 package.
- Distribute a new DLL to the web server.

Note: If you have already applied Jade2020CertifierAtPutHotFix2_debug.package or the earlier Jade2020CertifierAtPutHotFix_debug.package to your production system, you can go ahead with the normal certification process. If you have not applied that package to production, you must apply it to the copy used for certification. This is essential to get reliable meta-certification results.

You will follow the normal certification process, which is to restore a copy of the system from backup, perform certification, apply fixes to the production system, and repeat with a later backup until no further errors are found. For this release, if the system doesn't already have the hot fix, you should apply the debug package to the restored copy, before performing certification.

This release also reduces the space required for report data by around 90%. The package converts system file AH.dat, which can be very large on some sites. To minimise down-time, it is recommended that you perform the normal housekeeping of running the "Clear Print and Task Queues" process. This is best done out of business hours and well ahead of the upgrade.

The full benefit will not be realised until the system file AH.dat is compacted. The package does not compact the file, but you may choose to initiate this manually once Packman has applied the package.

For more information

- For information on the Jade 2022 release, see the [Jade Software website](#).
- For general Greentree help, see the [MYOB Greentree Help centre](#).

Document history

Version	Summary	Publication Date
1	Upgrade instructions for Greentree 2023.3.0	October 2023

Upgrade steps summary

This section outlines the steps you'll need to take to upgrade to Jade 2022. All steps are described in more detail in subsequent sections.

Preparation, rehearsal and certification

- Confirm that the production system is being backed up regularly.
- Obtain the materials you'll need and the machine you'll use to rehearse the upgrade.
- Install the C++ Redistributable on the rehearsal machine, the production server and all client machines.
- Restore a backup to the rehearsal machine.
- Apply Jade2020CertifierAtPutHotFix2_debug.package to the restored system if this or the earlier Jade2020CertifierAtPutHotFix_debug.package has not already been applied.
- Run Jade logical and meta-certify analyses on the restored system, apply fixes to the restored system and the production system, restore from the next backup and repeat until you get a clean certification with no further fixes required.
- Apply the package to the restored system using the new version of Packman.exe.
- Confirm the system is functioning normally and passes user acceptance testing.
- Optionally compact database files on the restored system.

Upgrading production

- Back up the production system.
- Shut down the system.
- Copy the new version of Packman.exe to the server's bin64 directory.
- Check and if necessary change the LogDirectory setting in the server's INI file.
- Apply the package.
- Push the updated web resource files to the web server.
- Copy the updated jadehttp files to the web server.
- Run the system in single-user mode and check a few essential functions.
- Start the system in multi-user mode and confirm you can connect remotely and perform basic operations.
- Install the C++ Redistributable on client machines if not done earlier.
- Confirm that you can use the updated 64-bit Jade ODBC driver on client machines. If not, register the driver on client machines.

Support

In these scenarios, contact MYOB Greentree Support:

- Logical or meta-certification analysis shows a manual choice of fixes is required.
- Applying repairs fails.
- Applying the Greentree package fails.

Preparation

Recent, reliable backups are essential to information system security. The broader topic is detailed in Jade's online help under the topic of [Recovery Concepts and Strategy](#).

For backup options and recommendations, see Backup Strategies in the [Greentree online help](#).

Recommendations

- Don't store backups or rehearse upgrades or run test systems on your production server.
- Use *full* backups, not *quiesced* backups.
- Identify the machine you will rehearse the upgrade on.
- Install the new Microsoft C++ Redistributables on server and client machines before the upgrade to minimise downtime.
- Consider using the compressing option for backups. Although this increases the time it takes to back up and restore, it can also reduce how long it takes to copy files from the server to the rehearsal machine.
- Apply the normal housekeeping action of running the Clear print and task queues process out of business hours and well ahead of the upgrade. This will reduce the size of the system, the size of backups and the time taken to apply the package.

Instructions

Confirm that the production system is being backed up regularly.

