



Hardware/Software Requirements For Self-Hosting – Multi Server

Ebix recommends two or more servers for sites with more than 30 active users. The first step is deciding which type of configuration would best suit your agency. Once that is done you can build your servers based on the server hardware and software requirements.

1 Server Configurations

The following are the different types of configurations possible for deployment of EbixASP across multiple servers.

Two-Server Configuration (One Database and One Web Server)	In such a configuration, the web services and database services would reside on two independent servers. This would provide adequate response time for up to 100 users. SQL Server software must be installed on both servers.
Two-Server Configuration (Cluster with Failover)	In such a configuration, the web services and database services would both reside on the two clustered servers. In a clustered arrangement, there is only one server that will be active at any given time. Hence, the other server merely waits and monitors the first server for any failure and in such an eventuality would take the control over. This arrangement definitely ensures no downtime. However, there will be response time lags because of only one server providing all the services at any given point.
Multi-Server Configuration (Minimum 4 servers)	In such a configuration, a minimum of two web servers and two database servers would be created. The web servers would be load balanced using a hardware load balancing equipment. The database servers would be configured as clustered servers and hence would have failover redundancy. This option also allows for easy scaling up of the servers for catering increasing number of users as explained in the following section. All configurations specified above (other than Multi-Server) do not provide for easy scaling up and would involve downtime of the site whenever a scaling up is proposed.

2 Scalability

If the servers were arranged as per the "Multi-Server Configuration" above, then they could be scaled up in the following ways:

Web-Server Scalability	The web server can be scaled by setting up a load balancer such as Big IP or Coyote Equalizer between the Internet and the Web Servers. Clients may add as many web servers as required, but two large web servers should be able to handle 300 – 400 active users.
Database Scalability	Establishing a cluster in an Active/Passive mode can scale SQL Server database, and a minimum of 2 servers is required for this. This configuration allows for setting up a redundant database server that acts as a stand-by and takes over the duties of the primary server should it go down. This configuration is required for maintaining a guaranteed up time of the servers. This arrangement could be scaled up to a maximum of 4 servers in the same cluster.

3 Server Hardware Requirements

Web Server(s)	Dual Intel Xeon 2.8 GHz or higher with 2 GB RAM. Server to be used only for EbixASP web server. Exceptions given for use as File Server, Print Server, DHCP Server, and EbixONE server with written permission from Ebix.
Database Server(s)	Dual Intel Xeon 2.8 GHz or higher with 4 GB RAM. Server to be used only for EbixASP database server.
SMTP Server	An SMTP server is required for sending out emails that are generated in the application. Microsoft Exchange Server Recommended.
Fax Server	
Download	If downloading with a carrier, an external IP address or URL must be provided at Self-Hosted Site

In accordance with the possible server configurations mentioned above, following is the list of recommended hardware requirements. Note that these configurations are for 2 web servers and 2 clustered database servers with External Raid Array. These are the minimum requirements for full redundancy. Please consult with Ebix on final hardware choice as technologies change hardware available also change.

**** WEB SERVER****	
Qty	Examples of specific products that fulfill requirements
2	HP DL360 Dual Core or Quad Core Processor
2	(Additional Processor) for DL360
2	2BG for DL360
4	72GB 15K HD (hot swap)
2	3 Yr OnSite 24x7 Support

****DATABASE SERVER****	
Qty	Examples of specific products that fulfill requirements
2	HP DL380 Dual Core or Quad Core Processor
2	(Additional Processor) for DL380
	4GB for DL380
6	72GB 15K HD (hot swap)
2	3 Yr OnSite 24x7 Support

****EXTERNAL RAID ARRAY****	
Qty	Examples of specific products that fulfill requirements
1	HP StorageWorks Modular Smart Array 500
1	HA Kit
4	72GB 15,000 rpm Universal Hard Drive (hot swap) Size varies based on client data, attachments
1	3 Yr OnSite 24x7 Support
2	HP StorageWorks Cable Kit

4 Server Software Requirements

Microsoft Software and licenses required: Note that these configurations are for 2 web servers and 2 Clustered database servers. This is for 50 internal users. Since Microsoft licensing changes often it is best to verify with your vendor proper licensing for your environment.

