

RETAIL

**Yourcegid** | RETAIL  
Software for Business

Technical Prerequisites

Yourcegid Retail CBR  
Version 11.05

**Cegid**

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## ■ Technical Prerequisites

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### 1. Foreword

This document describes the technical prerequisites associated with the Yourcegid Retail <sup>CBR</sup> On Premises solution, installed and running on the Customer's site. This solution is released by Cegid.

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 Yourcegid Retail <sup>CBR</sup> 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.

**Please notice:**

- ✓ The Customer must identify his 32-bit or 64-bit architecture in each of the tables presented in this document (refer to the additional information in the appendices.)
- ✓ 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 recommends a full backup of the servers (database, application, Web...) with all disks without exception, as well as the Windows registry.

**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, Oracle and Red Hat are referenced in the Appendices of the following document under the title: "Microsoft, Oracle and Linux Support Information."**

## 2. Windows Database Server / SQL Server

### DATABASE SERVER

Components	Minimum	Recommended
System unit	Xeon Dual-Core or > <sup>(1)</sup>	Xeon Dual-Core or > <sup>(1)</sup>
Operating system <b>x86-32 bits</b>	W2008 SP2	W2008 SP2
Operating system <b>x64-64 bits</b>	W2008 SP2	W2012
Edition	Standard	Standard, Enterprise or Datacenter
Language	FR or EN	FR or EN
Memory	2 GB	4 GB or > <sup>(1)</sup>
Hard drive	100 GB SCSI	SAS 15K rpm in RAID <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
<b>SQL Server</b>		
Database engine <b>x86-32 bits</b>	SQL 2008 SP3 <sup>(2)</sup>	SQL 2012 SP1 <sup>(3)</sup>
Database engine <b>x64-64 bits</b>	SQL 2008 SP3 <sup>(2)</sup>	SQL 2012 SP1 <sup>(3)</sup>
Edition	Standard	Standard or Enterprise
Language	FR or EN <sup>(4)</sup>	FR or EN <sup>(4)</sup>
Collation	CI_AS <sup>(5)</sup>	CI_AS <sup>(5)</sup>
Minimum compatibility level of databases	SQL 2008 (100)	SQL 2008 (100) or SQL 2012 (110)
Database option " <b>Service Broker</b> "	Active	Active
<b>Software</b>		
.Net Framework <sup>(6)</sup>	4.0	4.5.2

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of users, and number of used databases...). 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)

<sup>(2)</sup> Cegid has tested and supports SQL Server 2008, SQL 2008 R2 on Windows Server 2008 and Windows Server 2008 R2.

<sup>(3)</sup> Cegid has tested and supports SQL Server 2012 on Windows Server 2008 R2 and Windows Server 2012.

<sup>(4)</sup> SQL Server must be deployed in the same language as Windows Server (for example, SQL Server EN can be deployed in various localized Windows Server versions.)

<sup>(5)</sup> CI\_AS (Case **I**nsensitive – **A**ccent **S**ensitive). The language of the collation is to be chosen by the customer; however it must be case insensitive (CI) and accent sensitive (AS).

<sup>(6)</sup> Required for Cegid Database Maintenance (CDM). The "Client Profile" version is sufficient, but the "Full" version can be used too.

### How to Manage Issues about Collation

Each country has its own specific characteristics in the way things are sorted and ranked. In other words, the alphabetical order differs from one country to the other.

Moreover, additional elements can be taken into account when performing sorts, such as case-sensitivity or accent-sensitivity...

SQL Server handles these specific characteristics and enables the selection of the collation criterion.

By default, SQL Server proposes the Windows criterion.

For example, on a French operating system, the collation is French\_CI\_AS:

- French
- Case insensitivity (CI = Case Insensitive)
- Accent sensitivity (AS = Accent Sensitive)

This criterion, chosen at the installation step, becomes the default SQL Server criterion.

However, it will be possible to create or attach databases with a different collation.

This choice has multiple impacts:

- The order in which the user expects to recover the data may be different from the result return by SQL Server.
- Several multi-database queries may be inoperative if the databases concerned do not have the same collation.
- The consolidation of data from several servers and / or databases with different collations will be compromised.

The backup set used to create a new folder is provided with the French collation (French\_CI\_AS).

If no action is performed, the database will be attached to SQL Server with this collation that may differ from the collation used by Windows collation and / or by SQL Server.

It may also differ from the collation wanted by the customer. In some cases, it would be necessary to perform a change in the collation criterion for the database.

This operation can be done by the means of the "**AdminSQL**" (version 8.0.1.23 or later) and the "**Company administration**" (PGIMajVer.exe) tools.

#### **For customers outside France**

Most of time, the French\_CI\_AS collation provided at installation does not trigger any problem for these customers.

Therefore, the installation will be done just in the same way as for a French workstation.

If a customer wants, for whatsoever reason, to have another collation, the collation criterion for the database must be changed as described, once the product installed and the first folder created.

#### **For multinational companies and sites spread over several countries:**

In order to keep homogeneous data and enable some consolidation operations the customer may want to perform, it will be necessary to define a unique collation that will be used on all sites.

As far as possible, we recommend using the default collation provided by the installation of Yourcegid Retail <sup>CBR</sup> V11 (French\_CI\_AS or Latin1\_general\_100\_CI\_AS). If another collation is chosen, it would be necessary to change the collation criterion of the database after the installation of the database.

For more simplicity, we recommend you to choose, when you install SQL Server, this collation **in place of the one proposed by default**.

### 3. Windows Database Server / Oracle Database

<b>DATABASE SERVER</b>		
<b>Components</b>	<b>Minimum</b>	<b>Recommended</b>
System unit	Xeon Dual-Core or > <sup>(1)</sup>	Xeon Dual-Core or > <sup>(1)</sup>
Operating system <b>x86-32 bits</b>	W2008 SP2	W2008 SP2
Operating system <b>x64-64 bits</b>	W2008 SP2	W2012
Edition	Standard	Standard or Enterprise
Language	FR or EN	FR or EN
Memory	2 GB	4 GB or > <sup>(1)</sup>
Hard drive	100 GB SCSI	SAS 15K rpm in RAID <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
Backup	Mandatory <sup>(2)</sup>	Mandatory <sup>(2)</sup>
	<b>Oracle</b>	
Database engine <b>x86-32 bits</b>	11gR2 (11.2.0.3 patch 1) <sup>(3)</sup>	11gR2 (11.2.0.4) <sup>(4)</sup>
Database engine <b>x64-64bits</b>	11gR2 (11.2.0.3 patch 1) <sup>(3)</sup>	11gR2 (11.2.0.4) <sup>(4)</sup>
Edition	Standard <sup>(5)</sup>	Standard or Enterprise
Character set	AL32UTF8 <sup>(6)</sup>	AL32UTF8 <sup>(6)</sup>
	<b>Software</b>	
.Net Framework <sup>(7)</sup>	4.0	4.5.2

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of users, and number of used databases...). 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)

<sup>(2)</sup> Cegid recommends realizing a hot backup of the production databases via the Recovery MANager (RMAN) tool.

