

Upgrade guide

Kyocera Net Manager

Version 8.2

Table of contents

Purpose and scope	4
Print Server upgrade	4
Upgrade requirements	4
Software requirements	4
Hardware requirements	5
Support license requirements	5
Minimum version requirements	6
Terminal packages	6
Check compatibility of other applications	8
Customizations	9
Important changes in recent versions	9
Backup	10
Free space	11
Upgrade steps	12
Disable scheduled tasks.....	12
Stop services	13
Verify nothing is running	14
Upgrade	15
After upgrade steps	18
Central Server upgrade	20
Print Server in the Central Server mode	20
Central Server upgrade.....	20
Upgrade requirements	21
Software requirements	21
Hardware requirements	21
Support license requirements	22
Minimum version requirements	22
Customizations	22
Backup	23
Free space	24
Upgrade	steps
.....	25
Disable scheduled tasks.....	25

Stop services	26
Verify nothing is running	27
Upgrade	27

Purpose and scope

This document will guide you through the process of upgrade to the latest version of the product. Listed are requirements, prerequisites and new features as well as individual steps to follow.

Described are upgrade procedures for Print Server and Central Server, as well as additional information regarding Embedded terminals.

Print Server upgrade

This section will describe the upgrade procedure of the Print Server in case it is used in the following scenarios:

- ✦ Print Server in the Standalone mode
- ✦ Print Server in the Site role in case of Central-Site configuration

ⓘ Always upgrade the Central Server first and Site servers later. There is backwards compatibility so it is possible to use older versions of Site servers with a newer Central server. However, it is not possible to connect a newer version of Site server to an older Central server.

See other part of this document if you want to upgrade a different installation, or contact your support representative to get more information.

Upgrade requirements

Before upgrading, verify that your server meets the hardware and software requirements and that the support license is valid.

Make sure that there are available all the additional packages or applications which are used in the given installation environment and they are compatible with the version you are about to install.

Software requirements

Operating system:

- ✦ Windows Server 2012 64 bit or higher (recommended).
- ✦ Windows 8.1 64 bit or higher. Be aware of the connection limit of up to 20 clients.

ⓘ 32-bit Windows is no longer supported since Print Server 7.5. Use 64-bit version OS.

ⓘ Installation on Windows Server 2008 R2 and older and Windows 7 and older is no longer supported from version 8.0.

Installation on a Desktop (non-Server) operating system like Windows 10 as well as a Domain Controller is not recommended.

.NET Framework:

- ✦ 4.5 for KNM 7.1
- ✦ 4.7 for KNM 7.5
- ✦ 4.7.2 for KNM 7.6 and newer

Printer packages may require a higher version of .NET Framework to be installed later.

To make sure that the system runs smoothly, you need to set an exception for both program and data folders in your antivirus settings.

Hardware requirements

- ✦ CPU: 4 cores - 8 cores
- ✦ Memory: 6 GB RAM - 14 GB RAM
- ✦ Disk: 10 GB plus additional storage for print/scan jobs, logs, history, backups. Recommended size is at least 100 GB.

Use the higher requirements in case of:

- ✦ getting closer to the limit of supported terminals or parallel user sessions
- ✦ using the job parser
- ✦ using job archiving
- ✦ using the Smart Job Manager
- ✦ using the Smart Print Services
- ✦ using a lot of Office document printing via email/web/mobile
- ✦ using watermark
- ✦ heavy usage of the API

¶ We strongly recommend using an SSD hard drive for installation of both program and data parts of the application.

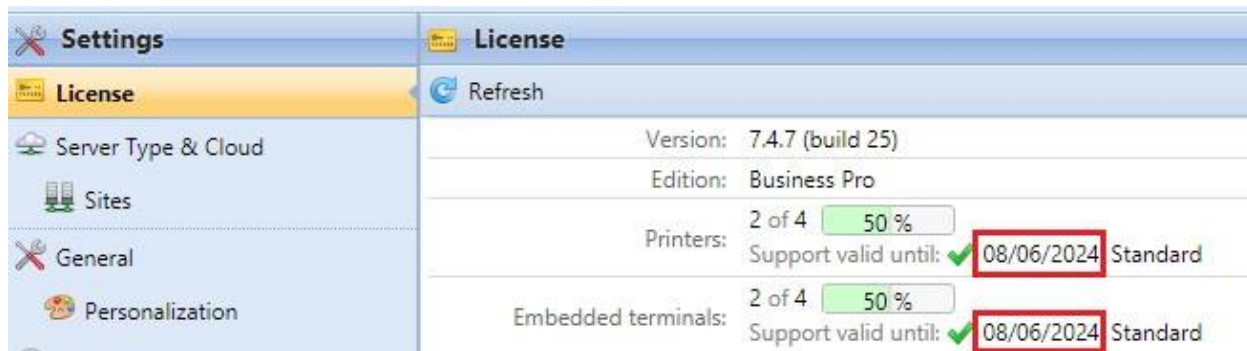
Support license requirements

Required support license validity is **15 January 2021**.

It is necessary to have a valid support license before proceeding with the upgrade. Without a valid support license, the upgrade process will not be permitted, or some parts of the system will not work after the upgrade.

You can check the validity of your support licenses in Settings > License.

¶ Be aware that the support license with the oldest expiration date counts for the support validity of the whole system.



License validity check

If the support license is not valid at least till the required date, do not start the upgrade. Activate the new support license first in order to prolong the support validity and do the upgrade afterwards.

Expired support license for the Embedded terminals will not prevent you from upgrading the Print Server, however pay attention to the required support for the Embedded terminal package which will be installed – package which requires a more recent validity will not allow users to login onto the terminals.

Minimum version requirements

There are limitations from which version it is possible to upgrade. Please refer to the following table and see if it is possible to upgrade directly, or an intermediary version must be used.

Current version	Intermediary version	Note
Lower than 7.1	7.1	Upgrade first to the latest available 7.1 version
7.4	7.6	Upgrade first to the latest available 7.6 version
7.1 – 8.1, except 7.4		Direct upgrade to 8.2 possible

Required versions for upgrade

⚠ Direct upgrade from versions lower than 7.1 is no longer supported. These installations must be upgraded via an intermediary version. **Always use the latest available 7.1 version for this intermediary upgrade.**

⚠ When upgrading from version 7.4 to version 8.2, the latest available version **7.6 needs to be used as an intermediary version.** Upgrade itself to 8.2 is possible, but all licenses might be removed from the system and it will be necessary to manually enter them again.

Terminal packages

Before starting the upgrade procedure, make sure that there are available all the embedded or hardware terminal packages which are compatible with the version you are upgrading to.

⚠ Always use the latest available terminal package version of the same, or lower than, the Print Server version.

⚠ In case of the new user session terminals, the use of 8.1 or higher terminal version is required. Do not use Embedded terminal version 8.0 with Print Server 8.2.

⚠ From version of Embedded terminal 8.x the architecture of the terminal has been changed. These changes may affect the behavior of the Embedded terminal. When upgrading the Embedded terminal, please check the Support Bulletin part of the Partner portal for more information to find out if your brand requires extra steps.

Partner portal -> Support -> Documentation -> Support Bulletin tab.

Currently, special steps are necessary for Kyocera Embedded terminal version 7.5. Please see the available Support Bulletin 04-2020 regarding the upgrade of Kyocera Embedded terminal for more information.

