

# Sage Business Exchange

11.40

## Technical Guidelines



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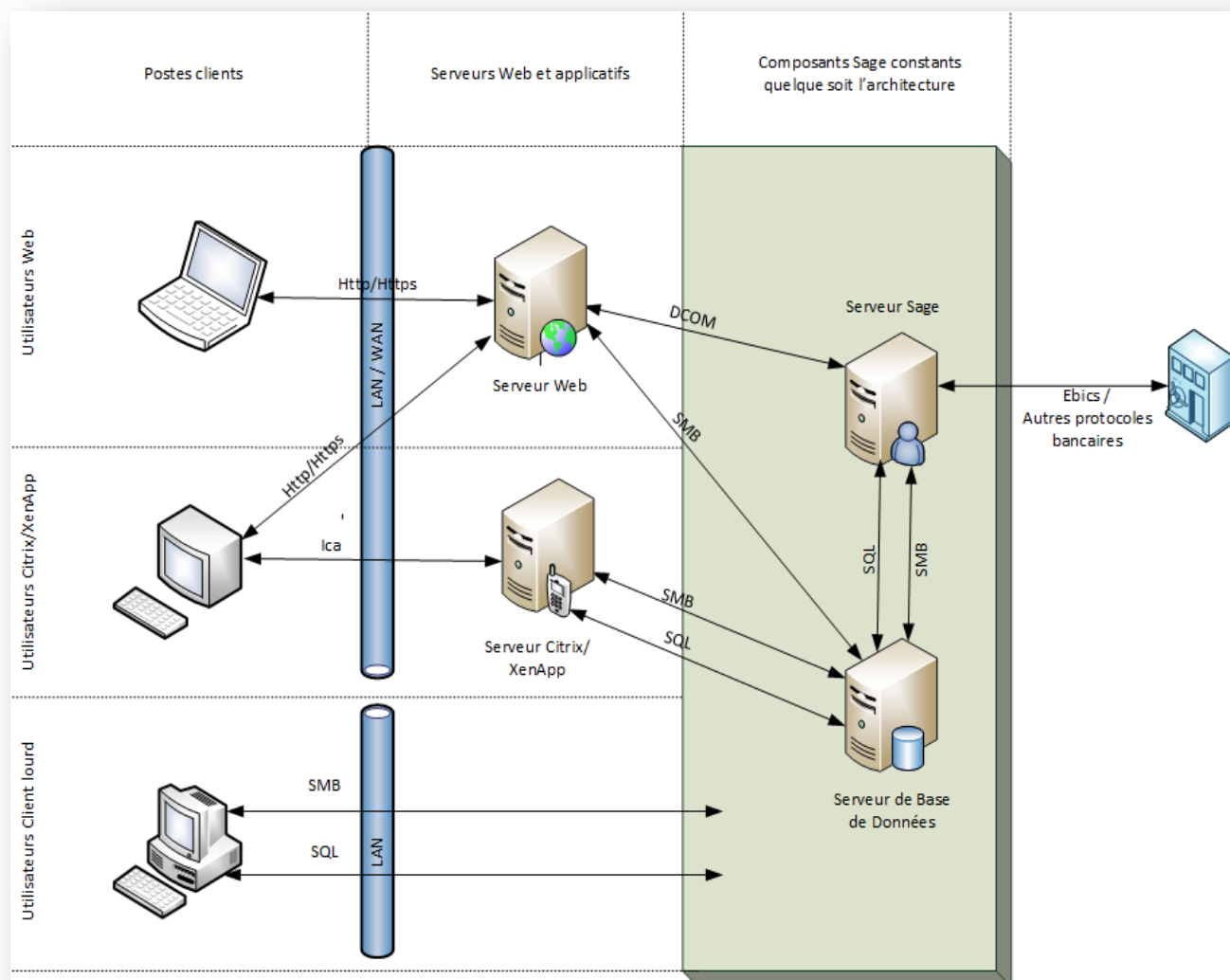
## Environments

### Compatibility Chart

		Sage SBE
	Current Product Version	11.40
Client Station	Operating System	Windows 7 SP1 Windows 8 Screen Resolution: 1024x768
	Recommendations for Technical Prerequisites	Dual Core/Processor 2 Ghz 4 GB RAM
	Other required products	.Net Framework 3.5 SP1
	Compatible office suites <i>with the last level of service pack. These tools are not required for the proper operation of our products.</i>	Office 2007 (1), 2010
Thin Clients and Virtualization	Terminal Services	Yes
	Citrix XenApp v5 or later	Yes
	ESX v5 or later	Yes
	Hyper-V (Windows Server 2008 R2 and 2012)	Yes
	Virtualization may cause effects on the applications processing times. Some functions linked to Bank Communication Management only work on an application server. Before any deployment, the architecture and the size of your configuration must be validated by SAGE consultants. Ebics TS tokens drivers must be available for bank files transfer by Electronic Signature.	
Application Server	Operating System	32/64-bit Windows Server 2012, or 2008 R2, or 2008 SP2
	Other products required for Application Server	.Net Framework 3.5 SP1
	Recommendations for Technical Prerequisites	Intel Xeon Bi-pro /Dual Core 4 GB RAM
Storage Server	Operating System	32/64-bit Windows Server 2012, or 2008 R2, or 2008 SP2
	Recommendations for Technical Prerequisites	Intel Xeon Bi-pro 4 GB RAM Disk SCSI 15 000 tpm RAID 1/5
	Compatible Microsoft Databases	SQL Server 2008 SP1 - 2008 R2 - 2012 (32-bit Driver)
	Compatible Oracle Databases	Oracle 11G R2 Driver 32 bits
Misc.	Browser	Internet Explorer 8/9   Firefox 3.x
	Internet Service Management	Microsoft IIS on supported Windows Server versions
	Java Runtime	JRE Sun virtual machine v1.6.0.20 and later
	Communication Device and Card Reader (ETEBAC 5)	RNIS Eicon S91 Card   RNIS via Capi 2.0 Eicon Diva Pro Card/Diva Server/Bintec X1200 Router/Cisco 800 Router. Omnikey Cardman 8630 / Cardman 3821 (USB)
	EBICS TS	E-Token (USB key) 3SKey, Keynectis, Certinomis
	Interoperability	Sage FCS v3.6 and Sage FRP Universe 3.22 SP1

