Technical Prerequisites

Cegid Retail Y2 Version 23 On Premises

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Foreword

This document describes the technical prerequisites associated with the Cegid Retail Y2 On Premises solution, installed and running on the Customer's site. This solution is released by Cegid.

As a reminder, we recommend that you install the Long Term Support (LTS) package in accordance with the LifeCycle Policy to receive extended support. Indeed, from version 23, Cegid makes available to its customers On Premise, a new package every two months that includes fixes and evolutions. Each year one of these packages is named LTS and is patched for an extended period of time.

This document covers the technical issues relating to various servers, telecommunications and networking, workstations and peripheral devices. If these technical prerequisites are satisfied, the correct operating of the Cegid Retail Y2 On Premises solution will be ensured. Cegid shall not be held responsible for any issues resulting from the malfunctioning of the application if these prerequisites have not been respected.

In the case of concurrent use of other Cegid applications, the Customer must ensure that all recommendations common to all the offers proposed are effectively met. For customized advice, please contact your sales consultant.

After testing, a customer may decide that a configuration that does not respect these prerequisites, however, meets his needs. If a bug is reported to the Help Desk, the latter will intervene only if the anomaly can be reproduced by the client in an environment meeting the prerequisites.

Remark

Prerequisites for Cegid Retail Intelligence, Demand Forecasting and Sourcing Optimization are described in dedicated documentation and are therefore not discussed in this document.

Please note that the management of backups is supported by the Customer according to the backup tools and methods he uses. During the installation, Cegid will provide all necessary information regarding the data to be backed up and the precautions to be taken during the backup and restore procedures.

Cegid does not support a configuration based on third-party software (operating system, database, etc.), if the latter is not supported by its editor (Microsoft, Oracle...)

The end of support dates for the main third-party software solutions used in the Cegid offer and edited by Microsoft are referenced in the Appendices of the following document under the title: "Microsoft Support Information."

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Contents

1. DATABASE SERVER

Hardware and Components	Minimum	Recommended
Processor:	4 vCPUs Xeon	Based on volumes [1]
X64-64bit Operating system:	W2016	W2022
Memory	4 GB	Based on volumes [1]
Edition	Standard	Standard, Enterprise or Datacenter
Language	FR or EN	FR or EN
Memory	8 GB	Based on volumes [1]
Hard drive	SAS 10K rpm in RAID	SSD in RAID
SQL Server		
x64-64 bit Database engine	SQL 2014 SP3 [2]	SQL 2022 CU7[6][7]
Edition	Standard	Standard or Enterprise
Language	FR or EN [4]	FR or EN [4]
Backup	To realize with SQL Server engine tools	To realize with SQL Server engine tools
Class	CI_AS [5]	CI_AS [5]
Collation	Latin1_General (instance and bases)	Latin1_General (instance and bases)
Minimum compatibility level of databases	Aligned with the used SQL Server version	Aligned with the used SQL Server version
Isolation level "**READ_COMMITED_SNAPSHOT**"	Active	Active
Database option "**Service Broker**"	Active	Active

[1] Elements to increase according to analyses carried out (operating system, number of users, and number of used databases, etc.) We recommend dedicating the database engine to the Cegid solution to avoid the following conflicts:

- Incompatibility between the different choices for database configurations
- No control of performance linked to the load arising from another application
- Changes in database versions that may occur at different moments
- Heterogeneous maintenance procedures (for example backup procedures)

[2] Cegid has tested and supports SQL Server 2014 on Windows Server 2012 R2.
[4] Cegid has tested and supports French SQL with French Windows Server and English SQL with English Windows Server
[5] CI_AS (Case Insensitive – Accent Sensitive). Collation must be case insensitive (CI) and accent sensitive (AS).
[6] Cegid has tested and supports SQL Server 2019 on Windows Server 2016 & 2019
[7] Cegid has tested and supports SQL Server 2022 on Windows Server 2022

2. BUSINESS APPLICATION SERVER - INTERNET INFORMATION SERVICES

This server is always installed on a local secure network in the customer's datacenter.

