

3CX PBX Software vs Asterisk PBX

S/No	Specifications	3CX	Asterisk	Notes: Disadvantage on Asterisk
1	SIP	Open Standard 2.0	Open Standard 2.0 / Proprietary	Most Asterisk based PBX, developer will make proprietary to protect their rights, including peripherals
2	Source	Licensed based on concurrent calls (scalable from 4SC to 1024SC)	Open source	High risk on Editing source files. Asterisk PBX manufacturer will limit the scalability
3	Operating System	Windows (Win10Pro or WinServer)	Linux (Version available based on)	High possibility of Hacking
4	OS Patches	Windows get regular patches	No patches provided	High possibility of Hacking
5	Mode	Software based	Appliance based	No updates from Asterisk
6	Expertise	No special skills required to manage PBX	Required Linux knowledge, using CLI	Modification or changes not easily available
7	Upgrading is easier	Quick Back restore	downtime is higher in this case	Need to replace the hardware and more time consuming
8	High Availability (HA)	HA Edition available	No HA on Asterisk	
9	Software Upgrade & Updates, Patches Frequency	Every 3-4 months minor updates Every year major version upgrade	Depends on the developer / manufacturer release	high risk on technology update
10	Fault tolerance through easy backup of your PBX	Software based allow user to easily backup your whole PBX. In the event of a hardware failure, restore 3CX phone system on another machine in a matter of minutes using the inbuilt backup function. If you are running your PBX virtually, you can use the Hyper V or VMware Backup function to save a complete copy of your PBX to disk	Running on proprietary "black box" solution or Appliance PBX, Unable to resolve operation without another physical PBX replacement and likely require reconfiguration.	Turn-around time and longer downtime and restoration
11	Leverage on existing server hardware investment	Latest servers have ample processing power, software-based PBX can run on an existing server along with other applications, saving on hardware cost, energy consumption and administration costs. No need for a dedicated machine or a low performance appliance. Optionally, using Hyper V or VMware for virtualize your PBX and separate it from other apps, without requiring a dedicated PBX server.	Not possible on virtualisation	Higher IT investment and running cost, despite initial low hardware cost
12	Low resource usage	Most hardware can easily support PBX hardware requirements. The table shows the processor and memory usage of a busy Windows Server for handling 16 continuous calls: Low processor and memory usage means it can be run safely on an existing Windows server that is running other applications.	FIXED "Black box" concept, for upgrade required to replace NEW Box you may need to replace the box	Not scalable to user demand
13	Virtualize	Alternatively you can run the PBX as a virtual instance using Hyper- V or VMware. Hyper- V or VMware are great virtualization platforms with superior I/O performance which allow you to virtualize your PBX, even for larger installations.	runs on fixed "Black box"	Not available

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14	Easy to scale according to user demand	Because your PBX is running on a modern server, it's easy to scale compared to a traditional PBX or an appliance. Modern server hardware will allow you to add almost unlimited extensions, lines and functions because servers have ample processing power.	Appliances on the other hand are limited by the number of telephony ports and by their limited processing power and memory. Your appliance will run out of steam as soon as you start adding more lines, phones, and making use of more processor intensive functions such as conferencing. Before you know it you will need to discard your old appliance and buy a new 'bigger' appliance.	
15	On Site support and replacements	An important advantage is that you can work with a leading server hardware vendor of your choice. Beronet, HP, IBM/Lenovo and other server vendors offer the best server hardware at reasonable prices and with worldwide on site support.	This is not the case with PBX appliances from smaller vendors - can they offer worldwide service and replacements within certain time frames?	
16	Easy Integration with other applications	Another major advantage of a software based PBX is that it integrates easily with your other business applications and uses the same API's	It's no longer a black box sitting in the corner refusing to talk to the rest of your applications. And with this integration we can gain features and thus productivity	
17	Integrate with CRM system or Database	A Software PBX will easily talk to other systems such as the CRM, mail or database server and greatly improve productivity and customer service. Match a caller ID to a customer and know who is calling. Automatically log calls with customers for reporting and customer service purposes.	it is not possible	
18	Integrate with your User Directory	Software based PBX will allow you to connect with your User Directory of choice, be it LDAP or Active Directory. Ensure that user data is not duplicated and always up to date, saving valuable administration time and ensuring user data is correct and <u>synchronised</u> .	it is not possible	
19	Knowledge	Easy installation & management	Need special skillset to install Linux & Asterisk PBX	
20	Hardware Investment	Ability to leverage your existing Server Hardware	Need separate PBX hardware or "Black box"	
21	Disaster Recovery Option	Fault tolerance via easy backup and restore	Relied on hardware replacement & longer downtime	
22	Application Integration	Integration with other business application such as CRM, Active Directory and many others	Use open source or 3rd party integration, intensive support program necessary.	
23	Softphones	3CX Softphone for Win/Mac 3CX Softphone for IOS & Android	Need to use 3rd party Softphone Application	In-compatibility occur
24	Web Softphones	Web Meeting use 3CX Softphones readily available	No web softphone available	Use 3rd party softphone, license required.
25	WebRTC	100% WebRTC enabled CTI modes	No WebRTC integration on "Black	
26	Webmeeting	Complimentary - WebRTC	No webmeeting	