From <https://greentreereleases.myob.com/>, download:

1. Jade2020CertifierAtPutHotFix2_debug.package if this or the earlier Jade2020CertifierAtPutHotFix_debug.package has not already applied to production
2. myobgreentree.2023.3.0.package
3. Packman.exe version 6.3.0.0
4. Microsoft Visual C++ Redistributables 2015-2022.

Restoring and certifying

This section explains:

- how to restore a system from a backup
- why it's necessary to certify the Jade database, and how to do so.

Before you can upgrade to a new Jade version, you must certify the Jade database to make sure there are no errors.

The time it takes to perform certification depends on the size and complexity of the database. This time is a significant consideration for clients and partners. You can shorten the process by following the recommendations below, but **you must not bypass this step**.

Certification is performed by a Jade application running on the database. The JadeLogicalCertifier application provides two forms of certification: logical checks and meta-data checks. For each form there's an analysis step, and, if needed, a repair step. These checks are distinct from the physical certification provided by the Jade Database Utility called **jdbutil**.

Note: If errors are detected during certification, you need to perform the repair process described in the [Performing repairs](#) section, then repeat the analysis step. You must repeat this until the *analysis* step reports no errors.

There's only a small chance of a new error being introduced between certification and the upgrade, but we recommend minimising the time between certifying and applying the fix files. The safest strategy is to take the database offline and perform the logical and meta-data checks, the repairs and the upgrade in a continuous process.

The recommended backup procedure generates command files that you can use to restore a database in a new location and perform the analysis and repair parts of the certification process.

Recommendations

- Before restoring a backup, take particular care to make the required changes to the INI file, as described in the [Instructions for preparing to restore](#) section.
- Choose the batch file that restores the database and performs the logical and meta-data analysis steps of certification.
- After restoring, compact the restored database. This will give you an indication of the benefits of compacting your production system and the time required.
- To prevent the restored system sending outward emails, turn on the **test system** as detailed in instructions below.
- To visually distinguish Windows client sessions on the restored system from those on the production system, use the **alternate skin** setting as detailed below.

Instructions for preparing to restore

1. Copy the latest backup directory to the rehearsal machine.
2. Inspect the backup directory and confirm it contains the expected directories (bin, bin64, logs, system and Webroot) and batch files (certify, certifyRepair, restore and restoreAndCertify).
3. Confirm you have enough free disk space to restore the backup and perform certification, upgrade and compact operations. As a rough guide, you need twice as much free space as the size of your system folder.
4. If you are running Instant Secure or RPS, modify the jadegt.ini and logicalcertify.ini files to remove the [SyncDbService] and [ConnectionParams] sections. The certify process cannot be performed on a database with an active primary or secondary role. The Role is removed during the restore process using the clearSDSRole parameter in the batch file.
5. Systems that had JournalRootDirectory set as a custom location in the [PersistentDb] section of the jadegt.ini will still have the same value set in the backup copy. If your original was not an Instant Secure or RPS database then change this setting to JournalRootDirectory=logs. That's the default and will create a new folder for journals. You could change this to any folder location.
6. If your database was using Instant Secure or RPS, then you will now have a copy of the journal folder included in your backup system directory. Change the JournalRootDirectory parameter to this location, as the current journals will be needed during the restore process. In the example below, the original location was c:\logsdel and in the logicalcertify.ini file it was manually changed to d:\gt\system\logsdel. This is a sub folder of the backup system folder. Change this in the logicalCertify.ini and Jadegt.ini files.

```
LogDRExceptions=false  
JournalRootDirectory=d:\gt\system\logsdel  
JournalMaxSize=12M  
JournalArchiveDirectorv=<default>
```

Instructions for restoring and certifying using the batch file

1. In the new location, run the command file **restoreAndCertify.bat**
2. Check it completes without errors.
3. If errors are detected, look for logs and fix files in the **certify** subdirectory.
4. If there are no errors, remove or rename the original system directory, and rename the new **system-restore** directory to **system**.