<sup>(3)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.3 patch 1) on Windows Server 2008/2008 R2.

<sup>(4)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows Server 2008/2008 R2/2012.

<sup>(5)</sup> The Oracle Database Standard Edition supports a server with maximum 4 processors (sockets).

<sup>(6)</sup> Only the AL32UTF8 character set is supported with Oracle Database 11gR2.

<sup>(7)</sup> Required for Cegid Database Maintenance (CDM). The "Client Profile" version is sufficient, but the "Full" version can be used too.

## 4. Linux Database Server / Oracle Database

<b>DATABASE SERVER</b>		
<b>Components</b>	<b>Minimum</b>	<b>Recommended</b>
System unit	Xeon Dual-Core or > <sup>(1)</sup>	Xeon Dual-Core or > <sup>(1)</sup>
Operating system <b>x64-64 bits</b>	Oracle Linux 6.2 <sup>(2)</sup> Red Hat Ent. Linux 6.2 <sup>(2)</sup>	Oracle Linux 6.2 or + <sup>(2)</sup> Red Hat Ent. Linux 6.2 or + <sup>(2)</sup>
Language		
Memory	4 GB	8 GB or > <sup>(1)</sup>
Hard drive	100 GB SCSI	SAS 15K rpm in RAID <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
Backup device	Tape drive <sup>(3)</sup>	Tape drive <sup>(3)</sup>
	<b>Oracle</b>	
Database engine <b>x64-64bits</b>	11gR2 (11.2.0.3) <sup>(4)</sup>	11gR2 (11.2.0.4) <sup>(4)</sup>
Edition	Standard <sup>(5)</sup>	Standard or Enterprise <sup>(5)</sup>
Character set	AL32UTF8 <sup>(6)</sup>	AL32UTF8 <sup>(6)</sup>

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of users, and number of used databases...).

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)

<sup>(2)</sup> Only the level of update is a minimum and version 6 of Linux is mandatory.

Some Red Hat Enterprise Linux versions support a server with maximum 2 processors.

Oracle Linux supports a server with no maximum number of processors and/or cores.

<sup>(3)</sup> Cegid recommends realizing a hot backup of the production databases via the Recovery MANager (RMAN) tool.

<sup>(4)</sup> Cegid has tested and supports Oracle Database 11gR2 (11.2.0.3 and 11.2.0.4) on an Oracle Linux 6 and Red Hat Enterprise 6 server.

<sup>(5)</sup> The Oracle Database Standard Edition supports a server with maximum 4 processors (sockets).

<sup>(6)</sup> Only the AL32UTF8 character set is supported with Oracle Database 11gR2.

## Specific Case of the Cegid Database Maintenance (CDM) Tool

As of Yourcegid Retail CBR V11, the Cegid Database Maintenance (CDM) tool is used to perform changes in the application version for updating the database structure in addition to the original tool called "PgiMajVer".

This CDM tool is traditionally installed on the server that hosts the database, within the context of a server running on Windows Server; the database used is SQL Server or Oracle Database.

AS the CDM tool is a Windows executable, it cannot be installed on the server that hosts the database, if the latter is an Oracle database installed on a Unix or Linux server.

In this case, the CDM tool must be installed on an existing CWAS server. If an installation on the CWA server is not possible, we recommend an installation on the serialization server. In absolute terms, it would also be possible to install the CDM tool on a dedicated server.

The following additional prerequisite must be applied to the server that hosts the CDM tool:

Software		
	Minimum	Recommended
.Net Framework <sup>(1)</sup>	4.0	4.5.2

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<sup>(1)</sup> Required for Cegid Database Maintenance (CDM). The "Client Profile" version is sufficient, but the "Full" version can be used too.

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## 5. Presentation Server (Remote Desktop)

A presentation server (also known as Terminal Services, TSE or Remote Desktop) runs applications locally on the server. The device (PC, terminal...) connected to the server, therefore, uses less resources than those requested by the same applications if running locally.

<b>PRESENTATION SERVER</b>		
<b>Components</b>	<b>Minimum</b>	<b>Recommended</b>
System unit	Pentium Xeon	Xeon Dual-Core or > <sup>(1)</sup>
Operating system <b>x86-32 bits</b>	W2008 SP2	W2008 SP2
Operating system <b>x64-64 bits</b>	W2008 SP2	W2012
Memory	4 GB	4 GB or > <sup>(1)</sup>
Hard drive	100 GB SCSI	SAS 15K rpm in RAID <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
	<b>Software</b>	
Desktop applications (OLE link)	Office 2007 SP3	Office 2010 SP1 <sup>(2)</sup> or Office 2013 SP1 <sup>(2) (3)</sup>
Presentation service	Terminal services on Windows Server <sup>(4)</sup>	Remote Desktop on Windows Server <sup>(4)</sup>
Client for Oracle solutions	11gR2 (11.2.0.3) <sup>(5) (6)</sup>	11gR2 (11.2.0.4) <sup>(5) (7)</sup>
.Net Framework	4.0	4.5.2

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of users...)

- On the average, add 100 MB of memory per user (depending on the number and type of applications used.)
- In the context of a Cegid solution, 1 processor generally supports 15 to 20 users.

<sup>(2)</sup> Microsoft recommends the installation of the 32-bit Office 2010/2013 version, even in 64-bit environments.

<sup>(3)</sup> Office 2013 is supported on Windows Server 2008 R2 and Windows Server 2012.

<sup>(4)</sup> The "application publishing" mode is validated by Cegid on Windows Server 2012 (the Desktop mode is approved for previous versions.)

<sup>(5)</sup> The 32-bit version of the Oracle client is required, even on Windows 64-bit platforms.

Version 11gR2 (11.2.0.3 or 11.2.0.4) must be used to access Oracle databases in version 11gR2.

<sup>(6)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.3) on Windows Server 2008/2008 R2.

<sup>(7)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows Server 2008/2008 R2/2012.

## 6. Business Application Server for Cegid Web Access

This server is always installed on the Customer's **Intranet**. For an access via the **Internet** a Front-end Web server is required.

### BUSINESS APPLICATION SERVER

Components	Minimum	Recommended
System unit	Pentium Xeon	Xeon Dual-Core or > <sup>(1)</sup>
Operating system <b>x86-32 bits</b>	W2008 SP2	W2008 SP2
Operating system <b>x64-64 bits</b>	W2008 SP2	W2012
Memory	2 GB	4 GB or > <sup>(1)</sup>
Hard drive	100 GB SCSI	SAS 15K rpm in RAID <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
	Software	
Client for Oracle solutions	11gR2 (11.2.0.3) <sup>(2) (3)</sup>	11gR2 (11.2.0.4) <sup>(2) (4)</sup>
TCP ports	80, 8081, 443 <sup>(5)</sup>	80, 8081, 443 <sup>(5)</sup>

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of users...)

