



# samwin System Requirements

Based On Version 7



## Server Hardware Requirements

The following requirements have to be met by every samwin server system. Both hot-standby cluster nodes as well as cold-standby backup nodes have to meet the same requirements as the primary node.

samwin contact center								
Estimated Load			Required Hardware					
	Max. Simultaneous Calls		Max. Simultaneous Agents	Reporting Server recom.	CPU	RAM	Ethernet	HD
	G.711	G.729						
1.	≤ 20	≤ 10	≤ 20	-	4-Core Xeon 2,00 GHz	8 GB	Fast Ethernet	50 GB SAS 320 10.000 RPM
2.	≤ 200	≤ 60	≤ 50	✓	8-Core Xeon 2,10 GHz	16 GB	Gigabit Ethernet	90 GB SAS 320 15.000 RPM
3.	≤ 500	≤ 120	≤ 200	✓	8-Core Xeon 2,40 GHz	64 GB	Gigabit Ethernet	160 GB SAS 320 15.000 RPM
4.	≤ 3000 *	≤ 2000 *	≤ 500 *	✓	Dual 8-Core Xeon 2,40 GHz	128 GB	Dual Gigabit Ethernet (Paired)	320 GB SAS 320 15.000 RPM

samwin billing				
Estimated Load		Required Hardware		
Max. Calls/Hour		CPU	RAM	HD
100		2-Core Xeon 2,00 GHz	4GB	50 GB SAS 320 7.200 RPM
1.000		4-Core Xeon 2,00 GHz	8GB	80 GB SAS 320 10.000 RPM
10.000		8-Core Xeon 2,40 GHz	16GB	160 GB SAS 320 15.000 RPM

\* client local streaming enabled

Note:

- Requirements depending on following features: reporting, presence, calendaring, phone settings, directories, database setup, skill/user priority
- two voice servers of given specs are required in hot-standby deployment
- a data retention period of 3 years is assumed for HD requirements
- virtualization is fully supported as long as resources equaling given specs are reserved for the server instances
- for scenarios 3 and 4: a separate reporting server is required, please get in contact with telecommunication software to discuss a detailed infrastructure plan



## Server Software Requirements

The following software requirements have to be met by every samwin server system.

<b>Operating System *</b>	Windows Server 2008
	Windows Server 2008 R2 SP1
	Windows Server 2012
	Windows Server 2012 R2
	Windows Server 2016
<b>Web Server</b>	IIS Server Feature (See samwin reference for details)
<b>Web Browser</b>	Internet Explorer 9 or later
	Adobe Flash Player 9 or later
<b>.NET Framework</b>	3.5 and 4.5.2

Note:

- All modules support both x86 and x64 versions
- QoS mechanism should be implemented to ensure voice and signaling quality
- .NET Framework redistributable is part of the samwin setup, for PCs without internet connection, install framework prior to samwin setup
- All samwin services and trace folders need to be excluded for memory resident antivirus software

\* See a detailed list of supported operating systems later in this document



## Client Hardware Requirements

The following requirements have to be met by every samwin client PC.

<b>CPU</b>	Intel i3 Dual-Core 2,60 GHz
<b>RAM</b>	4 GB
<b>HD</b>	30 GB
<b>Display Resolution</b>	1200x800 (at 100% scaling level)

Note:

- this data expects a dedicated samwin system. Please adapt requirements accordingly if 3rd party software is hosted on the system in parallel to samwin



## Client Software Requirements

The following software requirements have to be met by every samwin client PC.