Following Embedded terminal packages are supported by Print Server 8.2:

Web (REST API) Embedded terminals	Version
UDP Embedded terminals (old user session)	
Kyocera	7.5
New user session Embedded terminals	
Kyocera	8.1
HW terminals	
HW-11T	5.10
Android 5"	4.3
Android 7"	5.1
KNM TerminalPro	2.4
HW Recharge Terminal	8.2

Available terminal packages

⚠ It is recommended to always use the latest available release of the terminal package.

Do not use lower terminal versions than listed in the table above

Do not use higher terminal versions than 8.2 – future releases will most likely not be compatible.

⚠ If the currently installed terminal version is lower than the one listed in the table above, it is recommended to uninstall this terminal package before running the upgrade. Please, consult the corresponding terminal manual about the uninstallation procedure.

Check compatibility of other applications

Before starting the upgrade procedure, make sure that there are available all the additional software packages as well as any 3rd party applications which are compatible with the version you are upgrading to.

Following applications are supported by Print Server 8.2:

Clients	Version
Smart Job Manager	8.2
Smart Print Services	8.2
OCR Server	2.4
Mobile Print Agent	1.2
KNM X Mobile Client	
Central Server	8.2
Easy Cluster	8.2

Available applications

⚠ KNM Mobile Printing application (Android or iOS) is not compatible with Print Server 8.2 Use KNM X Mobile Client instead.

It is recommended to always use the latest available release of the client software.

Do not use lower client software versions than listed in the table above

Do not use higher client software versions than 8.2

Smart Job Manager

Print Server is only compatible with the same version of the Smart Job Manager. It is not possible to use lower (or higher) versions of this client, unless specifically stated otherwise.

Smart Job Manager has to be upgraded on the client stations as soon as possible after the Print Server is upgraded and is not to be used meanwhile.

Please, consult the Smart Job Manager manual on how to upgrade this client software.

Smart Print Services

Print Server is only compatible with the same version of the Smart Print Services. It is not possible to use lower (or higher) versions of this client, unless specifically stated otherwise.

Smart Print Services has to be upgraded on the client stations as soon as possible after the Print Server is upgraded and is not to be used meanwhile.

Please, consult the Smart Print Services manual on how to upgrade this client software.

Easy Cluster

There are special steps to follow in case the Easy Cluster environment is used. Different upgrade procedure applies to Active and Passive nodes of the cluster.

Please, see the Easy Cluster manual for more details.

Customizations

If there are any customizations running in the current installation – be it customized reports, scripts or anything else which isn't included in the standard setup, contact KNM support first to verify whether they are compatible with the version you are upgrading to.

Customizations are always created for a specific version and they depend on its resources. These resources may not be present in the newer version and so the custom content may not work after the upgrade.

Important changes in recent versions

There are many changes in every version which is released. We recommend reading all the Product changelogs and Technical changelogs before upgrading to be familiar with all the changes that were made in the product.

New features or changes may require additional settings like opening new ports in the firewall, installing additional 3rd party software and packages, or following other required steps.

These are the most important changes which have significant impact on the whole system, and they must be considered before upgrading.

¶ **Master Server** has been renamed to **Central Server**

Version 7.6

- ✦ Database Encryption and Password Protection
- ✦ New Admin Web UI and UI changes
- ✦ Printer Configuration profiles
- ✦ Native Airprint support for MAC OS & for Android using Mopria
- ✦ The job size is no longer limited to 2 GB

Version 8.0

- ✦ New KNM Core Architecture (also known as New User Session Architecture)
- ✦ Improved Watermark Functionality
- ✦ Advanced Project Accounting and Reports
- ✦ Admin's UI improvements
- ✦ Technical Optimization

Version 8.1

- ✦ New Parser & Preview Engine
- ✦ Enhanced Job Policies, Job Roaming and Quota
- ✦ Removal of Service module ✦ Pin management changes
- ✦ Installation key license type

Version 8.2

- ✦ Quota improvements
- ✦ Cost centers
- ✦ Accessibility mode
- ✦ Print via hot folder
- ✦ Removed Central server mode
- ✦ Web UI themes
- ✦ Printer Events
- ✦ Microsoft Universal Print
- ✦ CSV log removed from Data for support

- ✦ Converting of Excel documents to PDF using MS Office 2013 is not supported
- ✦ Office formats conversion requires 64-bit Office installed, 32-bit is not supported ✦ License migration
- ✦ MS Azure virtual server does not require to be in domain in order to use VMHA license
- ✦ Installation key support in MS Cluster environment ✦ New built-in certificate generation options

Backup

Before proceeding to the actual upgrade, do a backup first. This will ensure that in case of unsuccessful upgrade process, there will be a backup set of data to return to.

¶ It is recommended to physically copy the created backup files to a separate file storage.

Backup can be manually created either by using the KNM web interface or the Easy Config.

Web interface

Login as *admin and in Settings > Scheduler run the backup tasks for

- ✦ Database and settings backup
- ✦ Log backup

Check the log to see when the backup operations are finished.



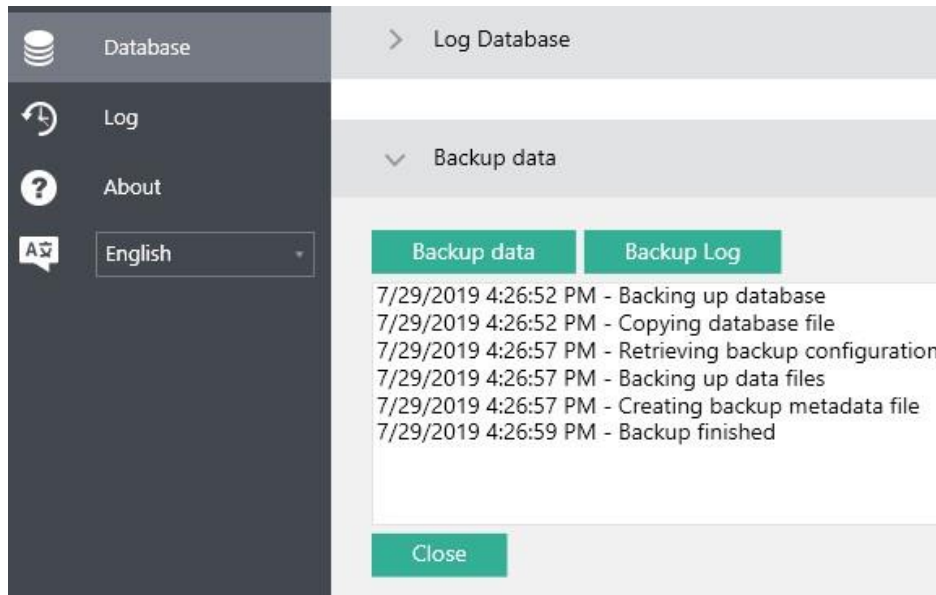
Stat...	Action	Name	Period	Last run	Next run
✓	Replication	Data replication from sites to the Master server	Daily	29/07/2019 16:20:55	30/07/2019 05:00:00
✓	Backup	Database and settings backup	Daily	29/07/2019 16:20:49	30/07/2019 03:00:00
✓	Disk space checker	Disk space checker	Minute	29/07/2019 16:20:58	29/07/2019 16:30:58
✓	History deletion	History deletion	Daily	29/07/2019 16:20:58	30/07/2019 03:00:00
✓	Backup	Log backup	Daily	29/07/2019 16:20:54	30/07/2019 03:00:00
✓	System maintenance	System maintenance	Daily	29/07/2019 16:20:58	30/07/2019 03:00:00
✓	User Synchronization	User Synchronization	Daily	29/07/2019 16:20:34	30/07/2019 00:30:00

Backup via web UI

Easy Config

Log in as user with local administrator privileges on the server running KNM and run the Easy Config application.

