CN Server for PHP 8.2

Server Upgrade guide

Compliance Now

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Introduction

This documentation guides you through the required upgrade steps and tasks that are common to all upgrade scenarios.

The CN server is based on a WAMP bundle created by ComplianceNow. All the descriptions and guides are based on upgrading a server using an earlier version of the WAMP bundle or an installation that is similar in setup.

Any comments or questions Mail: support@compliancenow.eu or call: +45 8817 8118.

Revision history

Revision	Date	Changed by	Description
5.2.9	2023-11-01	RTaduri	Implemented MSJava version 17 instead of MSJava version 11
5.2.10	2023-12-22	DWP	Added detailed information about the server components. Updated document for version 5.2.10 of the CN server.
5.2.11	2024-02-16	DWp	Updated document for PHP 8.2

The ComplianceNow Server WAMP bundle

The CN server is based on a WAMP bundle created by ComplianceNow. This bundle is made of these components:

- Apache server 2.4.*
  - https://www.apachelounge.com/download/
  - Windows version: Win64 VS17
- PHP 8.2.*
  - https://www.php.net/downloads
  - Windows version: https://windows.php.net/download/
  - Windows version: VS16 x64 Thread Safe
- MySQL 8.0.*
  - https://dev.mysql.com/downloads/mysql/
- Microsoft OpenJDK 17.0.*
  - https://learn.microsoft.com/en-us/java/openjdk/download
- SourceGuardian loader 14.0.*
  - https://www.sourceguardian.com/loaders.html
- Microsoft Visual C++ Redistributable (VC15 + VS17)
  - https://visualstudio.microsoft.com/downloads/

The WAMP bundle is available for 64-bit windows.

Software needed for the upgrade:

- ComplianceNow server components
  - Follow the links above for the various components.
- CNSuite PHP application for PHP 8.2
  - Can be downloaded from http://www.compliancenow.eu/en/software-download
- A CNSuite license file for the PHP 8.2 application
  - Contact ComplianceNow support if you have not received this.

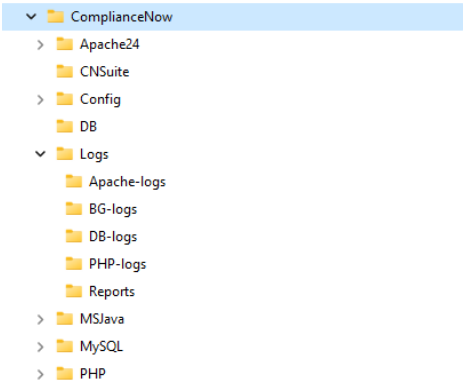
Upgrading components

Whenever the server components are being upgraded, it is important to stop the Apache service. That will prevent users from using the application while single components are being upgraded/changed. After completing an upgrade make sure to star the service again.

In case the database is upgraded, it will be necessary to stop and start the database service in the same way.

For the purposes of this document, it is assumed that the server is installed on a D-drive with a folder structure like this. Make sure to change any commands to fit the specifics of your own server. Generally, all software is placed in a central folder named ComplianceNow, and this will be referenced as <ComplianceNow> in all command examples.

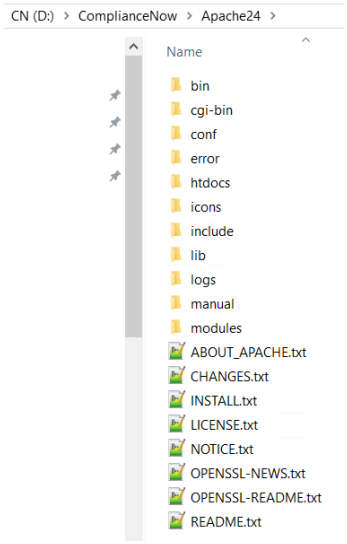
This guide contains the steps to perform the upgrade of each of the relevant server components and can be used to upgrade a single component or all, depending on your need.



Upgrading the Apache server

First you need to stop the Apache service that has been created on the server.

Delete the folder “<ComplianceNow>\Apache24\”. Unpack the new Apache files in the folder “<ComplianceNow>” to create a new “Apache24” folder and make sure that the structure is the same as before.