Qty	Description
2	MS Windows Server 2003 R2 Server for Web Servers - 32 bit Version
2	MS Windows Server 2003 R2 Enterprise Server for Database Servers - 32 bit Version
2	SQL Server 2005 Enterprise Edition (You may only need one license of SQL server if you are clustering in an active-passive failover situation)
50	Windows 2003 Client Access Licenses (number large enough to handle users and growth)
50	SQL Server 2005 Client Access Licenses (number large enough to handle users and growth)

Third-party software/tools required:

Software	Vendor	Description/Function
Ahsiasoft Active File ASP *	www.ahsiasoft.com	ActiveFile ASP 2.5 Single Server License. For file upload and downloads.
Active PDF Toolkit Professional Version *	www.activepdf.com	ActivePDF toolkit Professional 4.x single Production Server License, Includes Annual Subscription
ASPEmail	www.aspemail.com	Immediate Emails –Single Server License-Registration Key may be installed on one server only - download the 32-bit Purchase version. Free or demo versions not supported.
ASPCrypt (no need to buy)	Available from Ebix, no need to purchase.	Password Encryption. Will be setup with ASP server setup.
MS Office 2000 or 2003	www.microsoft.com	Required for creating Excel Reports. MS Office 2007 will not work on EbixASP server for report creation.
Alt-N's RelayFax Pro	http://www.altn.com	(Optional) Required for faxing. Separate Fax Server hardware required.

*** As technology continues to advance, changes to these requirements will be made. Confirm with your IT staff or consultant before purchasing equipment or software based on the requirements listed above. Ebix works to test the latest version of the software but recommends you contact Ebix before making final server or software purchase.**

No other software should be loaded on the server without prior written approval from Ebix IT / Development staff.

5 PC Software Requirements

Internet Browser

Microsoft Internet Explorer 6.0 or higher

Adobe Acrobat Reader – 7.0 or higher

You may download from the following site <http://www.adobe.com>. Be sure to review their system requirements based on the version you want to download.

WinZip Utility

Each PC must be able to unzip .ZIP files. Some versions of Windows include zip utility as part of the operating system. Otherwise, utility such as WinZip (www.winzip.com), PK Zip, or other compatible product will need to be installed.

Operating System

Microsoft Windows 2000 with Service Pack 3, Microsoft XP with Service Pack 2, Microsoft Vista

Optional Software

Microsoft Office 2000, XP Professional, Office 2003, or Office 2007 – Required for Exporting to Excel

Scanning software of your choice - EbixASP allows attachments but client must provide JPG, PDF, or other file.

6 PC Hardware Requirements

Computer Processor

Intel Pentium 400 MHz or higher

Memory – Recommended

256 MB Minimum for Windows 2000 or XP (recommended)

1 GB for Windows Vista (recommended)

Hard Drive Space

120 Mb minimal (required for full installation of Microsoft Internet Explorer 6.0)

Monitors & Display

17" monitor with VGA 256 color display card

Screen Resolution: The site was designed for 1024 x 768 screen resolution. Using a lower resolution may not display the screens correctly on your monitor.

7 Additional Requirements

Email	You must have a working email address so that we can contact you when necessary regarding updates or other announcements.
VPN / Remote Access	VPN access to web and database servers for initial setup and ongoing maintenance. If VPN access is not available some other similarly and easily accessible secure remote access can be used. EbixSupport may occasionally need administrative access to the servers and it is the client's responsibility to provide IP address, logon, and password information. Ebix recommends setting up a separate Administrator account (software installation and configuration) and User account (EbixSupport troubleshooting) for Ebix access.
Download	If downloading with a carrier, an external IP address or URL must be provided at Self-Hosted Site.
Terminal Server	Agencies planning on using Citrix or Terminal Server for client connections to the EbixASP server are responsible for setting up the connectivity and for handling any issues between the Citrix/Terminal Server and EbixASP server. Programs that must be installed on the PC, such as the Ebix Desktop Print Utility and Document Merge, must be installed on the terminal server as Administrator before any terminal clients can use.
Client PCs	Hardware and software installation, setup, and ongoing support on the client PCs are the end-users responsibility.

8 PC Settings

Below are the minimum settings required for PCs accessing EbixASP. Please refer to the EbixASP Online help topic *Configure PCs for use with EbixASP* and *Internet Settings for EbixASP* for the most current recommendations.

Verify Internet Options Settings:

IE 6.0

On Internet Explorer click, on **Tools** and select **Internet Options**

On the General tab under Temporary Internet files, click on **Settings** and make sure that **"Every visit to the page"** is selected Amount of disk space, enter 128

Click **OK** on the Settings Window and click **OK** on the Internet Options window

IE 7.0

On Internet Explorer Desktop Icon, right click and select Properties.