## Architecture

### Schema



## Client Stations

<b>Hardware/CPU</b>	Intel Dual Core 2GHz
RAM	4 GB
Screen	SVGA Screen (1024*768)

## Server Stations

<b>Hardware/CPU</b>	Intel Dual Core 2GHz
RAM	4 GB

## Databases Servers

<b>Hardware/CPU</b>	Intel Xeon Bi-pro
RAM	4 GB
Disk	Disk SCSI 15 000 tpm RAID 1/5

## Web Client Stations (with Signature module)

<b>Hardware/CPU</b>	Intel Dual Core 2GHz
RAM	4 GB
Java Runtime	JRE Sun virtual machine v1.7.0.51
Browser	Internet Explorer 8/9 (32 bits) Firefox 24 and 25 (32 bits)
Screen	SVGA Screen (1024*768)

## Web Server Stations (with Signature module)

<b>Internet Service Management</b>	Microsoft IIS on supported Windows Server versions
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## Load Tests

The load tests were made using two physical servers, with the following configuration:

- Application Server: 3.07GHz (2 CPUs), 4GB RAM - 64-bit
- Database Server: 2.93GHz (2 CPUs), 10GB RAM - 64-bit

## Payment

Functions	Timing
Third Party Import (300.00 third parties)	11 min
Mandate Import (300.000 mandates)	35min33s
Conversion of an AFB160 File into an XML SBE Import File ( <i>300.000 transactions</i> )	19min38s
Import of an XML file into SBE (300.000 transactions)	40min03s
Check Phase of imported data (300.000 transactions)	1h28min35s
Remittance Generation (300.000 transactions)	11min19s
Availability for Generation (300.000 transactions)	26s
SDD Generation (300.000 transactions)	20min13s

## Signature and Sending

Functions (for 300.000 transactions)	Timing
Add	1min16s
Prepare	3min35s
View	12min40s
Initial	7min50s
Display Initial Details	7min12s
Signature	7min58s
Send through EBICS	57s

## Security

### Flows and Ports

Flows between stations	Default Ports
Http/Https	1280
DCOM	135
SMB	445
SQL	1433
ICA :	1494

Several Bank Protocols may be used in the application, for instance: *AS2 ASCII Bolero CopyFile EBICS eMail External Ftam FTP (port ::20) Http (port :1280) Kermit MqSeries MsMQ OFTP PeSIT D PeSIT E SFTP SOAP Swift RA USB X.Change Wires X400 XYZ Modem*

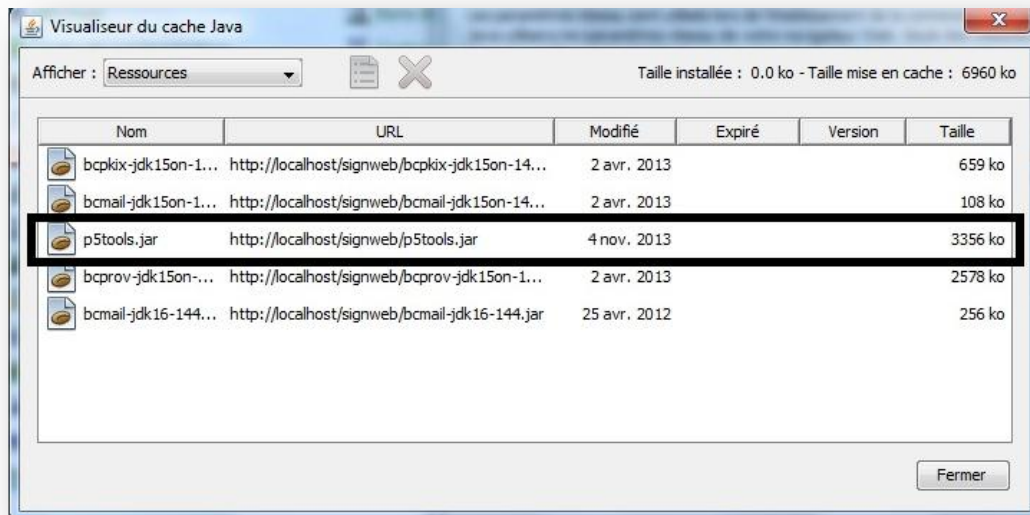
### Services

Application Services	Default Ports
P5CCOM - File Transfer Service	Encapsulated in SMB Protocol
P5CWEB - Transaction Service	1350
P5CPDS - Signature Service	1351
P5CNTF - Notification Service	Encapsulated in SMB Protocol
P5CA - Scheduler Service	Encapsulated in SMB Protocol
XDLO - User Service	5151
Additional Services	Default Ports
Http/Https	1280
DCOM	135
SMB	445



## Components (ActiveX or others, downloaded on client and server stations)

Applet Java script (version 1.9.0.5) using the following *P5Tools* component:



## Languages

### Thin Clients

- Java script (standard)
- HTLM .(4)
- Vb.net (Frame Work Dotnet 2.0)

### Rich Clients

- C++, C (Visual Studio 2008)
- CLINT (Clint3)
- C# (Frame Work.net V3.5 sp1)