In Database menu, open the Backup data submenu and run both the Backup data and Backup Log options one by one.



Backup via Easy Config

If you are running KNM in a virtual environment, it is recommended to create a Snapshot/Checkpoint before upgrading. This will present the easiest way of a rollback, if required.

Free space

During the upgrade process, both databases (containing data and logs) are upgraded and modified to be compatible with the new structure of the application. During this process, the HDD storage requirements grow significantly as the database contents are copied to temporary files while the database engine works on the required changes.

Space required during the upgrade process can be up to **four times** the size of the actual databases.

Verify that both the system hard drive (which is storing the temporary files) and the drive used for data part of the application, have at least four times the storage space available than the total size of both data and log databases.

The size of the databases can be found in the Data folder of KNM. By default, this is C:\ProgramData\KNM, or it can be found in Easy Config application in Settings > Data folder. Files are named KNM.fdb and KNMlog.fdb

This PC > Local Disk (C:) > ProgramData > MyQ

Name	Date modified	Type	Size
MYQ.FDB	7/29/2019 4:20 PM	FDB File	322,080 KB
MyQ-helpdesk	7/29/2019 4:20 PM	XML Document	98 KB
MYQLOG.FDB	7/29/2019 4:20 PM	FDB File	11,456 KB

Location and size of databases

In this example, we can see that the total size of both databases is about 330 MB, so for the upgrade process, the C: drive must have at least 1,3 GB of free space.

If the data folder was on the D: drive, then the same amount of free space is also necessary there, because by default, the temporary files are stored on the C: drive and both drives must have sufficient storage available.

⚠ Having an insufficient storage will lead to unexpected issues during upgrade. Not only the upgrade process will most likely fail, but it may also present a threat to the whole operating system as all the available storage will be depleted.

Upgrade steps

Following the upgrade steps one by one in a correct order will ensure the most reliable outcome of the upgrade. Though the process itself is simple, it should still be considered critical and the administrator should pay attention to every detail of it. Doing it right will minimize necessary downtime and also prevent unexpected issues from happening to the most possible extent.

Disable scheduled tasks

At the very beginning of the upgrade process, it is the best practice to disable all scheduled tasks. This is to avoid accidentally running a task which might require a lot of time to finish at some point that is not convenient. Also, if other components of the system are planned to be upgraded (for example Central server and Site servers simultaneously), user synchronization and data replication might start when not desired.

In Settings > Task Scheduler, right click all the tasks and click the Enabled button to disable the given tasks.

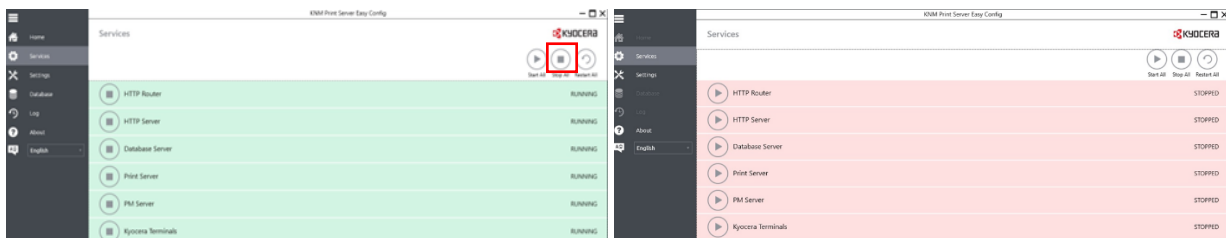
Some default tasks cannot be disabled, for those it is recommended to check the next scheduled run time and alter it, if necessary.

Stop services

The installation wizard will attempt to stop all application services so it may proceed with overwriting files and application components. It is best to do this step manually first and verify that all the services were stopped correctly and that there is no operation running in the background.

Until the services are stopped, and all the running tasks finished, the files are blocked, and the installation wizard will not be able to overwrite them.

To manually stop services, use the Easy Config application and click on the Stop button in the Services tab.



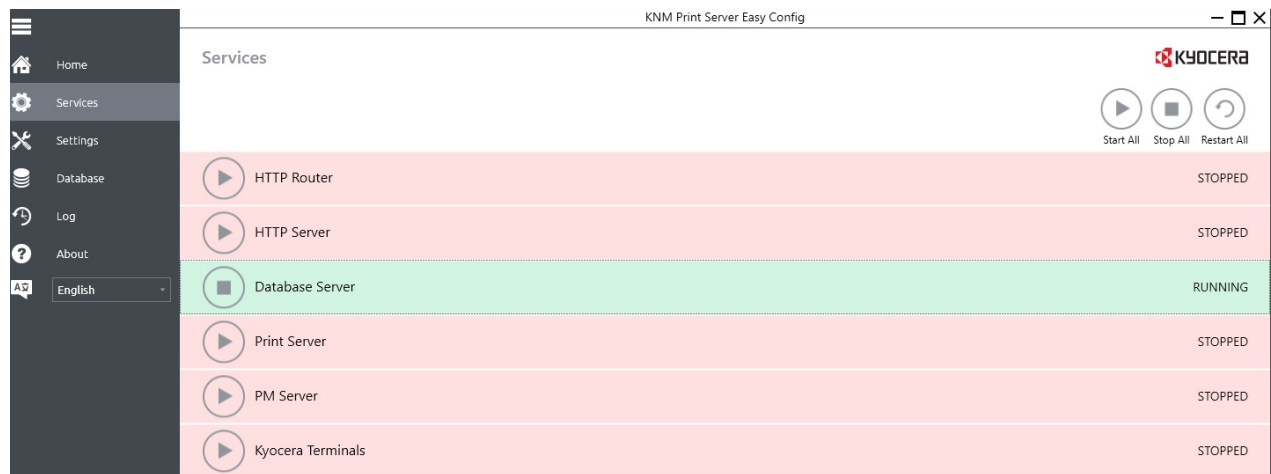
Stopping all services

Stopping all the services may take time as the services are not stopped right away, but the system will wait for any running task to correctly finish. Do not force stop the processes using Task Manager as it may leave some task in a half-finished inconsistent state.

⚠ Stopping services will prevent users from using the system.

When services are stopped, it is possible to proceed with following steps of the upgrade process. In this state it is ensured that no user is logged in and no task is running, so all the files and system components can be overwritten with an updated version.

⚠ After stopping all the services, manually run only the Database Server service. This service is necessary so the installation wizard can verify the version of the system, which is currently installed and properly perform the upgrade, as well as run the database upgrade afterwards.



Starting only the Database Server service

At this point, it is the perfect moment to create the database backup – because if such a backup must be restored, it will contain all the data since no one is using the system. This backup cannot be done via web UI since it is not currently running, it must be done via Easy Config.