<b>Operating System *</b>	Windows Vista SP2
	Windows 7
	Windows 8
	Windows 8.1
	Windows 10
<b>Web Browser</b>	Internet Explorer 9 or later
	Adobe Flash Player 9 or later
<b>.NET Framework</b>	3.5 and 4.5.2
<b>Others</b>	Windows Media Player

Note:

- samwin softphone clients should implement QoS mechanisms to ensure voice quality. This does not affect hardphone operators
- .NET Framework redistributable is part of the samwin setup, for PCs without internet connection, install framework prior to samwin setup
- please manually upgrade the operating system to .NET Framework 4.5 to ensure full support of the Jaws accessibility toolkit if required
- All samwin services and trace folders need to be excluded for memory resident antivirus software

\* See a detailed list of supported operating systems later in this document



## Database Engine Requirements

The following requirements have to be met for the samwin backend database engine.

samwin contact center					
Estimated Load				Required Database Engine	Expected Database Size
Max. Simultaneous Calls		Max. Simultaneous Agents	Total Calls Per Year		
G.711	G.729				
≤ 20	≤ 10	≤ 20	600.000	Microsoft SQL Server Express Edition	5 GB
≤ 20	≤ 10	≤ 20	1.000.000	Microsoft SQL Server Standard Edition or higher	10 GB
≤ 200	≤ 60	≤ 50	1.000.000	Microsoft SQL Server Standard Edition or higher	10 GB
≤ 500	≤ 120	≤ 200	5.000.000	Microsoft SQL Server Standard Edition or higher	50 GB
≤ 3000	≤ 2000	≤ 500	10.000.000	Microsoft SQL Server Standard Edition or higher	100 GB

samwin billing				
Estimated Load		Total Calls Per Year	Required Database Engine	Expected Database Size
Extensions				
≤ 1000		100.000	Microsoft SQL Server Express Edition	1 GB
≤ 10000		1.000.000	Microsoft SQL Server Express Edition	3 GB
≤ 100000		10.000.000	Microsoft SQL Server Standard Edition or higher	25 GB

Supported Versions
Microsoft SQL Server 2008
Microsoft SQL Server 2008 R2
Microsoft SQL Server 2012
Microsoft SQL Server 2014
Microsoft SQL Server 2016

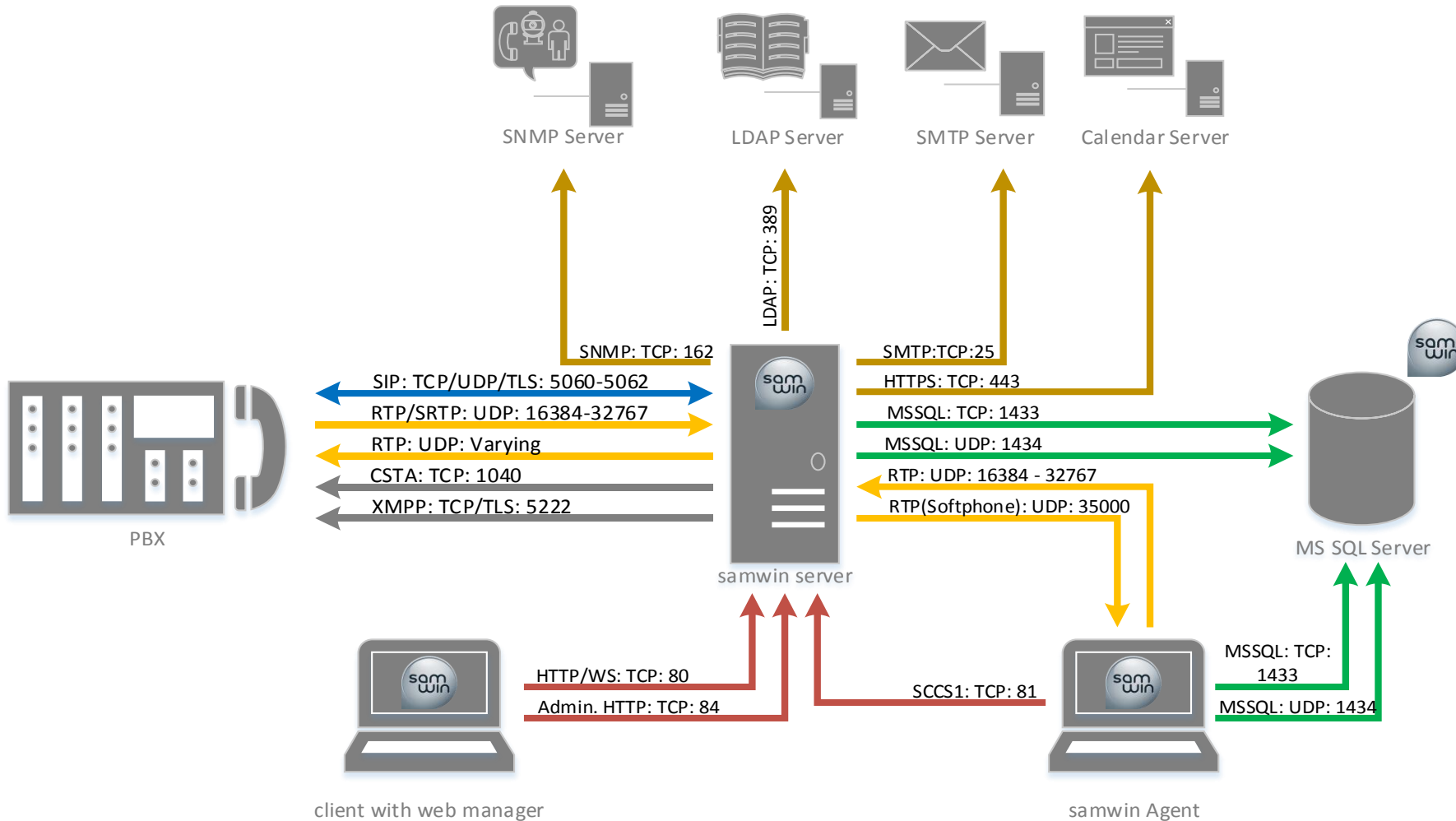
Note:

- a data retention period of 1 years is assumed
- only Microsoft SQL Server Express Edition is included free of charge with samwin
- only Microsoft SQL Server Express Edition is covered by a samwin service contract



## Port Settings

The following ports have to be opened in the host firewalls for common deployment scenarios.



**Note:**

- SIP and RTP traffic should be tagged with QoS
- These ports may vary based on the final configuration and modules



## PBX Licensing Requirements

The following license requirements have to be met by the telephony system to provide all call- and extension-related functionality towards samwin.

License Type	Volume
SIP Trunk License	1 per connected PBX (for samwin endpoint)
SIP Trunk Channel License	3x max. simultaneous calls, per connected PBX (for call legs)
CSTA or TAPI License	Opt., 1 per hardset controlled by call-center/attendant console
CSTA, SIP SIMPLE or TAPI License	Opt., 1 per extension monitored

Note:

- CSTA or TAPI License are not required by call-center/attendant consoles with a softphone (no physical extension attached)
- PBXs without support for anti tromboning/path replacement on SIP trunks require SIP licensing for the full duration of calls, i.e. until the call is fully released
- these licensing requirements do not apply to the billing module





## Connector Requirements

The following software and system requirements have to be met by 3rd party systems connected to samwin with the respective connector license.

Connector Type	Software and System Requirement
Presence to Microsoft OCS	Microsoft OCS 2007 with one standard CAL per 1000 presence subscriptions
Presence to Microsoft Lync	Microsoft Lync 2010 or later with one standard CAL for connector user
Presence to IBM Sametime	IBM Sametime Gateway 8.5 with dedicated community for synchronization with samwin
Calendar to Microsoft Exchange	Microsoft Exchange Web Services for Exchange 2007 SP1 or later with dedicated synchronization account
Calendar to IBM Domino	IBM Domino Server 8.5 with custom NSF file deployment on single server, read permission to user NSF files, web services enabled on server where NSF is deployed
Calendar to SQL database	Microsoft SQL Server calendar database