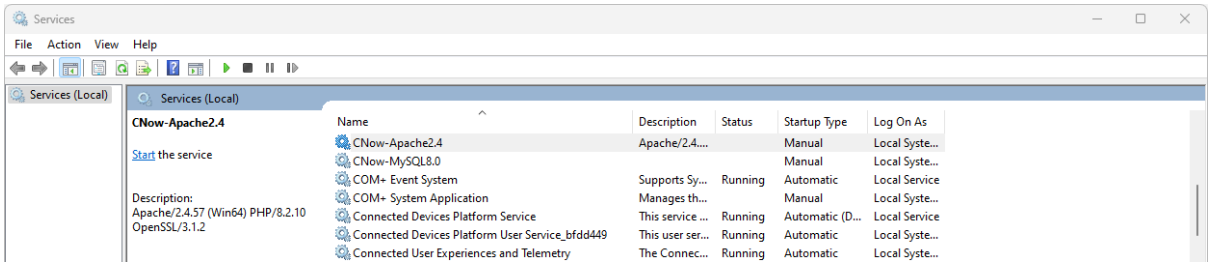
Copy the file from

```
D:\ComplianceNow\PHP\libssh2.dll
```

To the location

```
D:\ComplianceNow\Apache24\bin\libssh2.dll
```

Start the Apache service in the Computer Management Console. This will be the same name as specified when creating the service.



Upgrading PHP

Preparing the encoder files

The first step is to make a backup of the loader extension file(s). Make a copy of one or both files, depending on which are available in your PHP extension folder. This should be performed if you are upgrading/patching the PHP to a higher release of the same version.

- <ComplianceNow>\PHP\ext\ioncube_loader_win_7.3.dll
- <ComplianceNow>\PHP\ext\ixed.7.3ts.win

If you are upgrading the PHP to version 8.2, then it is not necessary to perform a backup of these loader extensions files, as new versions of these files will be needed.

Upgrading the PHP files

Rename, delete or empty the folder “<ComplianceNow>\PHP\”. This folder is going to be replaced by the new PHP language files, so if the folder is renamed or deleted then you must create a new empty folder named “<ComplianceNow>\PHP\”.

Download the new PHP language files. The files need to be unpacked to the folder “<ComplianceNow>\PHP\”.

Upgrading the encoder files

Move or copy the extension files that were backed up into the new extension folder “<ComplianceNow>\PHP\ext\”.

If upgrading to PHP 8.2 makes sure to add a new SourceGuardian extension instead in the Apache configuration file.

Adding extensions to Apache

Once the PHP files have been upgraded, one of the files must be copied to the Apache server.

Copy the file from

- <ComplianceNow>\PHP\libssh2.dll

To the location

- <ComplianceNow>\Apache24\bin\libssh2.dll

Apache configuration file

Make sure to configure Apache to be able to work with the new version of PHP. The example below enables PHP 8.* for Apache

```
# ComplianceNow-Begin
# This is configuration to enable Apache to use PHP 8
AddHandler application/x-httpd-php .php
AddType application/x-httpd-php .php .html
LoadModule php_module "D:/ComplianceNow/PHP/php8apache2_4.dll"
PHPIniDir "${CFGROOT}"
# ComplianceNow-End
```

PHP configuration file

Make sure to enable to extension named zip.

```
1038 ; Added with release 5.2.10
1039 extension=zip
1040 ; ComplianceNow-End
```

Upgrading the MySQL database

Upgrading the database requires a few, but important steps. The most important step is to take a backup of the schema/database before beginning the upgrade process.

Perform a backup

This command will execute the backup process. Make sure to change the command to point to the exact folders on your server.

```
<ComplianceNow>\MySQL\bin\mysqldump.exe -h localhost -u root –p --databases
DB_SCHEMA_NAME > D:\dbdump\cnsuite_yyyymmdd.sql
```

Upgrade the database

The official documentation for the upgrade process to the latest version of MySQL 8.0.x can be accessed via the following link:

https://dev.mysql.com/doc/refman/8.0/en/windows-upgrading.html#windows-upgrading-zip-distribution

> ⚠ ***Note:*** **MySQL database with a version higher than 8.0.19 must be used to perform fresh installations and upgrades.**

- Take a backup of the database/schema
- Stop the MySQL service
- Find the Database location in the my.ini file, which is in the folder "<ComplianceNow>\Config\"
- Make sure the database location is moved outside the MySQL folder, e.g., to a folder named "<ComplianceNow>\DB\"
    - Update the my.ini config file with the correct location of the database/schema files
- Delete the folder "<ComplianceNow>\MySQL\"
- Download the MySQL zip archive to install a new version of MySQL
- Unpack the contents of the zip file to "<ComplianceNow>" which will create a folder containing the MySQL database files called something like "<ComplianceNow>\mysql-8.0.*-win64\".
    - Rename the folder to "<ComplianceNow>\MySQL\"
- Initialize the database as described in the section "**Error! Reference source not found.**"
- Start the MySQL service

Import into new DB

The upgrade of MySQL is now done, but now the last important part is to import the backup taken earlier in this process. This is actually a 2-step process where first the backup is imported, and then the MySQL user used in the CN applications needs to be recreated.