Verify nothing is running

When services are stopped, verify if truly all the processes are stopped using the Task Manager and the Details tab. Technically, it is possible that some stuck process is still running and blocking the files, even though the related service is stopped.

In this state only the two following processes should be running:

- ✦ Firebird.exe
- ✦ KNM EasyConfig.exe

⚠ Make sure that there is **none** of the following processes or related services running:

- ✦ EpsonTerminal.exe
- ✦ HPProTerminal.exe
- ✦ HPTerminal.exe
- ✦ httpd.exe

- ✦ Kmum.Server.exe
- ✦ LexmarkTerminal.exe
- ✦ KNM.exe
- ✦ KNMSvc.exe
- ✦ nssm.exe
- ✦ php.exe
- ✦ php-cgi.exe
- ✦ rotatelogs.exe
- ✦ SharpTerminal.exe
- ✦ traefik.exe
- ✦ XeroxTerminal.exe

If any of the previously listed processes is running, despite all the services are stopped, then it is most likely a stuck process and will block the correct execution of the upgrade installation wizard.


In such a case, it is recommended to restart the whole server. After restarting the server, go back to the beginning of this chapter to stop the proper services again and check for any running processes.

Upgrade

When it is verified that the system meets all the requirements, backup is made and all the services, except for the Database engine, are stopped and there are no running stuck processes which would block the installation wizard, we can proceed to the actual upgrade.

¶ First close the Easy Config application.

Make sure that logged in user has Local Administrator access rights and run the installation wizard.

 MyQ Print Server 8.2 RC3.exe	3/22/2021 8:36 AM	Application	185,318 KB
--	-------------------	-------------	------------

File of the installation wizard

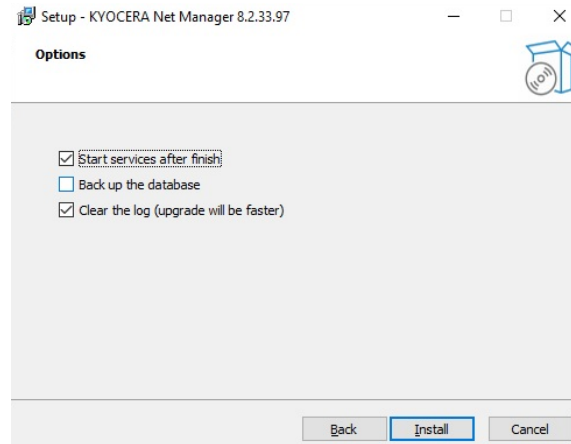
First choose the desired language of the installation wizard.

In second step, you will be presented with a message that previous version was detected, and upgrade will be performed.

Continue through the license agreement to the Options steps.

Here, it is possible to choose from various options regarding how to handle different parts of the system. These options will vary in each version and will also depend on the version from which the upgrade is being made.

The dialogue step may look like this:



Options step of the installation wizard

- ✦ Backup of the database will create a standard backup as if run via Easy Config. This step is generally not required because the backup was done manually before starting the upgrade. In some cases, when the database engine is also upgraded, this option is forcibly enabled because the backup and then following restore is done in order to change the database engine version.
- ✦ Clear the log option is generally recommended, since in most cases it is not necessary to keep the old log data. If the requirement appears for any reason in the future, there is a backup of the log database which can be used for this purpose. Deleting contents of the log database will free up some disk storage space and make the upgrade process faster.
- ✦ Start services after finish option is generally recommended. Only in case the previous upgrade was not successful for some reason, it is possible not to start the services right away and troubleshoot.

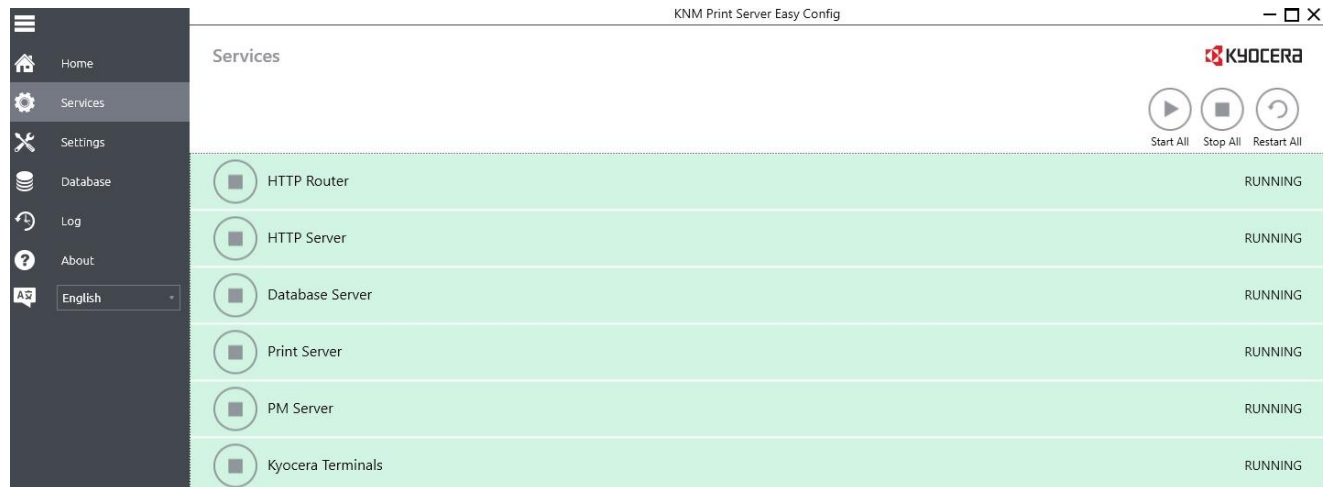
Continue with the Install button. After the installation wizard is finished, the Easy Config application will start.

You may be presented with the computer restart question – in this case, make sure that the Easy Config is not running, and it is not upgrading the database or doing other steps as the server restart will force stop this process and leave the database most likely inoperable. If the Easy Config is not running, confirm the server restart. Do not skip the restart entirely, if prompted. After restart, the Easy Config application will automatically launch.

Easy Config will perform the database upgrade steps. This process will take some time, especially with larger databases. Some of the upgrade steps can take a lot of time – be patient and do not forcibly end this process.

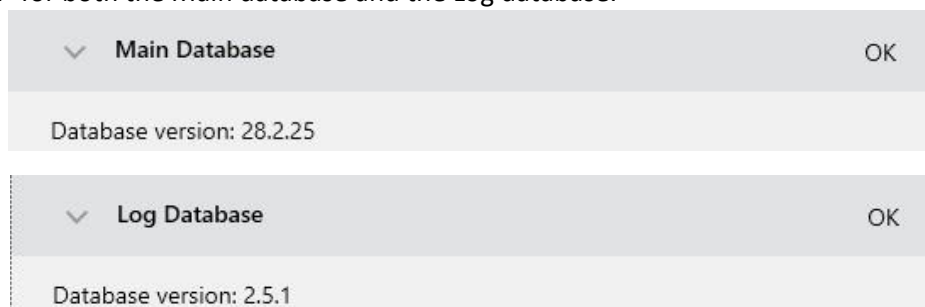


After the database upgrade is done, Easy Config will open on the Home tab where you can check basic details. It is recommended to go to the Services tab and verify that all the services are running. If not, click the Start All button.



All services are running

Then open the Database tab and submenus Main Database and Log Database – verify that the database status is “OK” for both the Main database and the Log database.