- A Web Access server with less than 10 simultaneous client connections can support the database part (mono-server solution); in this case we strongly recommend that this server is dedicated to the Cegid solution.
- A Web Access server can support up to 40 and even 50 simultaneous client connections, for more connections a second server (server farm) should be installed. The 50 simultaneous connections shall concern so-called light processes (such as standard cashing operations.)

<sup>(2)</sup> The 32-bit version of the Oracle client is required, even on Windows 64-bit platforms.

Version 11gR2 (11.2.0.3 or 11.2.0.4) must be used to access Oracle databases in version 11gR2.

<sup>(3)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.3) on Windows Server 2008/2008 R2.

<sup>(4)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows Server 2008/2008 R2/2012.

<sup>(5)</sup> Link between the Web Access server and the http clients using the TCP ports 80 and 8081 (modifiable default values), or https clients on port 443 for SSL communications (non modifiable port.) Refer to the appendices for further information on certificates.

## 7. Business Application Server - Internet Information Services

This server is always installed on the Customer's **Intranet**. It is used to publish services within the Yourcegid Retail <sup>CBR</sup> Omni-Chanel (or multichannel) offer and the Yourcegid Retail Mobile.

If there is an access via the **Internet**, a distribution server must be installed too. This is the server where the encryption SSL certificate will be deployed. Thus, only one certificate will be required, even if other IIS application servers are added later.

### BUSINESS APPLICATION SERVER

Components	Minimum	Recommended
System unit	Xeon Dual-Core or > <sup>(1)</sup>	Xeon Dual-Core or > <sup>(1)</sup>
Operating system <b>x64-64 bits</b>	W2008 R2 SP1	W2012
Memory	4 GB	4 GB or > <sup>(1)</sup>
Hard drive	100 GB SCSI	SAS 15K rpm in RAID <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
	Software	
IIS (Internet Information Server) <sup>(6)</sup>	7.5	8
.Net Framework	3.51 <sup>(2)</sup> & 4.5	3.51 <sup>(2)</sup> & 4.5.2
Client for Oracle solutions	11gR2 (11.2.0.3) <sup>(3) (4)</sup>	11gR2 (11.2.0.4) <sup>(3) (5)</sup>

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of users...)

- An IIS server can support up to 50 simultaneous client connections, for more connections a second server (server farm) should be installed, coupled to one or more distribution servers.

<sup>(2)</sup> .Net Framework 3.51 is required for the installation on Windows Server 2008 R2 (it is not required for Windows Server 2012).

<sup>(3)</sup> 32-bit AND 64-bit versions of the Oracle client must both be installed on an x64 operating system. Version 11gR2 (11.2.0.3 or 11.2.0.4) must be used to access Oracle databases in version 11gR2.

<sup>(4)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.3) on Windows Server 2008/2008 R2.

<sup>(5)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows Server 2008/2008 R2/2012.

<sup>(6)</sup> The business application servers within a same "server farm" must have the same version.

## 8. Application Request Routing “Distribution” Server

This server interleaves between the IIS business application servers and a Yourcegid Retail <sup>CBR</sup> application running on a user device. This server is required when several IIS business application servers are implemented, or if at least one IIS business application server can be accessed via the Internet.

If there is an access via the **Internet**, the encryption SSL certificate will be deployed on this server. The server is then deployed within the customer’s DMZ. Thus, only one certificate will be required, even if other IIS application servers are added later.

**A fixed public IP address is required for publishing this server on the Internet.**

This server is not used by Cegid Web Access business application servers.

<b>DISTRIBUTION SERVER <sup>(5)</sup></b>		
<b>Components</b>	<b>Minimum</b>	<b>Recommended</b>
System unit	Xeon Dual-Core or > <sup>(1)</sup>	Xeon Dual-Core or > <sup>(1)</sup>
Operating system <b>x64-64 bits</b>	W2008 R2 SP1	W2012 R2
Memory	4 GB	4 GB or > <sup>(1)</sup>
Hard drive	100 GB SCSI	SAS 15K rpm in RAID <sup>(1)</sup>
Network card <sup>(3)</sup>	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
	<b>Software</b>	
IIS (Internet Information Server) <sup>(4)</sup>	7.5	8.5
ARR (Application Request Routing)	2.5	3.0
.Net Framework	4.5	4.5.2
TCP ports	443 <sup>(2)</sup>	443 <sup>(2)</sup>

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of users...)  
<sup>(2)</sup> When the SSL protocol is implemented (access from the Internet), the TCP port 443 (non modifiable port) is used for SSL communications. For more details about certificates, refer to the appendices in this document.  
<sup>(3)</sup> A second network card is required once the ARR platform is doubled, for example to respond to scenarios about fault tolerance of this feature.  
<sup>(4)</sup> The distribution servers within a same “server farm” must have the same version.  
<sup>(5)</sup> The Customer is responsible for securing his 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.

## 9. Business Application Server for Cegid Web Access in the DMZ

For an operating via the Internet, the installation of a Front-end Web server is required. The server is then installed in the DMZ (Demilitarized Zone) of the customer's network infrastructure.

**A fixed public IP address is required for publishing this server on the Internet.**

FRONT-END WEB SERVER <sup>(5)</sup>		
Components	Minimum	Recommended
System unit	Pentium Xeon	Xeon Dual-Core or > <sup>(1)</sup>
Operating system <b>x86-32 bits</b>	W2008 SP2	W2008 SP2
Operating system <b>x64-64 bits</b>	W2008 SP2	W2012
Memory	2 GB	4 GB or > <sup>(1)</sup>
Hard drive	100 GB SCSI	SAS 15K rpm in RAID <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
	Software	
Client for Oracle solutions	11gR2 (11.2.0.3) <sup>(2) (3)</sup>	11gR2 (11.2.0.4) <sup>(2) (4)</sup>
TCP ports	443 <sup>(5)</sup>	443 <sup>(5)</sup>

### Just remind:

The application server is always installed on the customer's internal network.

The customer is responsible for securing his DMZ and his Web server. He must implement all required means to protect the access to the Web server, especially from potential external attacks. Cegid's services teams may support the customer in implementing some measures (security box, strong authentication solution etc.) to optimize the security level of a solution of that type.

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of users...)

- A Web Access server with less than 10 simultaneous client connections can support the database part (mono-server solution); in this case we strongly recommend that this server is dedicated to the Cegid solution.
- A Web Access server can support up to 40 and even 50 simultaneous client connections, for more connections a second server (server farm) should be installed. The 50 simultaneous connections shall concern so-called light processes (such as standard cashing operations.)

<sup>(2)</sup> The 32-bit version of the Oracle client is required, even on Windows 64-bit platforms.