Applications never connect directly to the business application server, but systematically access the distribution server which is an endpoint of the TLS connection and on which the SSL encryption certificate will be deployed. Thus, only one certificate will be required, even if other IIS application servers are added later.

Important

Business application server(s) and reporting and scheduled task server(s) must be in the same Active Directory domain (constraint linked to the use of MSMQ queues.)

Business Application Server		
Hardware and Components	Minimum	Recommended
Processor	4 vCPUs Xeon	Based on volumes [1]
X64-64bit Operating system:	W2016	W2022
Memory	8 GB	Based on volumes [1]
Software		
IIS (Internet Information Services)[2]	10	10
.Net Framework	4.8	4.8 or later

[1] Elements to increase according to analyses carried out (operating system, number of users...)
   To qualify with your technical presales consultant.
[2] The business application servers within a same "server farm" must have the same version.

3. AUTHENTICATION SERVER

The connection is managed by an architecture that complies with the OAuth2 standard. This method involves the use of a dedicated authentication server that manages the allocation of an access token based on the Cegid Retail Y2 API.

This evolution makes it possible to eliminate any specific connection logic in the SmartClient and to have complete consistency on the connection between the various Cegid Retail Y2 modules, while respecting good security practices for the connection.

The user and user group management screens are externalized in a dedicated Web Application.

This server is always installed on a secure local network in the customer's datacenter.

Authentication Server		
Hardware and Components	Minimum	Recommended
Processor	2 vCPUs Xeon	2 vCPUs Xeon
X64-64bit Operating system:	W2016	W2022
Memory	4 Go	4 Go
Software		
IIS (Internet Information Services)	10	10
.Net Framework	.Net 6.0	Latest .Net LTS version

4. REPORTING AND SCHEDULED TASK SERVER

This server is always installed on a local secure network in the customer's datacenter.

Important

Business application server(s) and reporting and scheduled task server(s) must be in the same Active Directory domain (constraint linked to the use of MSMQ queues.)

Business Application Server		
Hardware and Components	Minimum	Recommended
Processor	4 vCPUs Xeon	Based on volumes [1]
X64-64bit Operating system:	W2016	W2022
Memory	8 GB	Based on volumes [1]
Software		
.Net Framework	4.8	4.8 or later

[1] Elements to increase according to analyses carried out (operating system, number of users…):
    To qualify with your technical presales consultant.

5. CEGID DATABASE MAINTENANCE

"Cegid Database Maintenance" (**CDM**) is a tool used to update the structure of the database, in particular for:

- make it compatible following a version upgrade.
- Integrate specific CBS development (Cegid Business Studio).

It is installed on an administration server (or workstation) under Windows or on a task server.

It requires high bandwidth with the database (application in client/server mode).

6. APPLICATION REQUEST ROUTING - "DISTRIBUTION" SERVER AND NETWORK SECURITY

Role provided by the server and described in this chapter may also be provided by other solutions available on the market (e.g. F5 solutions – www.f5.com.)

An analysis with the help of Cegid is required to validate the server replacement by this type of solution.

This server interleaves between the business application servers and a Cegid application running on a user device. The server will act as:

- A load balancer between several application servers
- Ensure session affinity, if necessary
- And be the endpoint of the secure TLS connection with client workstations. Therefore, the SSL encryption certificate will be deployed on this server, regardless of the number of IIS business application servers.

Depending on the network topology and on how client workstations do access the application server farm, there may be several ARR servers (e.g. one server for accesses from the private network and one server for a DMZ with Internet accesses.) Each ARR server should have the appropriate SSL encryption certificate (from a certification authority recognized on the market for Internet accesses, generated by Active Directory for accesses from a private network) to ensure the TLS 1.2 security level with client applications.