- Import the database schema
  Execute the command from the folder "<ComplianceNow>\MySQL\bin" in the Command Prompt. You will be asked for the root user password when the script is executed. Replace the sql file with the actual path and filename of the database schema backup file.

  ```
  <ComplianceNow>\MySQL\bin\mysql -u root -p < D:\dbdump\cnsuite_yyyymmdd.sql
  ```

- Create the database user with the exact same credentials as in the old database. First logon to the database with the root user.

  ```
  CREATE USER '<username>'@'localhost' IDENTIFIED BY '<password>';
  ```

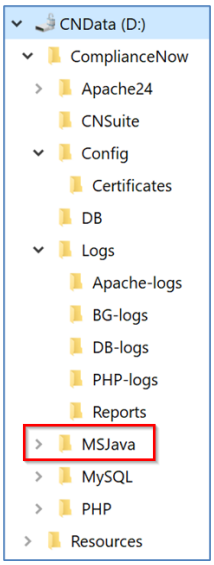
  Assign schema rights to the user

  ```
  GRANT ALL ON <db_schema_name>.* to '<username>'@'localhost';
  ```

  Important: replace <username>, <password> and <db_schema_name> with the correct values.

Upgrading Microsoft JDK

The JDK is placed in the folder “MSJava”. The task of upgrading the MSJava files is simple and requires the folder to be replaced by a folder containing the new JDK.



First download the required version of the JDK as a zip file.

Extract the contents of the zip file to the <ComplianceNow> folder. This should create a new folder with the entire JDK within eg. “jdk-17.0.3+7”.

Rename the old folder “MSJava” to something else, to indicate an older version. This folder can be deleted once the upgrade is complete.

Select the new folder created which is similar to “jdk-17.0.3+7” and rename it to “MSJava” in order to preserve the configuration.

Make sure that the reference in the configuration file “apm.ini” is correctly referencing the Java folder and pointing to the Java executable file.

```
41  ; path to the Microsoft Java executable
42  resources.java.executable = 'D:\ComplianceNow\MSJava\bin\java.exe'
```

Upgrading the SourceGuardian loader

The SourceGuardian loader is a PHP extension that is used to decode the application files.

First download the required version of the SourceGuardian loader as a zip file. Select the correct version of the loader and add it to the PHP extension folder.

- <ComplianceNow>\PHP\ext\ixed.8.2ts.win

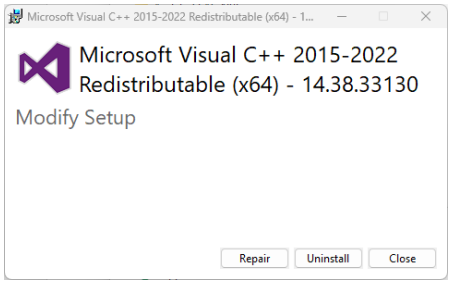
Make sure to update the configuration file "<ComplianceNow>\Config\php.ini" and ensure that the correct SourceGuardian extension is referenced.

```
[SourceGuardian]
; ComplianceNow-Begin
; For PHP 8.2
extension = ixed.8.2ts.win
; ComplianceNow-End
```

Upgrading the Microsoft Visual C++ Redistributable

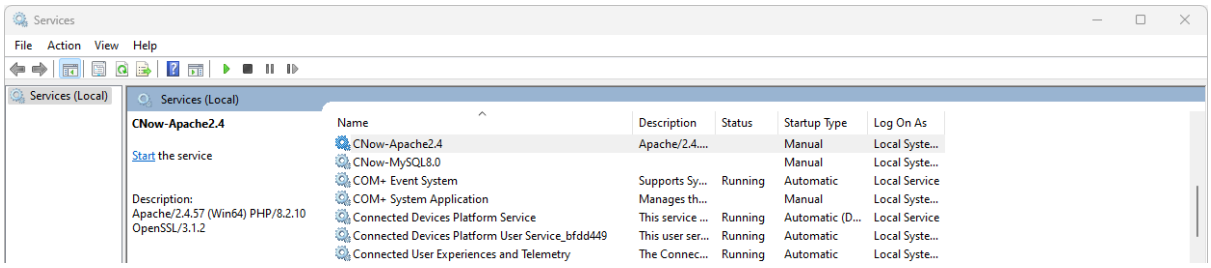
Both the Apache and the PHP files rely on the Microsoft Visual C++ redistributable. Make sure that you have a version that supports both VC15 and VS17 versions.

Download the latest version and install it on the ComplianceNow server.



Start the Apache service

Start the Apache service in the Computer Management Console. This will be the same name as specified when creating the service.



Upgrading the application

The next step is to have the application files upgraded and the schema updated. Please reference the CN application upgrade guide.