Version 11gR2 (11.2.0.3 or 11.2.0.4) must be used to access Oracle databases in version 11gR2.

<sup>(3)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.3) on Windows Server 2008/2008 R2.

<sup>(4)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows Server 2008/2008 R2/2012.

<sup>(5)</sup> The TCP port 443 is used for SSL communications (non modifiable port.) For more details about certificates, refer to the appendices in this document.

## 10. Workstations (Desktops, Laptops, Terminals...)

WINDOWS PCs		
Components	Minimum	Recommended
System unit	Intel Core 2	Core i
Operating system <b>x86-32 bits</b>	Windows 7 SP1	Windows 7 SP1 or Windows 8.1
Operating system <b>x64-64 bits</b>	Windows 7 SP1	Windows 7 SP1 or Windows 8.1
Edition	Professional	Professional
Language	FR or EN	FR or EN
Memory	1 GB	4 GB <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
Monitor	15"	17" or >
Video card	65,000 colors	65,000 colors
Display resolution	1024 x 768	1440 x 900
Size of the text displayed on the screen	Standard size 96 PPP	Standard size 96 PPP



An "Administrator" access right is required to install and update a Cegid application. The later use of the application only requires usual standard rights.

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of local applications...)

<sup>(2)</sup> For some Cegid applications requiring a local database engine, the SQL Express engine should be installed in the most recent version. For some scenarios, the same version should be installed on the client workstation and on the company's server.

<sup>(3)</sup> SQL Express must be deployed in the same language as Windows (however SQL Express in English can be deployed on different localized Windows versions.)

<sup>(4)</sup> The 32-bit version of the Oracle client is required on the workstations that access Cegid products, including on 64-bit Windows platforms (except for Web Access stations that do not require an Oracle client.)

Version 11gR2 (11.2.0.3 or 11.2.0.4) must be used to access Oracle databases in version 11gR2.

<sup>(5)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.3) on Windows Vista and Windows 7.

<sup>(6)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows Vista and Windows 7 and Windows 8.1.

<sup>(7)</sup> Microsoft recommends the installation of the 32-bit Office 2010/2013 version, even in 64-bit environments.

<sup>(8)</sup> Office 2013 is supported on Windows 7 and Windows 8.1.

<sup>(9)</sup> An access via the Internet is required for remote assistance by Cegid's Helpdesk team (WebEx tool), and for important system updates if the latter are not delivered via another deployment tool (critical system patches, update of certificate lists...)

WINDOWS PCs		
Components	Minimum	Recommended
		<b>SQL Express <sup>(2)</sup></b>
Database engine <b>x86-32 bits</b>	SQL 2008 SP3	SQL 2012 SP3
Language	FR or EN <sup>(3)</sup>	FR or EN <sup>(3)</sup>
	<b>Software</b>	
Client for Oracle solutions	11gR2 (11.2.0.3) <sup>(4) (5)</sup>	11gR2 (11.2.0.4) <sup>(4) (6)</sup>
Desktop applications (OLE link)	Office 2007 SP3	Office 2010 SP2 <sup>(7)</sup> or Office 2013 <sup>(7) (8)</sup>
.Net Framework	4.0	4.5.2
Tools	Adobe Acrobat 9	Adobe Acrobat 11
Internet access	Yes <sup>(9)</sup>	Yes <sup>(9)</sup>
Internet browser	Internet Explorer 8.x	Internet Explorer 11.x
ActiveX	WebEx <sup>(9)</sup>	WebEx <sup>(9)</sup>



An “Administrator” access right is required to install and update a Cegid application. The later use of the application only requires usual standard rights.

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of local applications...)  
<sup>(2)</sup> For some Cegid applications requiring a local database engine, the SQL Express engine should be installed in the most recent version. For some scenarios, the same version should be installed on the client workstation and on the company's server.  
<sup>(3)</sup> SQL Express must be deployed in the same language as Windows (however SQL Express in English can be deployed on different localized Windows versions.)  
<sup>(4)</sup> The 32-bit version of the Oracle client is required on the workstations that access Cegid products, including on 64-bit Windows platforms (except for Web Access stations that do not require an Oracle client.)  
 Version 11gR2 (11.2.0.3 or 11.2.0.4) must be used to access Oracle databases in version 11gR2.  
<sup>(5)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.3) on Windows Vista and Windows 7.  
<sup>(6)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows Vista and Windows 7 and Windows 8.1.  
<sup>(7)</sup> Microsoft recommends the installation of the 32-bit Office 2010/2013 version, even in 64-bit environments.  
<sup>(8)</sup> Office 2013 is supported on Windows 7 and Windows 8.1.  
<sup>(9)</sup> An access via the Internet is required for remote assistance by Cegid's Helpdesk team (WebEx tool), and for important system updates if the latter are not delivered via another deployment tool (critical system patches, update of certificate lists...)

<b>LIGHT TERMINALS (1)</b>		
<b>Components</b>	<b>Minimum</b>	<b>Recommended</b>
HP	T5520, T5530	T5540, T5550, T510
	<b>Software</b>	
RDP (Remote Desktop Protocol) Client	5.5 <sup>(2) (3)</sup>	6.0

<sup>(1)</sup> These terminals are used, connected to presentation servers (remote desktop.)

<sup>(2)</sup> Versions older than RDP 6.0 do not provide all the features proposed by recent operating systems (Windows Server 2008 and 2008 R2.)

<sup>(3)</sup> These terminals are not supported in connection to Windows Server 2012 presentation servers (remote desktop.)

## 11. POS Terminals

POS TERMINALS		
Components	Minimum	Recommended
System unit	Intel Core 2	Core i
Operating system <b>x86-32 bits</b>	Windows Embedded POS Ready 2009 (x64)	Windows 7 SP1
Operating system <b>x64-64 bits</b>	Windows 7 SP1	Windows 7 SP1
Edition	Professional	Professional or POS Ready 7 (x64)
Language	FR or EN	FR or EN
Memory	1 GB	3 GB <sup>(1)</sup>
Network card	100 Mb/s	1 Gb/s
DVD drive	Yes	Yes
Monitor	15"	17" or >
Video card	65,000 colors	65,000 colors
Display resolution	1024 x 768	1440 x 900
Size of the text displayed on the screen	Standard size 96 PPP	Standard size 96 PPP



An "Administrator" access right is required to install and update a Cegid application. The later use of the application only requires usual standard rights.