Distribution server		
Hardware and Components	Minimum	Recommended
Processor	2 vCPUs Xeon	2 vCPUs Xeon
X64-64bit Operating system	W2016	W2022
Memory	4 GB	4 GB
Network card	1 or 2 [2]	1 or 2 [2]
Software		
IIS (Internet Information Services)[3]	10	10
ARR (Application Request Routing)	3.0.1952	3.0.1952
.Net Framework	4.8	4.8 or later
TCP ports	443 [4]	443 [4]

[1] The Customer is responsible for securing their DMZ and the resources that are exposed there. Therefore, he must implement any required means to protect the access to the distribution server, especially from potential external attacks. Cegid's services teams may support the customer in implementing some measures (security devices…) to optimize the security level of a solution of that type.

(2) A second network card is required once the ARR platform is doubled, for example to respond to scenarios about fault tolerance of this feature.

(3) The distribution servers within a same "server farm" must have the same version.

(4) TCP port 443 is used for SSL/TLS communications (non-modifiable port.) For more details about certificates, refer to the appendices in this document.

7. WORKSTATIONS (DESKTOPS, LAPTOPS, TERMINALS…)

An "Administrator" access right is required to install a Cegid application. Minor updates and the later use of the application require usual standard rights.

Windows PCs		
Hardware and Components	Minimum	Recommended
Processor	Intel Core i3	Intel Core i3/i5/i7
X64-64bit Operating system	Windows 10 or 11	Windows 10
Edition	Professional	Enterprise LTSB 2016 or LTSC 2019 or LTSC 2021
Memory	2 GB	4 GB (1)
.Net Framework	4.8	4.8 or later
Monitor	15″	15″ or larger
Display resolution	1366*768	1680*1050 or higher
Microsoft Edge WebView2 Runtime	112.0.1722.32	Latest

(1) Elements to increase according to analyses carried out (operating system, number of local applications…)

8. POS TERMINALS

An "Administrator" access right is required to install a Cegid application. Minor updates and the later use of the application require usual standard rights.

Windows PCs		
Hardware and Components	Minimum	Recommended
Processor	Intel Core i3	Intel Core i3/i5/i7
X64-64bit Operating system	Windows 10 [2]	Windows 10 [2]
Edition	Enterprise LTSB 2016 or LTSC 2019 or LTSC 2021	Enterprise LTSC 2021
Memory	2 GB	4 GB (1)
.Net Framework	4.8	4.8 or later
Monitor	12''	15'' or larger
Display resolution	1024*768	1680*1050 or higher
Microsoft Edge WebView2 Runtime	112.0.1722.32	Latest

(1) Elements to increase according to analyses carried out (operating system, number of local applications…)
(2) There is currently no LTSC version for Windows 11. Until then, Windows 11 is not validated for POS terminals.

Note: Do not mix up OPOS manufacturers for device operation.

An identification and authentication process allows users to connect to Cegid Retail Y2 in a secure manner.

9. PRINTERS & PERIPHERALS FOR P.O.S.

The Cegid applications use the printing infrastructure of the Windows environment. We have to ensure that the print devices do have the certified printing drivers, especially on 64x platforms for an efficient support of the used operating systems (for clients and servers).
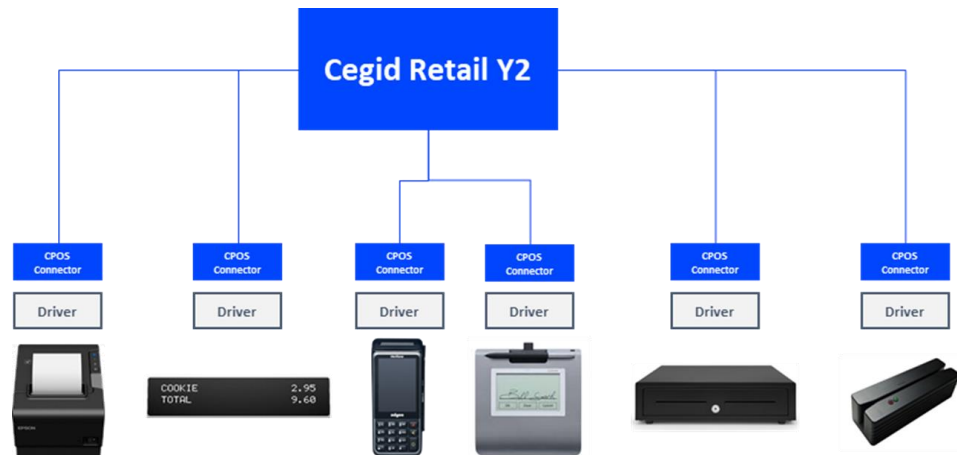
Instead of exchanging directly with each device, the POS terminal communicates with a generic multi-device connector called CPOS.
Customers or partners can develop their own drivers to connect their specific devices.