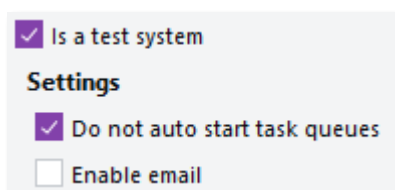
Instructions for preparing the test system

After successfully restoring and certifying your system, follow these steps to prepare it for test use.

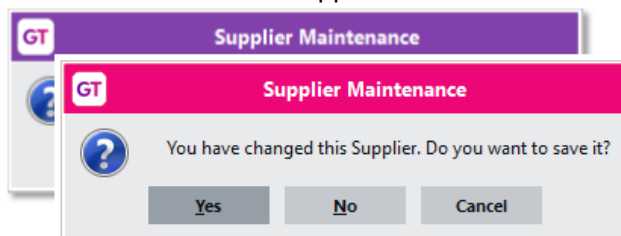
1. Turn on the test system setting by modifying the INI file on the server as follows:
[JadeServer]
IsATestSystem=true

Restoring and certifying

- Alternatively, you can do this within the application by logging in in single-user mode, opening **System > System Setup > General System Preferences** and turning on **Is a test system**, turning on **Do not auto start task queues** and turning off **Enable email**.



- Turn on the alternative skin setting by modifying the INI file on the server as follows:
[JadeServer]
MYOBGreentreeSkin=Alternate
- Locate the [JadeLog] section of the INI file. If the LogDirectory setting is present and holds a relative path, you will need to change it. If the setting is LogDirectory=logs, you can delete the line entirely, and Jade will apply the default. Otherwise, change the setting to an absolute path. For example, LogDirectory=C:\Greentree\JadeLogs
- Log in to the system in single-user mode and confirm that the Test System setting and alternate skin have been applied.



- If the site uses the Browser client:
 - Change the setup on **System > System Setup > Browser Application Maintenance** to use test system setup on your web server.
 - Copy the new web resources to the test system directory on your web server.
 - Sign in to the *production* system's Browser to confirm it is unaffected by your changes.

Instructions for applying Jade hot fix 60

Follow these steps unless the hot fix was previously applied to the production system:

- Copy **Jade2020CertifierAtPutHotFix2_debug.package** to the restored system's packages directory.
- Rename the file to debug.package.
- Run Packman from the restored system's bin64 directory.
- Ensure that the system setting points to the restored system.
- Start Packman and check that it applies the package without errors.

Instructions for performing certification in GUI mode

If you choose not to use the command file **restoreAndCertify.bat**, you can perform the analysis and repair steps using the Jade Logical Certifier GUI application.

Create a shortcut to the JadeLogicalCertifier application on RootSchema e.g.

```
D:\GreentreeCertTest\bin64\jade.exe path=D:\GreentreeCertTest\System  
ini=D:\GreentreeCertTest\jadegt.ini app=JadeLogicalCertifier  
schema=RootSchema Server=SingleUser
```

Start the application and follow these steps:

1. From the **Operation** combo box:
 - a. for logical analysis, choose Certify All Schemas.
 - b. for meta-analysis choose Meta Certify All Schemas.
 - c. for applying fixes generated from an analysis choose **Repair**.
2. For the Log File Directory create a unique location for logs and fix files e.g.
D:\GreentreeCertTest\logs\LOGICALCERT
D:\GreentreeCertTest\logs\METACERT
3. For analysis operations choose multiple workers e.g. 5
4. For analysis operations click **Certify** to begin the process.
For repair click **Repair** and answer **Yes** to the prompt “Repair processing will update the certify fix and log files. Do you want to continue?” and **Yes** to the next confirmation prompt.

When the process completes, check for errors. If any were detected, apply the fixes as described in the Performing repairs section.

Troubleshooting

If the file _metacert.err contains a report of exception 5028 Requested file path was not found, check the LogDirectory setting in the [JadeLog] section of the INI file, and revisit the Instructions for preparing the test system.

If the file _metacert.err contains the text Exception 1090: error object=0.0, revisit Instructions for applying Jade hot fix 60.