(1) Elements to increase according to analyses carried out (operating system, number of local applications...)  
 (2) For some Cegid applications requiring a local database engine, the SQL Express engine should be installed in the most recent version. For some scenarios, the same version should be installed on the client workstation and on the company's server.  
 (3) SQL Express must be deployed in the same language as Windows (however SQL Express in English can be deployed on different localized Windows versions.)  
 (4) The 32-bit version of the Oracle client is required on the workstations that access Cegid products, including on 64-bit Windows platforms (except for Web Access stations that do not require an Oracle client.)  
 Version 11gR2 (11.2.0.3 or 11.2.0.4) must be used to access Oracle databases in version 11gR2.  
 (5) Cegid has tested and supports Oracle 11gR2 (11.2.0.3) on Windows 7.  
 (6) Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows 7 and Windows 8.1.  
 (7) Microsoft recommends the installation of the 32-bit Office 2010/2013 version, even in 64-bit environments.  
 (8) Office 2013 is supported on Windows 7 and Windows 8.1.  
 (9) An access via the Internet is required for remote assistance by Cegid's Helpdesk team (WebEx tool), and for important system updates if the latter are not delivered via another deployment tool (critical system patches, update of certificate lists...)

POS TERMINALS		
Components	Minimum	Recommended
		<b>SQL Express <sup>(2)</sup></b>
Database engine <b>x86-32 bits</b>	SQL 2008 SP3	SQL 2012 SP3
Language	FR or EN <sup>(3)</sup>	FR or EN <sup>(3)</sup>
	<b>Software</b>	
Client for Oracle solutions	(11.2.0.3) <sup>(4)</sup> <sup>(5)</sup>	11.2.0.4) <sup>(4)</sup> <sup>(6)</sup>
Desktop applications (OLE link)	Office 2007 SP3	Office 2010 SP2 <sup>(7)</sup> or Office 2013 SP1 <sup>(7)</sup> <sup>(8)</sup>
.Net Framework	4.0	4.5.2
Tools	Adobe Acrobat 9	Adobe Acrobat 11
Internet access	Yes <sup>(9)</sup>	Yes <sup>(9)</sup>
Internet browser	Internet Explorer 8.x	Internet Explorer 11.x
ActiveX	WebEx <sup>(9)</sup>	WebEx <sup>(9)</sup>



An “Administrator” access right is required to install and update a Cegid application. The later use of the application only requires usual standard rights.

<sup>(1)</sup> Elements to increase according to analyses carried out (operating system, number of local applications...)  
<sup>(2)</sup> For some Cegid applications requiring a local database engine, the SQL Express engine should be installed in the most recent version. For some scenarios, the same version should be installed on the client workstation and on the company's server.  
<sup>(3)</sup> SQL Express must be deployed in the same language as Windows (however SQL Express in English can be deployed on different localized Windows versions.)  
<sup>(4)</sup> The 32-bit version of the Oracle client is required on the workstations that access Cegid products, including on 64-bit Windows platforms (except for Web Access stations that do not require an Oracle client.)  
 Version 11gR2 (11.2.0.3 or 11.2.0.4) must be used to access Oracle databases in version 11gR2.  
<sup>(5)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.3) on Windows 7.  
<sup>(6)</sup> Cegid has tested and supports Oracle 11gR2 (11.2.0.4) on Windows 7 and Windows 8.1.  
<sup>(7)</sup> Microsoft recommends the installation of the 32-bit Office 2010/2013 version, even in 64-bit environments.  
<sup>(8)</sup> Office 2013 is supported on Windows 7 and Windows 8.1.  
<sup>(9)</sup> An access via the Internet is required for remote assistance by Cegid's Helpdesk team (WebEx tool), and for important system updates if the latter are not delivered via another deployment tool (critical system patches, update of certificate lists...)

POS terminals certified with Yourcegid Retail <sup>CBR</sup>

Modular POS terminals		
<b>HP</b>	rp5800	Windows 7 Pro x86

"All-In-One" POS Systems		
<b>AURES</b>	Sango	Windows 7 Pro x64
<b>AURES</b>	Sango	Windows POS Ready 7 x64
<b>AURES</b>	Odysse 2	Windows 7 Pro x64
<b>AURES</b>	Odysse 2	Windows POS Ready 7 x64
<b>AURES</b>	Teos Wide	Windows 7 Pro x86

POS Certifications to Come		
<b>HP</b>	rp7800	Windows POS Ready 7 x64
<b>HP</b>	rp7800	Windows 7 Pro x64
<b>TOSHIBA</b>	TCx Wave A 30	Windows POS Ready 7 x64

## 12. Peripheral devices for Yourcegid Retail Mobile

### Communications

**Operating:** only with **Wi-Fi**: the Apple device communicates via Wi-Fi with a Wi-Fi access point which in turn is linked to a router connected via a VPN to the business application server(s). The device talks and therefore sends the information directly to the business application server. It is possible to make Apple devices communicate through HTTPS directly on the Internet by implementing the management of SSL certificates.

**Wi-Fi coverage:** Requires a presales technical study (payable service), whether it is a study based on a plan of the building on which the nature of walls, floors and the places where the devices will be located are specified, or a study by a technician who visits the site.

The solutions integrating radio (Wi-Fi) are real projects and need to be managed as such. Therefore, presales and deployment features need to be systematically planned and defined.

<u>Wi-Fi</u>	
Components	Minimum
Protocol	Wi-Fi 802.11 b/g
Wi-Fi Security	WEP, WPA
Communications for PDA / Receipt Printer	Bluetooth (Class II, v 2.0 EDR)
Certified access points	Motorola AP-5131 (industrial model) Linksys WAP54G (basic model) D-Link DAP-1160 (basic model)

Certified Apple Devices

APPLE DEVICES		
Model	Operating system	
iPod TOUCH 5	iOS 7 minimum	
iPhone 5S (not 5c)	iOS 7 minimum	
iPad Mini 2	iOS 7 minimum	
iPad Mini Retina	iOS 7 minimum	

The following cases can be used with these devices:

- Ingenico iSMP Companion for all devices
- Ingenico iCMP for all devices
- Linea-Pro 5 for iPod and iPhone
- Honeywell Captuvo SL22 for iPod or SL42 for iPhone



The Ingenico cases iSMP and iCMP require the use of the centralized transaction management solution from Ingenico called AXIS.

Certified Receipt Printers

These printers are certified:

- The EPSON TMH 6000 IV printer with Wi-Fi or Ethernet modules.)
- The EPSON TM 88 V printer (with Wi-Fi or Ethernet modules.)

## 13. Peripheral devices for Yourcegid Retail Mobile Inventory

### Communications

**Operating:** The PDA is used to scan items in "Disconnected mode" (without network access) The device is then connected to the computer hosting the software applications such as "Windows Mobile Device Center", Hub Copy" and "Yourcegid Retail <sup>CBR</sup>". Data is then transferred from the PDA to the computer where this data will be integrated with Yourcegid Retail <sup>CBR</sup>

<b>REQUIRE SOFTWARE</b>	
<b>Components</b>	<b>Remark</b>
Windows Mobile Device Center	A Microsoft Windows component configured by CEGID.
Hub Copy	Provided and configured by CEGID.