The CPOS connector does not concern:
- Network printers
- Label printers
- Barcode readers
- Inventory terminals

Please note:
In general, the unitary compliance of each device with the prerequisites does not guarantee that the system consisting of an assembly of hardware, OS, software and multiple devices is either functional, or even optimal. This assembly will have to be tested within the project and validated by the project team on the basis of the usage scenario.

Tips:
Do not mix up OPOS manufacturers.
As the serial port is becoming obsolete, focus on the USB interface.

Receipt Printer (except fiscal printer)

There are two operating modes:
- Via a CPOS driver provided by Cegid to communicate with EPSON and compatible printers.
- Via OPOS drivers provided by manufacturers

Customer Display

There are two operating modes:
- Via a CPOS driver provided by Cegid to communicate with EPSON and compatible displays.
- Via OPOS drivers provided by manufacturers

Cash Drawer

There are two operating modes:
- Via a CPOS driver provided by Cegid to communicate with EPSON and compatible cash drawers.
- Via OPOS drivers provided by manufacturers

Barcode Scanner

Handheld barcode readers: all models connected in USB mode or as 'keyboard/control unit' interface (Wedge mode) with the "CR/LF" sequence applying automatically after the reading of a barcode.
Note: the keyboard configuration may affect the interpretation of barcodes.

Magnetic Card Reader

HP models: External MSR device in USB mode driven by the OPOS layer (OPOS version 2.62) + the CPOS layer.
MSR device integrated with the HP AP5000 and HP RP9G1 POS terminals driven by the OPOS layer + the CPOS layer.
External USB MSR reader operating in keyboard emulation.

Document Reader

3M model:
"QS 1000" reader driven by the CPOS layer with software components "3M™ Page Reader SDK" in version 3.1.10.
3M CR100 MRZ reader driven by the CPOS layer with with "3M™ Swipe Reader" software components

Fingerprint Reader

U.are.U model: "4000B" device driven by the CPOS layer with the software components "DigitalPersona One Touch for Windows SDK" in version 1.6.1.
U.are.U model: "4500" device driven by the CPOS layer with the software components "DigitalPersona One Touch for Windows SDK" in version 1.6.1.

EFT Drivers

Y2 uses EFT solutions using CPOS drivers.
These solutions are specific to every country and EFT requirements.
Cegid provides with Retail Y2 a standard API layer with which the CPOS electronic payment connectors interact.

To confirm that a CPOS electronic payment driver already exists with the solution you are using within your scope of use, we invite you to contact your electronic payment service provider.

Other Printers

For other types of printers, especially network printers, rewritable and label printers, please contact your sales consultant.

10. DEVICES FOR CEGID RETAIL MOBILE POS

Communications

The devices communicate **only** via the WiFi network.

Certified Apple Devices – Cegid Retail Mobile POS

Hardware	
Cegid Retail Mobile POS V5	Cegid validates the compatibility of mPOS with Apple operating systems (iOS and iPADOS). Therefore, the hardware requirements are those recommended by Apple for each operating system. *NB: It is recommended to use the latest Apple OS and compatible hardware.*
iOS version	
Cegid Retail Mobile POS V5	iOS 13 minimum* * Some features related to third party applications may require a higher OS

An **ABM** account (Apple Business Manager) is required for the distribution of the MPOS application on production Apple hardware.