Databases upgraded successfully

On the About tab, you can check the currently installed version to make sure that the upgrade was successful.

After this, proceed to the web interface, log in as *admin and verify that everything is running as it should and to re-install terminal packages if previously uninstalled.

We recommend checking the following areas, whether they run correctly:

- ✦ Log for any error messages
- ✦ Licenses
- ✦ User synchronization
- ✦ Site-Central connection and data replication
- ✦ Scheduled reports generation

With all the previous steps finished, the upgrade is done. Congratulations!

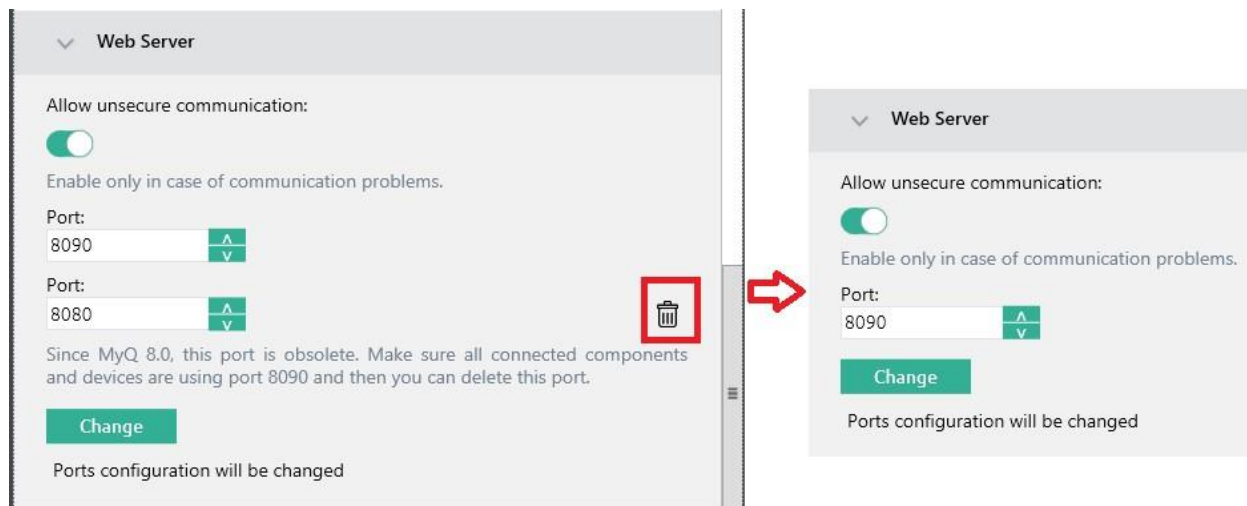
After upgrade steps

With the upgrade procedure successfully finished, the system is up and running. Depending on from which version was the system upgraded, there might still be steps to perform.

Single communication port

From version 8.0, all the main port communication is forwarded to a single port (8090 by default). If there were previously used both ports (default 8080 and 8090) or a single unsecure port (8080), it is necessary to update settings of the connected applications (Embedded terminals, SPS, SJM etc.) to use this single main port.

After that, the old unsecure communication port can be deleted in **Easy Config > Settings > Web Server**, which also closes this port in the firewall. Use the trash bin icon on the right. You can also choose whether to allow the unsecure communication. Deleting the port will restart services.



Deleting the unused port

Reinstall terminal packages

If the terminal packages were uninstalled prior to the upgrade, install the current version.

In Settings > Printers & Terminals > Terminal packages, click +Add and install required terminal packages.

From Print Server 8.0, the default communication is set to be secured by default. When installing Web-Based terminal, the certificate needs to be applied to the port using a PowerShell script. (steps for installation of certificate can be found in manual for each Embedded terminal).

Other solution is to allow unsecured communication in Easy config in **Easy Config > Settings > Web Server > Allow unsecure communication** and by enabling the switch. This action will restart services.

After the terminal packages are installed, run a new remote setup on affected devices.

Central Server upgrade

There are two different software packages which are referenced as the Central Server:

- ✦ Print Server with the Central Server mode enabled
- ✦ Central Server

The Print Server with enabled Central Server (or formerly Master Server) in Settings > Server Type & Cloud is using the standard Print Server installation package and the embedded Firebird database engine.

The Central Server is a standalone software with a separate installer and can only be used in the Central Server mode, not as a Print Server. It offers either Firebird database or Microsoft SQL Server database engines.

These two products have different approach for the upgrade.

Print Server in the Central Server mode

Since version 8.2, it is not possible to use the Print Server in the Central Server mode anymore. The upgrade will not be permitted by the installer software.



An existing Print Server installation running in the Central Server mode has been detected. However, Print Server 8.2 or higher cannot run in the Central Server mode anymore. If you want to upgrade, you need the Central Server 8.2 or higher installation package.

Install the Central Server 8.2 instead and proceed with the migration process to convert the current installation of the Print Server to the Central Server.

Please, consult the Central Server guide for more information about the migration from Print Server to Central Server.

Central Server upgrade

This section will describe the upgrade procedure of the Central Server.

See other part of this document if you want to upgrade a different installation, or contact your support representative to get more information.

⚠ Always upgrade the Central Server first and Site servers later. There is backwards compatibility so it is possible to use older versions of Site servers with a newer Central server. However, it is not possible to connect a newer version of Site server to an older Central server.

Upgrade requirements

Before upgrading, verify that your server meets the hardware and software requirements and that the support license is valid.

Software requirements

Operating system:

- ✦ Windows Server 2012 64 bit or higher (recommended).
- ✦ Windows 8.1 64 bit or higher. Be aware of the connection limit of up to 20 clients.
- ✦ MS SQL Server 2012 or higher (2017 or higher is recommended), in case the MS SQL database is used

⚠ 32-bit Windows is not supported. Use 64-bit version OS.

Installation on a Desktop (non-Server) operating system like Windows 10 as well as a Domain Controller is not recommended.

.NET Framework:

- ✦ Microsoft .NET Framework 4.7.2 or newer

To make sure that the system runs smoothly, you need to set an exception for both program and data folders in your antivirus settings.

Hardware requirements

KNM Central Server with integrated Firebird database

- ✦ CPU: 6 cores
- ✦ Memory: 8 GB RAM (10 000 users) – 12 GB RAM (50 000 users) - 16 GB RAM (100 000 users)

KNM Central Server mode with external MS SQL database

- ✦ CPU: 4 cores
- ✦ Memory: 4 GB RAM (10 000 users) – 6 GB RAM (100 000 users)

Server with MS SQL database

- ✦ CPU: 6 cores
- ✦ Memory: 12 GB RAM (10 000 users) – 24 GB RAM (50 000 users) - 36 GB RAM (100 000 users)

- ✦ Disk: 10 GB plus additional storage for replicated data, logs, backups. Recommended size is at least 50 GB.

⚠ We strongly recommend using an SSD hard drive for installation of both program and data parts of the application.