### Certified PDAs

<b>PDAs</b>	
<b>Model</b>	<b>Operating system</b>
Motorola MC 2180	Win CE 5 or 6
Motorola MC 3100	Win CE 5 or 6
Honeywell Dolphin 6100	Win CE 5 or 6

## 14. Printers & Peripherals

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.

Now, 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

### Network Printer

Laser printers (graphic mode): **HP** or **Lexmark** having undergone the Cegid tests and configuration.

Network card 10/100 Mbit.

16 MB minimum memory, emulation excluded.

**Label Printer**

For a better printing quality of the finished product labels on specialized printers, we recommend the use of **ZEBRA** printers certified by Cegid.

These printers must include a network interface (or possibly a Cegid validated network box).

Certified models sold by CEGID:	
<b>PAXAR</b>	Monarch 9642
<b>PAXAR</b>	Monarch 9825
<b>PAXAR</b>	Monarch 9830
<b>PAXAR</b>	Monarch 9855
<b>ZEBRA</b>	Z4MPlus
<b>ZEBRA</b>	TLP -2844-Z
<b>ZEBRA</b>	ZM400
<b>ZEBRA</b>	ZM600
<b>ZEBRA</b>	GK420t

Models tested but not sold by CEGID:	
<b>ZEBRA</b>	TLP -2746-E
<b>ZEBRA</b>	TLP-2824
<b>ZEBRA</b>	S4M
<b>COGNITIVE</b>	Advantage LX (US printer)

**Important remarks**

In general, the implementation and configuration of label printers requires the intervention of a functional Yourcegid Retail <sup>CBR</sup> project manager.

There are some restrictions linked to each of the printer models tested (for example, fonts linked to the print driver cannot be used since they are not known by the business application server which results in lower print quality and speed.)

### Receipt Printer

Printer types: **Epson or compatible** (ESC/POS), **IBM** and **HP** driven by OPOS layer from the vendor and CPOS layer (Cegid POS.)

EPSON printers must include a series or parallel interface.

IBM printers driven by OPOS drivers must include a USB interface (with or without power supply) or a series interface.

**EPSON models** (ESC/POS) which are compatible and certified for the Front-Office are: TMH6000 / TMH5000 / TMU950 / TMU675 / TMT88 / TMT70 / TMU220 / TM-J7100.

**WINCOR models** (ESC/POS) which are compatible and certified for the Front-Office are: TH210 / TH230 / TH320.

**IBM models** which are compatible and certified for the Front-Office are: 4610-TG3 / 4610-2NR / 4610-TF6 / 4610-1NR (OPOS version  $\geq$  1.13 + CPOS).

**HP model** compatible and certified for the Front Office: A799 (OPOS version 1.8.53 + CPOS).

**TOSHIBA model** compatible and certified for the Front Office: TRST-A10 (OPOS + CPOS).

### Rewritable printer

**STAR model:** TCP-400 printer supported by a CPOS layer with the "VisualCardOCX" software components in version 1.9.0.

### Tax Printer

In Italy, printers of type **EPSON FP-90** driven by the OPOS layer and the CPOS layer (Cegid POS.)

For Poland, a CPOS driver was developed by our partner **JANTAR** for a **POSNET** fiscal printer driven by OPOS layers.

For Russia, a CPOS driver was developed by our partner **MARPEX** for a **MOEBIUS** fiscal printer driven by OPOS layers.

### Tax box

**For Sweden:** The "CleanCash®" box is supported by a CPOS layer with the software components "CleanCashServer" in version 2.3 and "CleanCashAPI" in version .1.1.

### Customer Display

**All certified customer display models** are directly driven by the Front-Office via CPOS layers (Cegid POS.)

**EPSON models:** DMD105 / DMD100. This peripheral device is connected to the dedicated RS-232 serial port (ESC/POS) between the POS terminal and the receipt printer.

**AURES model:** OCD-100. This peripheral device is connected to the dedicated RS-232 serial port (ESC/POS).

**WINCOR model:** BA63. This peripheral device is connected to the dedicated RS-232 serial port (ESC/POS).

**IBM model:** driven by the OPOS layer (version  $\geq 1.13$ ) + the CPOS layer from CBR version 10. It is connected to the self-powered 15-pin serial port (IBM SUREPOS 545 POS model), or 9-pin serial port interface (IBM SUREPOS 566) POS model) – IBM proprietary connector technology.

**HP model:** USB customer pole display LD220 driven by the OPOS layer (version 1.9.1) + the CPOS layer. Display integrated with the **HP AP5000** POS terminal driven by the OPOS layer + the CPOS layer.

### Cash Drawer

**EPSON model or compatibles:** these devices are directly driven by Front-Office + the CPOS layer (Cegid POS.) This peripheral is connected to the DK socket (RJ12 format) of the receipt printer.

**HP model:** the drawer is driven by the OPOS layer (OPOS version 1.8.53) + the CPOS layer.

**IBM model:** the drawer is driven by the OPOS layer (OPOS version 1.13) + the CPOS layer. It is connected to the 'Cash Drawer' interface of the POS terminal from the SurePOS series – IBM proprietary connector technology.

### Barcode Scanner

**Bar code readers:** all models connected in USB mode or as 'keyboard/SU' interface (Wedge mode) with the "CR/LF" settings applying automatically after the reading of a bar code.

## 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** POS terminal driven by the OPOS layer + the CPOS layer.

## Document reader

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

## 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.

### Electronic Fund Transfer

**Connected EFT:** the **CONCERT CB 5.2** protocol of the French bank card association (GIE) is implemented as standard in the Front-Office to talk to certain models of Electronic Payment Terminals from INGENICO (i5100 for example). The linking interface between these connected terminals and the POS is a serial interface.

**Integrated EFT:** The Front Office implements the **AXIS C3** software (the porting of which is in progress in some countries). The "PIN pad" is connected in serial or USB mode to the POS terminal. The INGENICO AXIS C3 software is installed on the POS terminal. The central EFT server, joined by the POS terminal, sends a request to the authorization center. The local POS receipt printer (TMH6000/TMT88, etc.) prints the sales receipts and the receipts of bank card payments.

A CPOS connector is available to make the Yourcegid Retail CBR solution independent from the local electronic payment offers.

Compared to the above payment solutions you can find hereunder a summary of those with which Yourcegid Retail <sup>CBR</sup> is presently interfaced, given that the geographical coverage of each solution varies according to the vendor and that a study case by case is almost always necessary.

The most representative providers of solutions compared to Yourcegid Retail <sup>CBR</sup> are presently Ingenico and Wynnid Verifone that propose payment solutions with payment terminals directly connected to Yourcegid Retail <sup>CBR</sup>, or centralized solutions (i.e.: AXIS).

Sagem: as Sagem is now linked up with INGENICO, their **integrated payment** solution is that of AXIS C3. AXIS C3. Sagem proposes only **connected EFT** solutions.