Performing repairs

If the analysis stage of logical certification or meta-certification detected errors, you should follow instructions in this section for applying repairs to the restored and production systems.

Instructions for applying fixes

1. Take a copy of all files in the Log File Directory and put them aside for applying to your production system at a later step. The repair process will update the fix and log files.
2. Use the same shortcut to start the JadeLogicalCertifier application.
3. From the **Operation** combo box, choose **Repair**.
4. For the Log File Directory, choose the location you previously used for logs and fix files. For example, D:\GreentreeCertTest\logs\LOGICALCERT
5. Click **Repair** to begin the process.
6. Click **Yes** for the message that appears, “Repair processing will update the certify fix and log files. Do you want to continue?”
7. Click **Yes** for the second confirmation message.
8. When the process completes, check for errors. If any problems remain, do not proceed with further certification or upgrade steps. Instead, contact Jade Support for assistance and follow their requests and instructions.

Recommendations

The analysis process generates fix files in the **certify** directory. These fixes can be applied to both the restored system and the production system. However, the repair process updates the fix files, so you'll need to copy them and put them aside before using them.

Repairs generally are quick to perform. Performing them on the restored system first will inform you whether they will succeed and how long they will take. You will need to schedule down-time in the production system to apply repairs there.

There are two ways you can apply a repair:

- Use the JadeLogicalCertifier GUI application.
- Prepare a batch file that runs a non-GUI version of the same application.

Note: After repairing the production system, obtain another backup. Then, redo the processes described in the [Restoring and certifying](#) section. You need to repeat this until you have a clean system that is free of logical and meta errors.

Instructions for repairing the restored system

1. Make a copy of the files generated in the **certify** directory and put them aside.
2. Open the **_logcert.fix** file from the **certify** directory in a text editor.
3. Search for **//FIX**. This text signals that a manual choice is required. If you require assistance, contact MYOB Greentree Support, and pass the copy of the generated files. If no choices are required, carry on.
4. Perform the repair on the restored system. Use the batch file **certifyRepair.bat**.
5. Confirm that the repair process completed without errors.
6. If the repair process failed, contact MYOB Greentree Support.

Instructions for repairing the production system – GUI

1. Copy the fix files to the server.
2. Perform a backup on the production system.
3. Shut the system down.
4. Run the Jade certifier GUI application from a shortcut or batch file with these settings:
app=JadeLogicalCertifier schema=RootSchema
5. For **Operation** choose Repair.
6. For **Log File Directory** choose the directory holding the fix files.
7. Click **Repair** and confirm.
8. If the repair process fails, contact MYOB Greentree Support.
9. Otherwise, close the application, restart the system, and perform another backup.
10. Take the next backup and return to the [Restoring and certifying](#) section.

Instructions for repairing the production system – non-GUI

1. Copy the fix files to the server.
2. Perform a backup on the production system.
3. Shut the system down.
4. Copy the batch file **certifyRepair.bat** to the installation directory on the server.
5. Modify the batch file so that it will work on the server. Remove the BackupDir and RestoreDir variables and ensure the path passed to jadclient specifies the system directory.
6. Run the batch file and check its results.
7. If the repair process fails, contact MYOB Greentree Support.

Performing repairs

8. Otherwise, restart the system, and perform another backup.
9. Take the next backup and return to ***Restoring and certifying***.

After repairs

After applying fixes, you must run the analysis stage again to check for further errors. It's normal for it to take two or three cycles before the analysis reports that the system is clean.

Applying the package

This section describes how to apply the Greentree package. This is done on a copy of the system before being done on the production system. You must not apply a Greentree package until you've taken a backup, restored a system from a backup, and certified your production system, as described in the previous sections.

For general information on running the Greentree package manager, Packman, see the [MYOB Greentree Deployment documentation](#).

Rehearse

Rehearsal confirms your preparation and minimises the risk of problems when upgrading the production site. It also provides a system for user acceptance testing.