A Mobile Device Management (**MDM**) solution is required to deploy Mpos and update Apple hardware.

InStore Hub MPOS

Management of POS devices requires the Cegid **In-Store Hub mPOS** component:
- This is a component that is installed on a dedicated Windows appliance and allows Cegid Retail mPOS to manage communications with in-store POS devices.
- This component is based on the CPOS pilots which have been developed by Cegid and by our network of partners.

Minimum technical requirements for Cegid InStore Hub mPOS:
- Stick PC or mini PC or standard PC
- Windows 10 LTSC (recommended) or Pro
- Processor:
    - for single instance operation: Intel Celeron 2 Ghz 2 cores / 2 threads
    - for multi-instance operation: Intel Core i3 3 Ghz 4 cores / 8 threads

- Mémoire RAM :
  - for single instance operation: 4 Gb RAM
  - for multi-instance operation: 8 Gb RAM
- SSD 64 Gb
- Ethernet wired network recommended

Certified Receipt Printers

These printers are certified:
- The EPSON TMH 6000 IV printer with WiFi or Ethernet modules
- The EPSON TM 88 V printer (with Wi-Fi or Ethernet modules
- The EPSON P60 II printer (with WiFi module
- The EPSON TM-m30 printer (with WiFi or Ethernet module

Printers will operate if you implement a local network in the store.

11. DEVICES FOR CEGID RETAIL INVENTORY TRACKING

Please note: This chapter concerns the mobile application for managing inventory counts and documents in connected mode.

Communications

Inventory Tracking works autonomously with regular connections to the Y2 database for retrieving different information:

- Product data
- User rights
- Store transactions to perform

Two communications modes are available:

- Wired connection using a dock with network access
- WiFi connection

Android Certified Devices

The software installed on the PDA consists of an APK copied to the mobile device and then installed with native Android tools.

Model	Monitor	Operating system	Manufacturer end of sale
Honeywell Dolphin 75e	4.3 inches	Android 6.x	2018 (replaced by CT40)
Zebra TC51/TC56	5 inches	Android 7.x	2019 (replaced by TC52/57)
Honeywell EDA50	5 inches	Android 7.x	2019 (replaced by EDA51)
Zebra TC20	4.3 inches	Android 6.x	2020 (replaced by TC21)
Honeywell CT40	5 inches	Android 7.x	End of 2021 (replaced by CT45)
Honeywell CT40xp	5 inches Full HD – 1920*1080	Android 10.x	End of 2021 (replaced by CT45)
Honeywell EDA51	5 inches	Android 8.x	End of 2021 (replaced by EDA52)
Zebra TC52/TC57	5 inches	Android 8.x	2022 (replaced by TC52x/TC52ax)
Zebra TC21/TC26	5 inches	Android 10.x	
Zebra TC52(a)x/TC57x	> 5 inches Full HD – 1920*1080	Android 10.x & 11.x	
Zebra TC53 (SE4720)	6 inches	Android 11.x	
Honeywell EDA52	5.5 inches	Android 11.x	
Honeywell CT45	5 inches	Android 11.x	

Memory/storage minimum:

- Up to Android 9:   2 GB RAM of which 1 GB available / 16 GB Internal Storage
- Up to Android 11:   3 GB RAM of which 1 GB available / 32 GB Internal Storage

IOS Devices

Inventory Tracking is compatible with the following Apple hardware: Iphone 6 minimum with 64 bits processor and iOS 12 minimum

IPAD not supported

An **ABM** (Apple Business Manager) account is required to distribute Inventory Tracking on Apple production hardware.

A **MDM** (Mobile Device Management) solution is required to deploy Inventory Tracking and update Apple hardware.

12. COUNTRY PACKAGES

The concept of "Country Packages" includes many elements about deployment specifics in different countries including the following information:
- Translation management
- Tax management
- For some countries, specific reports and receipt formats
- For some countries, management of fiscal references
- For some countries, integration of local components such as:
  - o Specific functional components
  - o Packaged exports
  - o Tax printers or components
- For some countries, software certification

Please refer to documentation dedicated to "Country packages" to get information about the technical requirements about their specific components.