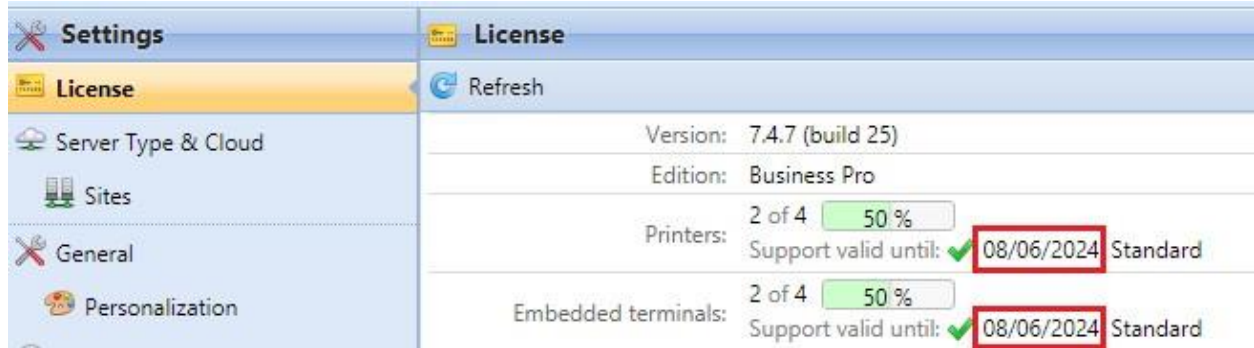
Support license requirements

Required support license validity is **15 January 2021**.

It is necessary to have a valid support license before proceeding with the upgrade. Without a valid support license, the upgrade process will not be permitted, or some parts of the system will not work after the upgrade.

You can check the validity of your support licenses in Settings > License.

ⓘ Be aware that the support license with the oldest expiration date counts for the support validity of the whole system.



The screenshot shows the 'Settings' application with the 'License' section selected. The 'License' page includes a 'Refresh' button and displays the following information:

Version:	7.4.7 (build 25)
Edition:	Business Pro
Printers:	2 of 4 <input type="checkbox"/> 50%
Support valid until:	✓ 08/06/2024 Standard
Embedded terminals:	2 of 4 <input type="checkbox"/> 50%
Support valid until:	✓ 08/06/2024 Standard

License validity check

If the support license is not valid at least till the required date, do not start the upgrade. Activate the new support license first in order to prolong the support validity and do the upgrade afterwards.

Minimum version requirements

There are no limitations in the upgrade process and it is possible to upgrade to version 8.2 from any previous version of the Central Server (or former Master Server).

Customizations

If there are any customizations running in the current installation – be it customized reports, scripts or anything else which isn't included in the standard setup, contact KNM support first to verify whether they are compatible with the version you are upgrading to.

Customizations are always created for a specific version and they depend on its resources. These resources may not be present in the newer version and so the custom content may not work after the upgrade.

Backup

Before proceeding to the actual upgrade, do a backup first. This will ensure that in case of unsuccessful upgrade process, there will be a backup set of data to return to.

ⓘ It is recommended to physically copy the created backup files to a separate file storage.

Backup can be manually created either by using the KNM web interface or the Easy Config.

Web interface

Login as *admin and in Settings > Scheduler run the backup tasks for

- ✦ Database and settings backup

✦ Log backup

Check the log to see when the backup operations are finished.

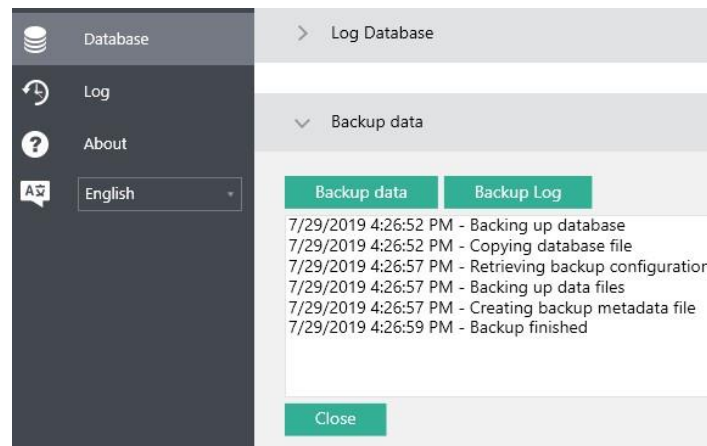
Stat...	Action	Name	Period	Last run	Next run	
✓	Replication	Data replication from sites to the Master server	Daily	29/07/2019 16:20:55	30/07/2019 05:00:00	
✓	Backup	Database and settings backup	Daily	29/07/2019 16:20:49	30/07/2019 03:00:00	Edit
✓	Disk space checker	Disk space checker	Minute	29/07/2019 16:20:58	29/07/2019 16:30:58	Run
✓	History deletion	History deletion	Daily	29/07/2019 16:20:58	30/07/2019 03:00:00	Enabled
✓	Backup	Log backup	Daily	29/07/2019 16:20:54	30/07/2019 03:00:00	Delete (Delete)
✓	System maintenance	System maintenance	Daily	29/07/2019 16:20:58	30/07/2019 03:00:00	
✓	User Synchronization	User Synchronization	Daily	29/07/2019 16:20:34	30/07/2019 00:30:00	

Backup via web UI

Easy Config

Log in as user with local administrator privileges on the server running KNM and run the Easy Config application.

In Database menu, open the Backup data submenu and run both the Backup data and Backup Log options one by one.



Backup via Easy Config

If you are running KNM in a virtual environment, it is recommended to create a Snapshot/Checkpoint before upgrading. This will present the easiest way of a rollback, if required.

ⓘ Please note, that when using the MS SQL database, the actual backup of the database has to be performed manually. Backup created via Scheduler or Easy Config only backs up data stored on the KNM Server, not the SQL database itself. Use the MS Management Studio (or any other preferred way) to create the SQL database backup.

The option to back up the MS SQL database directly from KNM was implemented in Central Server 8.2.

Free space

During the upgrade process, both databases (containing data and logs) are upgraded and modified to be compatible with the new structure of the application. During this process, the HDD storage requirements

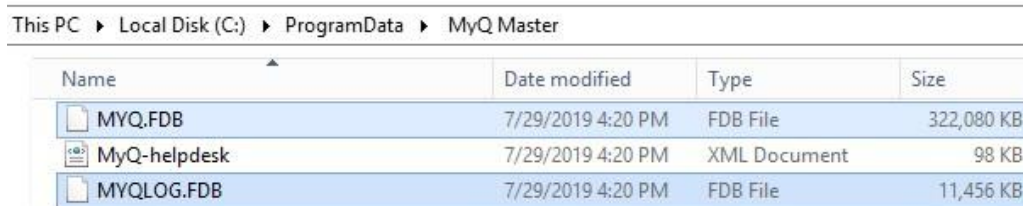
grow significantly as the database contents are copied to temporary files while the database engine works on the required changes.

Space required during the upgrade process can be up to **four times** the size of the actual databases.

Verify that both the system hard drive (which is storing the temporary files) and the drive used for data part of the application, have at least four times the storage space available than the total size of both data and log databases.

The size of the databases can be found in the Data folder of KNM. By default, this is C:\ProgramData\KNM Master, or it can be found in Easy Config application in Settings > Data folder.