Recommendations

- Use the system that you previously restored from backup and certified. This should make the rehearsal as close as possible to upgrading the production system.
- Keep track of the time required to prepare, to apply the package and to verify the results. That way, you can be well-informed for applying the package to production. If the machines have different specifications, expect the time to differ.
- Determine in advance the extent of testing required. The minimum should be confirming the ability of users to connect to the Windows client and browser client and using other forms of access.
- Leave the test system in place so it can be used to investigate if any issues are found later.

Instructions

1. Copy the file `myobgreentree.2023.3.0.package` into the `\packages` directory.
2. Locate the [JadeLog] section of the server's INI file. If the LogDirectory setting is present and holds a relative path, you will need to change it. If the setting is `LogDirectory=logs`, you can delete the line entirely, and Jade will apply the default. Otherwise, change the setting to an absolute path. For example,
`LogDirectory=C:\Greentree\JadeLogs`
3. Copy Packman.exe version 6.3.0.0 to the `\bin64` directory.
4. Run Packman.exe from the `\bin64` directory. Click start and confirm.
5. When Packman completes, confirm the package has been imported without errors. Check the display window. For a full text copy, see `\bin64\packCurrentLog.log`.
6. If the site is running Greentree Browser, copy the Webroot files to the test location on your web server.
7. Confirm access and basic operation in single-user mode.
8. Start the system in multi-user mode and confirm remote access.

Instructions for updating Web Server Test facility

If the site is running Greentree Browser and you have a test web server, or you have a test facility on your web server, follow the [Instructions for updating Web Server](#) below. However, be very careful to update the test facility, not the live system.

Upgrade production

Before applying the package to the production site, confirm that the preparation detailed in all previous sections has been completed. You should have a clear plan for the upgrade and know exactly how you will execute your fall-back plan if you need it.

Recommendation

- Confirm arrangements with clients and IT support for the outage.

Instructions

1. Double-check storage space.
2. Confirm the location and date of the latest backup.
3. Shut down the system using GreentreeShutdown.exe.
4. Shut down Windows services.
5. Confirm that no Jade processes are running by using Windows Task Manager.
6. Install Microsoft Visual C++ 2015-2022 Redistributables.
7. Copy the package file myobgreentree.2023.3.0.package into the **\packages** directory
8. Locate the [JadeLog] section of the server's INI file. If the LogDirectory setting is present and holds a relative path, you will need to change it. If the setting is LogDirectory=logs, you can delete the line entirely, and Jade will apply the default. Otherwise, change the setting to an absolute path. For example, LogDirectory=C:\Greentree\JadeLogs
9. Copy Packman.exe version 6.3 to the **\bin64** directory.
10. Run Packman.exe from the **\bin64** directory. Click start and confirm.
11. When Packman completes, confirm the package has been imported without errors. Check the display window. For a full text copy see \bin64\packCurrentLog.log.
12. If the site is running Greentree Browser, copy the Webroot files to the live location on your web server.
13. Restart the system in multi-user mode.
14. Confirm remote access.

Instructions for updating Web Server

These instructions apply to sites running Greentree Browser.

1. Update the Webroot directory on the web server. You need to completely replace the files with the new copies on the site's webroot directory.
 - a. Remove the old directories from the web server, being careful to leave other directories, such as eCRM, in place.
 - b. Copy the new materials to the Webroot directory. You should replace directories greentree-desktop, greentree-login, greentree-mobile and resources, and file version.json.

2. Alternatively, use the push function on the Browser Application Maintenance form. This is accessible by selecting the **System > System Setup** menu item. On the **Website Settings** tab, use **Create Batch File** and **Update Now**.
3. Copy the files jadehttp.dll and jadehttp.pdb from the system's bin64 directory to the bin directory on the web server, replacing the existing files there.
4. Confirm access to Browser by logging in from a local machine.