13. NETWORKING

ADSL versus SDSL

For Web Access **HTTPS** solutions, the store needs only a simple ADSL subscription.

For a great number of connections (local for navigating and e-mailing, and remote on the business application server(s)), the Headquarters should focus on the use of two separate Internet subscriptions, one for Internet navigating and the e-mailing in the Headquarters, and the other dedicated to business connections.

In this case, the use of Internet in the Headquarters does not have a negative impact on cashing operations in the store.

The latency for Internet accesses is a very important concept for the use of the Cegid Retail Y2 solution.

A Round Trip Time superior to **100 ms** may alter the user experience of Cegid products. Especially on POS terminals it is necessary to test the target sales process to validate user experience according to the various network performance levels that will be encountered. If need be, the configuration of the sales process can be adapted to the network constraints for some stores.

Average bandwidth stated for the Front Office

On the average 50 kb/s to 100 kb/s per user. Of course, this average should be modulated by the effective use of the Front-Office product.

For some processes, peaks of 100 kb/s can be stated.

Analyses (dashboards) and **inventories** (with inventory closure) are the most bandwidth consuming processes in the Front-Office.

Number of concurrent users	Technology	Minimum throughput for download	Minimum throughput for upload	Maximum round trip time
< 3	ADSL (*)	1 Mb/s	256 Kb/s	
3 to 9	SDSL	1 Mb/s	1 Mb/s	
10 to 19	SDSL	2 Mb/s	2 Mb/s	100 ms
20 to 39	SDSL	4 Mb/s	4 Mb/s	
>= 40	SDSL versus Fiber - Specific analysis			

(*) With the ADSL technology, cuts and slowdowns linked to this technology can be observed.

Average bandwidth stated for the Back Office

On the average 100 kb/s per user. Of course, this average has to be calibrated according to the functional requirements and the effective use of the Back Office product.

Analyses (cubes, dashboards, statistics…), **Inventories** (with inventory closure), **replenishment calculations**, **imports/exports**, and **accounting interfaces** are the most bandwidth consuming processes on the Back Office.

Number of concurrent users	Technology	Minimum throughput for download	Minimum throughput for upload	Maximum round trip time
< 2	ADSL (*)	1 Mb/s	256 Kb/s	100ms
2 to 9	SDSL	1 Mb/s	1 Mb/s	
10 to 19	SDSL	2 Mb/s	2 Mb/s	
20 to 39	SDSL	4 Mb/s	4 Mb/s	
>= 40	SDSL versus Fiber - Specific analysis			

(*) With the ADSL technology, cuts and slowdowns linked to this technology can be observed.

Network protocols to be authorized on the client side and recommended practices

- Network protocol TCP 443 must be allowed out towards Y2 servers.

- Prioritization of network protocols is recommended; otherwise you must guarantee not to disturb Y2 network flows by other network usages such as:

  - System updates
  - Software updates
  - Antivirus updates
  - Audio / Video streaming
  - Other "recreational" network usages

- Usage of proxy, cache and/or introspection of network protocols is not recommended.

  - If your company uses proxies, it is advised to exclude the Y2 Server flows from the proxies usage.

  - If you use a http proxy, it is advised not have the Y2 Server flows go through these proxies. Some proxy modules can slow the traffic down or generate disconnections:

    - If for example your Y2 Server is hosted through our SaaS solution, the following flows must be excluded for proxy usage: https://*.cegid.cloud

    - In this above SaaS context ; the access URLs would be the following : https://9xxxxxxx-env name-retail-ondemand.cegid.cloud/y2 (9xxxxxx : client number, Env name. : environment name : ex prod)

- Cegid client support may need in certain situations to remotely access and control a client machine. In order to be able to do this, the site https://www.teamviewer.com must be reachable from client machines.