A specific analysis must be carried out by the customer with Cegid's assistance, in order to ensure that the customer's network configuration gives access to the electronic payment service provider.

## 15. Networking

### NETWORK

Components	Minimum	Recommended
Communication protocol	TCP/IP "IPv4" <sup>(1)</sup> <sup>(2)</sup>	TCP/IP "IPv4" <sup>(1)</sup> <sup>(2)</sup>
WebEx remote assistance <sup>(3)</sup>	<a href="https://cegid.webex.com/sc">https://cegid.webex.com/sc</a>	<a href="https://cegid.webex.com/sc">https://cegid.webex.com/sc</a>
Internet access for downloading application fixes	Download from <a href="http://www.cegidlife.com">http://www.cegidlife.com</a>	Download from <a href="http://www.cegidlife.com">http://www.cegidlife.com</a>
Local network (LAN)	100 Mb/s	1 Gb/s
Fixed Internet access	ADSL <sup>(4)</sup>	SDSL <sup>(4)</sup>
Mobile Internet access	3G <sup>(4)</sup>	Wi-Fi <sup>(4)</sup>

<sup>(1)</sup> The TCP/IP V6 protocol can also be present

<sup>(2)</sup> According to your infrastructure and your security level, "exceptions" may be added to your Internet browser or enhancements on settings can be configured on your routers or proxy servers, if necessary.

<sup>(3)</sup> Cegid's remote assistance is always realized via the Internet with the WebEx solution.

<sup>(4)</sup> These recommendations are given for informative purposes. Depending on the use and the expectations of performance, our teams can discuss with you the best suited offer for your solution.

## ADSL versus SDSL

For Web Access **HTTPS** solutions, the store needs only a simple ADSL with one **public fixed IP address**.

For a great number of connections (local for navigating and e-mailing, and remote on the CWAS 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 Yourcegid Retail <sup>CBR</sup> solution.

Latency superior to **100 ms** is considered insufficient for an optimal use of our products.

### 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 latency
< 3	ADSL (*)	1 Mb/s	256 Kb/s	100 ms
3 to 9	SDSL / T1	1 Mb/s	1 Mb/s	
10 to 19	SDSL / T1	2 Mb/s	2 Mb/s	
20 to 39	SDSL / T1	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 latency
< 2	ADSL (*)	1 Mb/s	256 Kb/s	100 ms
3 to 9	SDSL / T1	1 Mb/s	1 Mb/s	
10 to 19	SDSL / T1	2 Mb/s	2 Mb/s	
20 to 39	SDSL / T1	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.

## 16. General Recommendations

The following recommendations are not prerequisites but give precious information about the implemented infrastructure.

### Wiring Harness

Electrical outlets that are supplying servers and central units should be cabled directly from the electric control panel.

There must be at least two electrical outlets per **server** (within 1.5 m from the equipment)

There must be at least two electrical outlets per **workstation** (within 1.5 m from the equipment)

There must be at least four electrical outlets per **POS terminal** (within 1.5 m from the equipment)

### Network Wiring

An Ethernet **RJ45** socket must also be available near each network equipment (server, PC, printer) that must be implemented.

Wall mounted or flying lead network wiring must be of category 5 at minimum (5, 5E, or 6).

Wall mounted Ethernet sockets must be female RJ45 sockets

We recommend the use of a switch (as hubs are obsolete and less efficient.)

The number of available connectors of the existing switches must be sufficient to accommodate all network devices to implement.

Networks of type **Wi-Fi** or **PLC** (Power line communications) are not validated to be used in **Client/Server** ("DUO" solution and network solution with server) or IIS architectures. A minimum bandwidth of 100 Mb/s is required for a local network.

### Server Room / Rack

We recommend you to install a dedicated **computer room** for accommodating the new proposed server(s).

This room must be equipped with **air conditioning** meeting the new requirements.

If you already own a **rack**, it must fit the proposed servers (fixing tracks, depth, etc.):

- HP or IBM rack according to the servers chosen
- Width: 19 inches
- Square holes

The space (U shaped) available in the rack must be sufficient to host the Cegid servers.

If there is not enough space in an existing rack, **additional locations** must be provided by the customer (and/or Cegid if Cegid has sold a rack) prior to the physical installation of the equipment at the customer's site.

If a new rack is installed by Cegid, pay attention to the **access means** to provide (floor, narrow passage, and room to reorganize before any intervention...). All these elements have an impact on the shipment to organize and on the time required to install the rack.

## 17. 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 (this acronym designates at Intel the support for this instruction set) 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:

### **Services Packs (SP):**

Set of patches applying to one product, with cumulative effects, limited in numbers (often less than 5 over the lifetime of the product), they may be a minimum required for the installation of Microsoft solutions, Cegid solutions, or third-party applications.

→ Cegid tests the service packs in conjunction with the applied solutions and publishes information soon after their release by Microsoft (prerequisite notes identify the levels of service packs supported).

### **Broadcasted updates:**

A patch enabling the resolution of a particular problem provided in-between 2 service packs. These patches are usually delivered on a monthly basis via Windows and/or Microsoft Update; Microsoft recommends installing these updates (categorized as important, critical or recommended). Given that it is impossible to validate all the combinations of these isolated updates, Cegid recommends that you test their implementation on a "pilot environment", then accept the deployment on other machines as long as no undesirable side effect appears (Cegid can propose the implementation of the WSUS service → Windows Software Update Services that allows you to address this need).

### **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, Oracle and Linux 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 from their respective publishers.

A reminder of the standard end of support dates for these products is shown below; more detailed and extensive information is available from the publishers concerned. (It is sometimes possible, beyond the dates of full support of the product to get security patches or some other patches, if you have subscribed a contract for additional chargeable support.)

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

Oracle lifecycle <http://www.oracle.com/us/support/lifetime-support/index.html>

Red Hat lifecycle <https://access.redhat.com/support/policy/updates/errata/>

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.

Microsoft Products (Publisher's Information)		
Marketed product	End of main support (date mm/dd/yyyy)	Remark
Windows Embedded POS Ready 2009	4/8/2014	
Windows 7 Professional	1/13/2015	
Windows 8 Professional	1/9/2018	
Office 2007	10/9/2012	
Office 2010	10/13/2015	Qualified for x86 versions
Office 2013	4/10/2018	Qualified for x86 versions
Windows Server 2008	1/13/2015	
Windows Server 2008 R2	1/13/2015	
Windows Server 2012	1/9/2018	
SQL Server 2008	1/14/2014	Qualified with WS 2008 & WS 2008 R2
SQL Server 2008 R2	1/14/2014	Qualified with WS 2008 & WS 2008 R2
SQL Server 2012	7/11/2017	Qualified with WS 2008 R2 & WS 2012
Oracle Products (Publisher's Information)		
Marketed product	Premier Support Ends on (date mm/dd/yyyy)	Remark
Oracle Database 11.2	1/31/2015	Qualified with WS 2008 & WS 2008 R2 and Oracle Linux 6.2
Oracle Linux 6.2	March 2021	
Red Hat Products (Publisher's Information)		
Marketed product	End of main support (mm/dd/yyyy)	Remark
Linux Red Hat 6	11/30/2020	



## Support of Cegid Solutions in Virtualized Environments

Installing a Cegid solution in a virtualized environment (virtualization of servers) meeting the same requirements as for a deployment on physical machines, is often done in a transparent manner because installation programs or applications consider the virtualized resources in the same way as physical resources.