Files are named KNM.fdb and KNMlog.fdb



Name	Date modified	Type	Size
MYQ.FDB	7/29/2019 4:20 PM	FDB File	322,080 KB
MyQ-helpdesk	7/29/2019 4:20 PM	XML Document	98 KB
MYQLOG.FDB	7/29/2019 4:20 PM	FDB File	11,456 KB

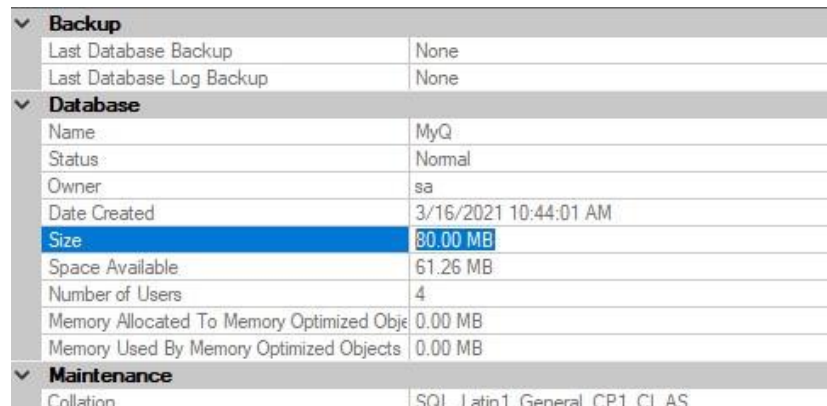
Location and size of databases

In this example, we can see that the total size of both databases is about 330 MB, so for the upgrade process, the C: drive must have at least 1,3 GB of free space.

If the data folder was on the D: drive, then the same amount of free space is also necessary there, because by default, the temporary files are stored on the C: drive and both drives must have sufficient storage available.

In case MS SQL database is used, the SQL Server handles the temporary databases and the space requirements are not as large, but still we recommend having at least 2-3 the size of the SQL database of free storage on the disk.

You can use the MS Management Studio to determine the database size. This value is visible in properties of the database.



Backup	
Last Database Backup	None
Last Database Log Backup	None
Database	
Name	MyQ
Status	Normal
Owner	sa
Date Created	3/16/2021 10:44:01 AM
Size	80.00 MB
Space Available	61.26 MB
Number of Users	4
Memory Allocated To Memory Optimized Objects	0.00 MB
Memory Used By Memory Optimized Objects	0.00 MB
Maintenance	
Collation	SQL Latin1 General CP1 CI AS

MS SQL database size

⚠ Having an insufficient storage will lead to unexpected issues during upgrade. Not only the upgrade process will most likely fail, but it may also present a threat to the whole operating system as all the available storage will be depleted.

Upgrade steps

Following the upgrade steps one by one in a correct order will ensure the most reliable outcome of the upgrade. Though the process itself is simple, it should still be considered critical and the administrator should pay attention to every detail of it. Doing it right will minimize necessary downtime and also prevent unexpected issues from happening to the most possible extent.

Disable scheduled tasks

At the very beginning of the upgrade process, it is the best practice to disable all scheduled tasks. This is to avoid accidentally running a task which might require a lot of time to finish at some point that is not convenient. Also, if other components of the system are planned to be upgraded (for example Central server and Site servers simultaneously), user synchronization and data replication might start when not desired.

In Settings > Task Scheduler, right click all the tasks and click the Enabled button to disable the given tasks.

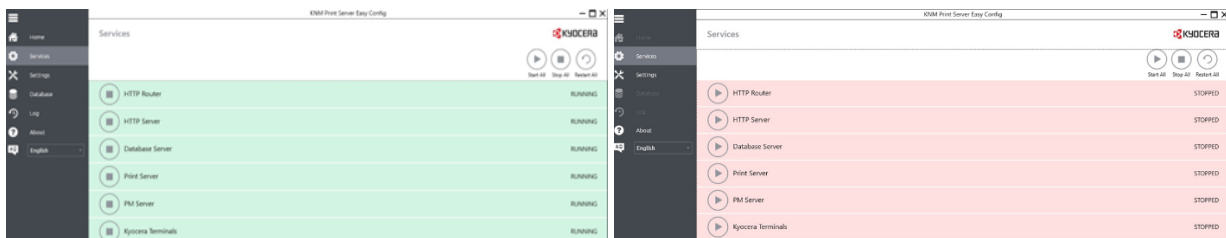
Some default tasks cannot be disabled, for those it is recommended to check the next scheduled run time and alter it, if necessary.

Stop services

The installation wizard will attempt to stop all application services so it may proceed with overwriting files and application components. It is best to do this step manually first and verify that all the services were stopped correctly and that there is no operation running in the background.

Until the services are stopped, and all the running tasks finished, the files are blocked, and the installation wizard will not be able to overwrite them.

To manually stop services, use the Easy Config application and click on the Stop button in the Services tab.



Stopping all services

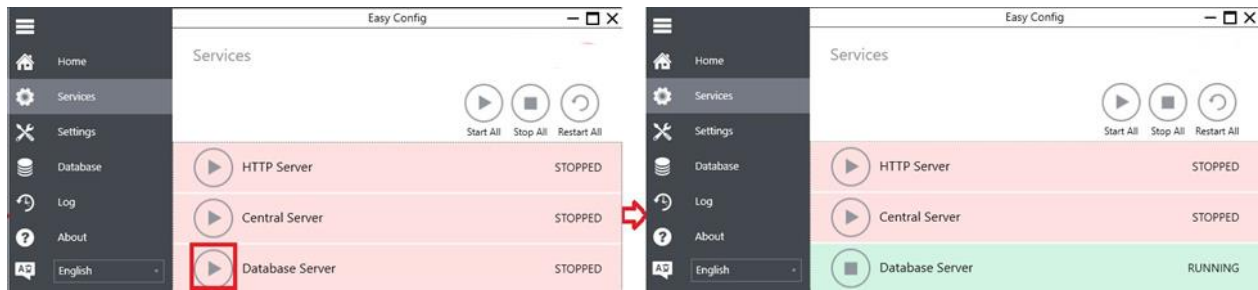
Stopping all the services may take time as the services are not stopped right away, but the system will wait for any running task to correctly finish. Do not force stop the processes using Task Manager as it may leave some task in a half-finished inconsistent state.

⚠ Stopping services will prevent users from using the system.

When services are stopped, it is possible to proceed with following steps of the upgrade process. In this state it is ensured that no user is logged in and no task is running, so all the files and system components can be overwritten with an updated version.

⚠ After stopping all the services, manually run only the Database Server service. This service is necessary so the installation wizard can verify the version of the system, which is currently installed and properly perform the upgrade, as well as run the database upgrade afterwards.

In case you're using the MS SQL database, this option is not available in the Easy Config. Still, the database server must remain up and running for the upgrade to proceed.



Starting only the Database Server service

At this point, it is the perfect moment to create the database backup – because if such a backup must be restored, it will contain all the data since no one is using the system. This backup cannot be done via web UI since it is not currently running, it must be done via Easy Config (and the MS SQL backup via Management Studio).

Verify nothing is running

When services are stopped, verify if truly all the processes are stopped using the Task Manager and the Details tab. Technically, it is possible that some stuck process is still running and blocking the files, even though the related service is stopped.

In this state only the two following processes should be running:

- ✦ firebird.exe
- ✦ KNM EasyConfig.exe

¶ Make sure that there is **none** of the following processes or related services running:

- ✦ httpd.exe
- ✦ KNMCentral.exe
- ✦ php.exe
- ✦ php-cgi.exe
- ✦ rotatelogs.exe

If any of the previously listed processes is running, despite all the services are stopped, then it is most likely a stuck process and will block the correct execution of the upgrade installation wizard.