14. APPENDICES

Terminology Details Concerning Processor Architectures

In documents issued by Cegid, the **64-bit** term refers to the architecture – or instruction set - named **x86-64**, often abbreviated as **x64**.

This architecture is a 64-bit extension of the conventional Intel 32-bit instruction set x86 and has been introduced by AMD, initially as AMD64. It is supported by all EM64T Intel processors and also by all the 64-bit AMD processors.

*This architecture must **not** be mistaken for the one known as **IA-64**, implemented by the Intel processors of the **Itanium** family, which is a distinct and incompatible 64-bit architecture. IA-64 and the Itanium processors are outside the Cegid 64-bit scope and are not validated.*

Cegid's Policy Concerning the Application of Microsoft Patches

To correct malfunctioning and/or to improve the support and the security of its products, Microsoft regularly provides updates to be applied to the solutions concerned.

These updates are, among others:

Service Packs/Updates

Set of fixes and changes that apply to a product. These service packs are quite a few (often less than 5 in the whole product lifecycle.) They can be minimums required for installing Microsoft or Cegid solutions, or even third-party applications.

 Cegid tests the service packs/updates in conjunction with the applied solutions and publishes information after their release by Microsoft (prerequisite notes identify **explicitly** versions and levels of service packs supported).

Quality Update

Set of software fixes that corrects security or robustness issues, releases by Microsoft on a supported version/service pack/update (including Extended support for security patches.) These fixes are generally provided on a monthly basis via Windows and/or Microsoft Update.

Microsoft recommends installing these hotfixes (Categorized as important/critical or recommended.) Although Microsoft tests updates extensively for compatibility with deployed applications, there is a risk of undesired edge effects in a particular one environment. Cegid therefore recommends testing the implementation of the Quality Updates in a "pilot environment" representative of the production environment, and then accepting its deployment in concentric circles on the other machines. (Cegid may propose the implementation of various tools provided by Microsoft to meet this issue.)

Specific updates

Unavailable online, these updates are created to address a particular problem. They are delivered by Microsoft exclusively when dealing with an identified problem.

Support Information for Microsoft Products

The various products (operating systems, database engines, office products, etc.) mentioned in this document are subject to the support conditions and particularly to the "end of support" conditions.

End dates of extended support for these products (which is the date Microsoft no longer provides security patches) are mentioned below. More detailed and comprehensive information is available:

Microsoft lifecycle: http://www.microsoft.com/lifecycle

To benefit from the latest technological developments and from the publisher's support if required, it is important to consider the product lifecycles, as well as a migration towards later platforms supported by the various business solutions.

To guarantee the stability of its solutions deployed on Front Office P.O.S. systems in hundreds of stores, Cegid supports what Microsoft is committed to supporting for 10 years. That's why for Windows 10, Cegid only supports Windows 10 Enterprise LTSB and LTSC 2019, and not the semi-annual versions of Windows 10 that have only a 18 months support.

Microsoft Products (Publisher's Information)		
Marketed product	End of extended support (mm/dd/yyyy)	Remark
Windows 10 Enterprise 2016 LTSB	10/13/2026	
Windows 10 Enterprise 2019 LTSC	1/9/2029	
Windows 10 Enterprise 2021 LTSC	1/13/2032	
Windows Server 2016	1/11/2027	
Windows Server 2019	1/9/2029	
Windows Server 2022	10/14/2031	Not validated
SQL Server 2014 SP3	7/9/2024	Qualified with WS 2012 R2
SQL Server 2016 SP3	7/14/2026	Qualified with WS 2016
SQL Server 2019	1/8/2030	Qualified with WS 2016 & 2019
SQL Server 2022	1/11/2033	Not validated

Sources: https://support.microsoft.com/

Support of Cegid Solutions in Virtualized Environments

Various virtualization solutions on the market are designed to reproduce in virtual environments controlled by "hypervisors", infrastructures previously implemented with physical resources (servers, storage, network, etc.)