### ■ Required checks in this type of environment:

- As a result 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.
- All hardware components are not “virtualizable” and sometimes some aspects (advanced graphical features, telecommunications equipment...) are not supported.
- The licensing module for some Cegid applications will use the physical elements (including the network adapter) of the server where it is installed. We recommend installing the licensing module either on a non virtualized server, or on a virtualized machine ensuring that that the MAC address used for the network adapter does not change.
- First of all, it is necessary to ensure that the various elements (operating systems, database engine...) 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.)
  - Microsoft’ policy for application support in virtual environments can be viewed at the following address: <http://windowsservercatalog.com/svvp.aspx?svvppage=svvpwizard.htm>.
  - Oracle specifically supports its products on Oracle VM and Microsoft Hyper-V Server 2012, as defined in the technical release note "[Certified Software on Microsoft Windows Server 2012 Hyper-V \[ID 1563794.1\]](#)." The support strategy for Oracle solutions on VMware has a smaller commitment as described in the Oracle technical release note "[Support Position for Oracle Products Running on VMWare Virtualized Environments \[ID 249212.1\]](#)."

### ■ Conditions relating to the technical support ensured by Cegid:

- The Cegid solutions described in this “document of prerequisites” are supported the Windows Server 2012 and Hyper-V Server 2012 and later environments, since these environments comply with the prerequisites of the Cegid solutions, identical to those established for physical environments, as well as with the support policies of the concerned third-party products.
- Cegid specifically provides functional support for Cegid applications via various standardized offers.
- For customers with system support contracts for Windows Server 2012 and Hyper-V Server 2012 and later, used to implement a Cegid application, Cegid may provide additional support and expertise for these products (at this stage, Cegid will not provide support for the operating and use of other virtualization solutions.)
- When a solution is installed according to the “state of the art”, in a virtualized environment that is not supported by Cegid or does not benefit from a system support contract, the various teams

involved in customer services (deployment, support...) will use reasonable means to help diagnose a malfunction occurring in the implemented Cegid application solution.

- If a problem with a Cegid application solution deployed in this context does not find a quick solution after the initial diagnosis, Cegid may request to reproduce the problem within a standard (non-virtualized or Hyper-V) deployment context to validate or not the impact of the virtualization on the dysfunction found.
- As a complementary service offering, Cegid's system engineers may provide assistance to customers to implement a "supported solution" to identify the potential cause of a problem, thus facilitating its solution. This is a chargeable service on site.



### SSL Certificates for the Yourcegid Product Range

For communications between an application running on a user's peripheral device and a Web Access server, a business application server or a distribution server, it is possible to choose, either to use a non encrypted HTTP protocol, or to secure the exchange by implementing the relevant encryption via an SSL HTTPS protocol.

The most common cases implemented are the following:

■ **The Web Access server and the Web Access application are located on the company's network:**

- Because the internal network is under control, the http mode (without certificate) is the mostly implemented; it is also the most cost saving and the easiest to deploy
- To customers that have a Windows infrastructure and that have deployed via their IT teams, the certificate server module integrated with Windows server, and propagated the certificate of the internal authority to the peripheral devices that must run an application of type Web Access, Cegid may provide a documentation describing how to integrate on the Web Access server a certificate granted by this internal authority.

■ **The Web Access server and the Web Access application are linked together via the Internet:**

- When the server and the Web Access client are linked together via the Internet (or a network less secured than a company network), it is highly recommended to encrypt the data that transits between the two ends.
- One simple option consists in using a self-signed certificate (generated by the Web Access 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:
  - Only Web Access applications with an available connection period are supported.
  - In terms of security, it is easy to generate this type of certificate, but there is no guarantee that a Web Access application will connect to "its server".
  - As with a recent browser accessing a site for which neither its origin, nor the validity of the certificate can be guaranteed, the user must confirm each time he connects that he agrees 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 Web Access server a certificate issued by a recognized certificate authority; type and cost of the certificate will depend mainly on:
  - The issuing authority and the confidence it inspires on the market.
  - The peripheral devices and browsers you want to be supported.
  - The lifetime of the certificate from 1 year to 4-5 years.
  - 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.)
- When deploying Cegid Web Access solutions, the certificates commonly used for Windows workstations and the most commonly used peripheral devices are 40-bit server certificates for a period of 3 years (mostly provided by "TBS Internet" for an optimized cost, or "VerSign" provided by "TBS Internet" for customers wishing to use one of the most recognized certification authorities on the Internet.)

**Note:** when using Yourcegid Retail Mobile <sup>CBR</sup>, make sure that the certificate really does support client operating systems for mobile devices.

■ **The business application server, the distribution server and the consumer of services (third-party or Apple device) are located on the company's network:**

- Because the internal network is under control, the http mode (without certificate) is the mostly implemented; it is also the most cost saving and the easiest to deploy
- To customers that have a Windows infrastructure and that have deployed via their IT teams, the certificate server module integrated with Windows server, and propagated the certificate of the internal authority to the peripheral devices that must consume the published services, Cegid may provide a documentation describing how to integrate on the concerned servers a certificate granted by this internal authority.

■ **The distribution server and the consumer of services (third-party or Apple device) are linked together via the Internet:**

- When the distribution server and the consumer of services are linked together via the Internet (or a network less secured than a company network,) it is highly recommended to encrypt the data that transits between the two ends.
- One simple option consists in using a self-signed certificate (generated on the IIS 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:
  - Only services consumers with an available connection period are supported.
  - In terms of security, it is easy to generate this type of certificate, but there is no guarantee that the service consumer will connect to "its server."
  - As with a recent browser accessing a site for which neither its origin, nor the validity of the certificate can be guaranteed, the user must confirm each time he connects that he agrees 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:

- The issuing authority and the confidence it inspires on the market.
- The peripheral devices and browsers you want to be supported.
- The lifetime of the certificate from 1 year to 4-5 years.
- 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.)
- When deploying Cegid solutions, the certificates commonly used for Windows workstations and the most commonly used peripheral devices are 40-bit server certificates for a period of 3 years (mostly provided by "TBS Internet" for an optimized cost, or "VerSign" provided by "TBS Internet" for customers wishing to use one of the most recognized certification authorities on the Internet.)

**Note:** when using Yourcegid Retail Mobile, make sure that the certificate really does support client operating systems for mobile devices.