## Operating System Compatibility

		Server							Client						Database						
		Windows Server 2000	Windows Server 2003	Windows Server 2008	Windows Server 2008 R2	Windows Server 2012	Windows Server 2012 R2	Windows Server 2016	Windows XP	Windows Vista	Windows 7	Windows 8	Windows 8.1	Windows 10	SQL Server 2000	SQL Server 2005	SQL Server 2008	SQL Server 2008 R2	SQL Server 2012	SQL Server 2014	SQL Server 2016
<b>contact center</b>	samwin 4.5	x	x					x						x	x						
	samwin 5.0		x	x	x			x	x	x					x	x	x				
	samwin 5.1		x	x	x			x	x	x					x	x	x				
	samwin 5.1 R2		x	x	x	x	x		x	x	x	x	x			x	x	x	x		
	samwin 5.1 R3		x	x	x	x	x		x	x	x	x	x			x	x	x	x		
	samwin 6			x	x	x	x			x	x	x	x			x	x	x	x		x
	samwin 7.0 - 7.1			x	x	x	x			x	x	x	x			x	x	x	x		
	samwin 7.2 - 7.3			x	x	x	x	x		x	x	x	x	x			x	x	x	x	x
<b>billing</b>	samwin 4.5	x	x					x						x	x						
	samwin 5.1		x	x	x	x	x	x	x	x	x	x			x	x	x				
	samwin 6.0			x	x	x	x			x	x	x	x			x	x	x	x	x	x



## Hardware

	Plantronics		Jabra		Sennheiser	Embrava	Advantec
	Spokes	Hub	PC Suite	Direct	Head Setup	Blynclight	USB-4761
samwin 5.3 - 5.14			x				
samwin 6.0			x				
samwin 6.1 - 6.3	x		x				x
samwin 7.0	x		x			x	x
samwin 7.1	x		x			x	x
samwin 7.2		x		x	x	x	x
samwin 7.3		x		x	x	x	x

Note:

- Only the most common hardware of the listed vendors is tested
- For the listed vendors, the provided API is implemented, however the support and features of all types and devices may be varying



## PBX/samwin contact center suite Compatibility

	CUCM 4.1 - 7	CUCM 8	CUCM 9	CUCM 10 - 11	Audio Codes	Ferrari	Sonos	Avaya ACM 5	Avaya ACM 6	Avaya CS 1000 4	Avaya CS 1000 5	Avaya CS 1000 6 - 7	Avaya IP Office 8	Avaya IP Office 9	Innovaphone V6 - V8	Innovaphone V9	Innovaphone V10	Innovaphone V11	Simens HiPath 4000	Simens HiPath 8000	Microsoft Lync 2010	Microsoft Lync 2013	Skype for Business
samwin 5.1 R3	x	x			x	x	x	x		x	x	x			x				x	x	x*1		
samwin 6.0	x	x	x		x	x	x	x	x	x	x	x	x		x	x			x	x	x*1	x	
samwin 6.1	x	x	x		x	x	x	x	x	x	x	x	x		x	x			x	x	x*1	x	
samwin 6.2	x	x	x		x	x	x	x	x	x	x	x	x		x	x			x	x	x*1	x	
samwin 6.3	x*2	x	x	x	x	x	x	x	x	x*2	x	x	x	x	x*2	x*2	x*2	x*2	x	x	x*1	x	x*2
samwin 7	x*2	x	x	x	x	x	x	x	x	x*2	x*2	x	x	x	x*2	x*2	x*2	x*2	x	x	x*1	x	x

\*1 Limitations

\*2 on request/project based



## Service Livetime

<b>contact center</b>	SAMwin.CBC 3.5	Out of Service
	SAMwin.CBC 4.0	Out of Service
	SAMwin.CBC 4.1	Out of Service
	SAMwin.CBC 4.2	Out of Service
	SAMwin.CBC 4.5	Out of Service
	SAMwin.CBC for NDS	Out of Service
	SAMwin.CCO 5.0	Out of Service
	samwin 5.1	Out of Service
	samwin 5.1R2	Out of Service
	samwin 5.1R3	Out of Service
	samwin 6	Supported until end of 2016
	samwin 7.0 / 7.1	Supported until end of 2017
	samwin 7.2 / 7.3	Supported until end of 2018
<b>billing</b>	SAMwin.CAS 3.5	Out of Service
	SAMwin.CAS 4.0	Out of Service
	SAMwin.CAS 4.1	Out of Service
	SAMwin.CAS 4.2	Out of Service
	SAMwin.CAS 4.5	Out of Service
	samwin billing 5.1	Supported until end of 2016
	samwin billing 6.0	Supported until end of 2018