If considering the installation of an application solution, you can assume that sizing (number of processors, memory, disk space…) and installing (OS, database engines, and application solutions, etc.) are similar between in virtualized environments and in a physical infrastructure.

Cegid's solutions will work with the most common hypervisors on the market. They are tested, in particular on the latest versions of hypervisors from Microsoft (Hyper V) and VMware.

Cegid specifically provides functional and technical support for Cegid applications via various standardized offers.

Specific recommendations for this type of environment

- o Because of the technologies implemented for the virtualization, but also of the consolidation that often leads to pool multiple virtual servers onto fewer physical machines, performance may be less than this proposed natively in a non-virtualized configuration. **The assessment of performance, therefore, has to be taken into account as a priority** for this type of solution. We also recommend checking whether specific rule apply to the licenses from every vendor affected by the solution to deploy in a virtualized environment.
- o Not all hardware components are "virtualizable" and sometimes some aspects (advanced graphical features, telecommunications equipment, etc.) are not supported.
- o First, it is necessary to ensure that the various elements (operating systems, database engine, etc.) of the solution are supported by their respective publishers in the targeted environment (this is generally the case for the most recent Microsoft products on the most representative hypervisors.)
    - o Microsoft' policy for application support in virtual environments can be viewed at the following address:
      http://windowsservercatalog.com/svvp.aspx?svvppage=svvpwizard.htm.

SSL Certificates for the Cegid Y2 Product Range

For communications between a user's workstation and a distribution server, it is necessary to secure the exchange by implementing the relevant encryption using a TLS HTTPS protocol.

The most common cases implemented are the following:

The business application server, the distribution server and the client application (Cegid Retail Y2 Smart Client, Cegid Retail Y2 Cataloging/Clienteling/Shopping, Cegid Retail Y2 Mobile POS or the service-consuming application) are located on the company's network

To customers that have a Windows infrastructure and that have deployed by their IT teams, the certificate server module integrated with Windows Server, and propagated the certificate of the internal authority to the peripheral devices that run an application of type Cegid Retail Y2, Cegid may provide a documentation

describing how to integrate on the concerned servers a certificate granted by this internal authority (see document "HTTPS settings for Y2 solution with IIS.)

The distribution server and the client application (Cegid Retail Y2 Smart Client, Cegid Retail Y2 Cataloging/Clienteling/Shopping, Cegid Retail Y2 Mobile POS or the service-consuming application) are linked together via the Internet:

- In this case (or if the network is less secure and controlled than a corporate network), you really must encrypt data passing through these two ends.
- One simple option consists in using a self-signed certificate (generated on the IIS or ARR server); however, this solution must only be used to realize a template limited to Windows workstations. This solution does not take into account all the features of the Cegid solution:
    o Only Cegid applications of type Smart Client with an available connection period are supported.
    o In terms of security, it is easy to generate this type of certificate, but there is no guarantee that a Cegid application will connect to "its server".
    o As with a recent browser accessing a site for which neither its origin, nor the validity of the certificate can be guaranteed, users must confirm each time they connect that they agree to access a server equipped with this type of certificate.
- To improve confidence and productivity for users, the recommended solution, in this context, is to deploy on the servers a certificate issued by a recognized certificate authority. Type and cost of the certificate will depend mainly on:
    o The issuing authority and the confidence it inspires on the market.
    o The peripheral devices and browsers you want to be supported.
    o The lifetime of the certificate from 1 year to 4-5 years.
    o The type of certificate and the controls the authority operates before issuing the certificate. Certificates called "EV" or "Extended Validation" will reassure the users of a site by coloring the address bar in green. To issue such certificates, a large number of controls are performed on the applicant.

Please note:

When using Cegid Retail Y2 Mobile POS, make sure that the certificate really does support client operating systems for mobile devices.

The device being used must also have an up-to-date list of certification authorities and intermediate certification authorities (available via the updating mechanism of the operating system.)

Cegid offers a support service for implementing SSL certificates, given the complexity of such an implementation.