Replay the upgrade on SDS/RPS Secondaries

These instructions are from the JADE 2022 Installation & Upgrade Instructions, and apply only to systems configured with secondary databases:

SDS Secondary databases will replay the journals created on the primary during the upgrade as normal. They will reach a point at which a "Stop Tracking" command is encountered. The reason will be "Version Check". This information will be available in the jommsg log or the SDS Admin tool. It is at this point that the Secondary must be shut down, and the new System Files, Binaries, and _monitor.dat installed. The Secondary can then be restarted and will continue processing as normal. RPS Secondaries will retain their attached SQL databases.

New client files

The 2023.3.0 release deploys new files required for Jade thin client connections to the server's bin64 directory. These files include:

- New versions of MYOB_GreenTree_FREE.xla, MYOB_CRM_FREE.xla and MYOB_HR_FREE.xla
- New versions of GreentreeInterface.dll and GreentreeInterface.exe.
- Jade's new ODBC drivers.

As a result, you will need to verify that the users can use FREE and ODBC.

ODBC Data Source Administration

This release delivers an updated 64-bit Jade ODBC driver to the server's bin64 directory. At the first attempt by a user to log in to Greentree, Connection Manager will download the driver to the client machine. If the client previously registered the 64-bit version of the Jade 2020 ODBC driver, the replacement will work cleanly.

Recommendations

- Check that you can connect from a local machine. If there's a problem, you will need to unregister the prior version first.

Compacting the database

Database compaction is a routine maintenance job that can minimise storage requirements. You may choose to combine it with applying a Greentree upgrade.

Recommendations

If you're unsure of the time required and reduction in database size, you can perform compaction on a copy of the production system. This will guide your decision on whether to compact the production system as a whole or to compact only selected files or to do no compaction.

Compaction has the potential to affect system performance, so it's normally done in single-user mode, or in multi-user mode at an off-peak time.

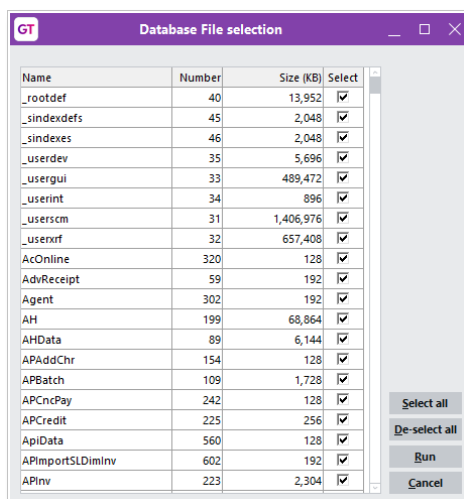
You can perform compaction using a system script within the Greentree Windows client when the system is running in single-user or multi-user mode.

Alternatively, you can do the same with the system shut down using the Jade database utility, `jdbutil.exe`, or in batch mode using `jdbutilb.exe`. This allows you to specify multiple worker threads, so it should be faster. It also provides a helpful free-space evaluation process.

In either case, record the size of the system directory before and after compaction, so you can assess the overall reduction.

Instructions for running from Greentree Windows client

1. Use menu item System > Utilities > System Scripts, locate the Database category, choose Compact database files.
2. Click Yes to the confirmation message.
3. Select the required database files.



Instructions for running Jade database utility

1. With the system shut down, start \bin64\jdbutil.exe
2. Use menu item **File > Open database** and enter the path to the system directory. For example, D:\GreentreeTest\system
3. Use menu item **Operation > Evaluation free space**, add all files, click **OK** to begin. You can find potential size reductions on screen or in file \logs\ospace.log.
4. Use menu item **Operation > Compact files**, add all files, specify 5 workers and click **OK** to begin. You can find size reductions in the file \logs\compact.log.
5. On completion, use menu item **File > Close database** and exit.

Instructions for running in batch mode

Create and run a batch file or enter a command of this form in a command window:

```
D:\GreentreeCertTest\bin64\jdbutilb.exe  
path=D:\GreentreeCertTest\System ini=D:\GreentreeCertTest\jadegt.ini  
compact workers=5
```