In such a case, it is recommended to restart the whole server. After restarting the server, go back to the beginning of this chapter to stop the proper services again and check for any running processes.

Upgrade

When it is verified that the system meets all the requirements, backup is made and all the services, except for the Database engine, are stopped and there are no running stuck processes which would block the installation wizard, we can proceed to the actual upgrade.

¶ First close the Easy Config application.

Make sure that logged in user has Local Administrator access rights and run the installation wizard.



File of the installation wizard

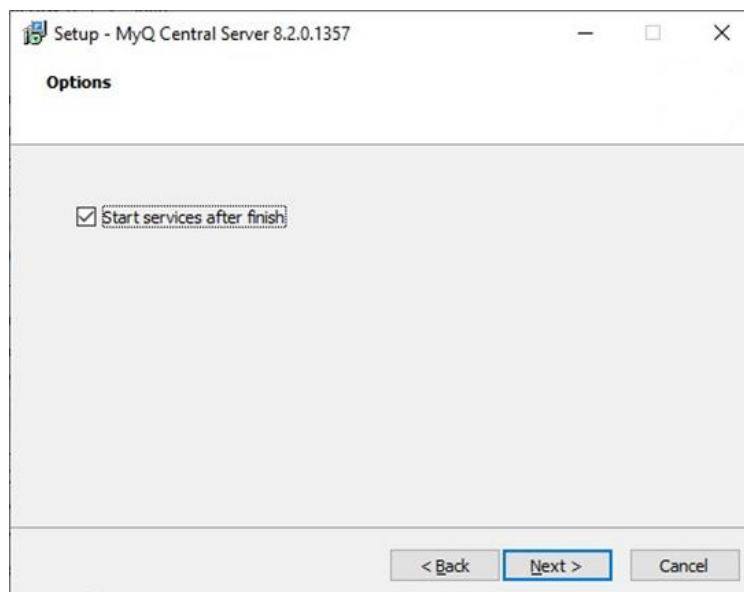
First choose the desired language of the installation wizard.

In second step, you will be presented with a message that previous version was detected, and upgrade will be performed.

Continue through the license agreement to the Options steps.

Here, it is possible to choose from various options regarding how to handle different parts of the system. These options will vary in each version and will also depend on the version from which the upgrade is being made.

The dialogue step may look like this:



Options step of the installation wizard

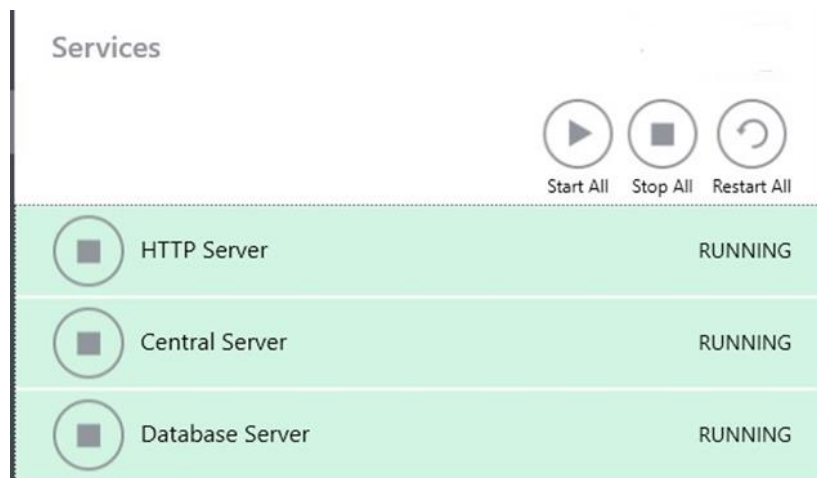
- ✦ Backup of the database will create a standard backup as if run via Easy Config. This step is generally not required because the backup was done manually before starting the upgrade. In some cases, when the database engine is also upgraded, this option is forcibly enabled because the backup and then following restore is done in order to change the database engine version.
- ✦ Clear the log option is generally recommended, since in most cases it is not necessary to keep the old log data. If the requirement appears for any reason in the future, there is a backup of the log database which can be used for this purpose. Deleting contents of the log database will free up some disk storage space and make the upgrade process faster.
- ✦ Start services after finish option is generally recommended. Only in case the previous upgrade was not successful for some reason, it is possible not to start the services right away and troubleshoot.

Continue with the Install button. After the installation wizard is finished, the Easy Config application will start.

You may be presented with the computer restart question – in this case, make sure that the Easy Config is not running, and it is not upgrading the database or doing other steps as the server restart will force stop this process and leave the database most likely inoperable. If the Easy Config is not running, confirm the server restart. Do not skip the restart entirely, if prompted. After restart, the Easy Config application will automatically launch.

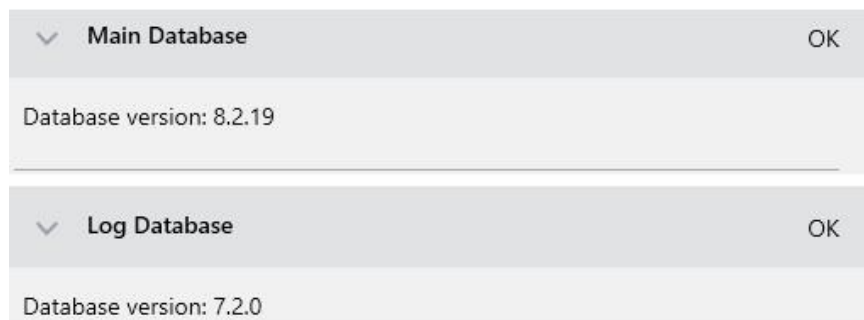
Easy Config will perform the database upgrade steps. This process will take some time, especially with larger databases. Some of the upgrade steps can take a lot of time – be patient and do not forcibly end this process.

After the database upgrade is done, Easy Config will open on the Home tab where you can check basic details. It is recommended to go to the Services tab and verify that all the services are running. If not, click the Start All button.



All services are running

Then open the Database tab and submenus Main Database and Log Database – verify that the database status is “OK” for both the Main database and the Log database.



Databases upgraded successfully

On the About tab, you can check the currently installed version to make sure that the upgrade was successful.

After this, proceed to the web interface, log in as *admin and verify that everything is running as it should.

We recommend checking the following areas, whether they run correctly:

- ✦ Log for any error messages
- ✦ Licenses
- ✦ User synchronization
- ✦ Site-Central connection and data replication
- ✦ Scheduled reports generation

With all the previous steps finished, the upgrade is done. Congratulations!

KYOCERA Kyocera Net Manager is a trademark of the KYOCERA Companies.

Specifications and design are subject to change without notice.

This document is provided for information purposes only. KYOCERA does not warrant or guarantee that the customer's Kyocera MFPs, printer or application have been equipped or have the proper security or specifications for their needs or requirements. Supported security functions or specifications vary and may require optional equipment. For more information, please refer to the catalogs or user

Copyright©2023 KYOCERA Document Solutions America, Inc.
All rights reserved.



KYOCERA Document Solutions does not warrant that any specifications mentioned will be error-free. Specifications are subject to change without notice. Information is correct at time of going to press. All other brand and product names may be registered trademarks or trademarks of their respective holders and are hereby acknowledged.