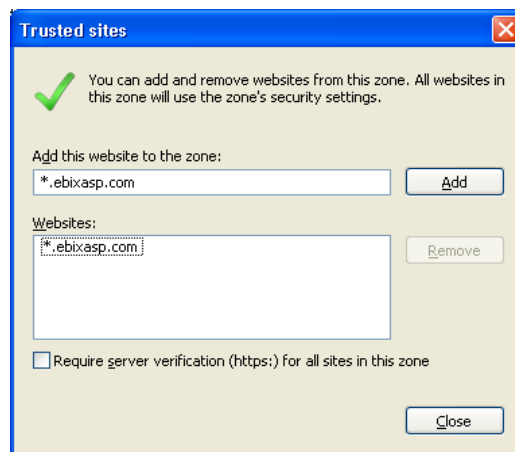
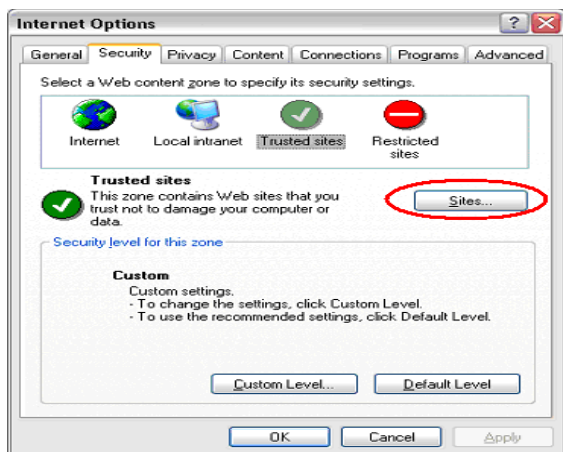
On the General tab under Browsing history, click on **Settings** and make sure that **"Every time I visit the web page"** is selected

Next to Disk Space to use, enter 128

Click **OK** on the Settings Window and click **OK** on the General Tab window

Add EbixASP as Trusted Site:

1. Open **Internet Options** if not already done above.
2. Click on the **Security Tab**
3. Click on the **Trusted Sites** icon
4. Click on the **Sites...** button. The Trusted Site window will appear.
5. Enter ***.ebixasp.com** and click **Add**. (Also **Add** your server IP or web URL of EbixASP web server.)



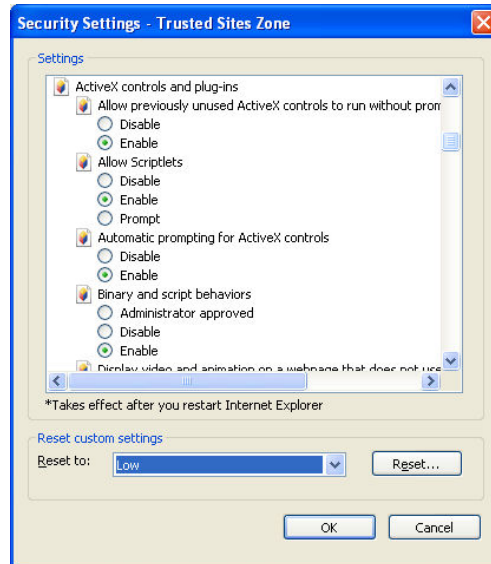
Note:

Make sure the Require sever verification check box is unmarked, otherwise you will be unable to add the address as a Trusted Site.

6. Click **Close** to return to the *Internet Options* > Security tab window.

PC Settings (Cont'd)

7. Click the **Custom** Level... button to open the *Security Settings - Trusted Sites Zone*.



8. Change *Reset to:* drop down to **Low** then click the **Reset...** button. Choose **Yes** if warning message to make changes appears.
9. Under Settings, scroll down to the section *ActiveX controls and plug-ins* and make sure all radio buttons are marked **Enabled**, changing the following from *Prompt*:
 - *Download unsigned ActiveX controls*
 - *Initialize and script ActiveX controls not marked as safe for scripting settings.*
10. Scroll down to the section *Miscellaneous* and make sure *Access data sources across domains* is **Enabled**.
11. Scroll down to the section *Scripting* and make sure all radio buttons are marked **Enabled**.
12. Click **OK** to close the *Security Settings - Trusted Sites Zone* window. Choose **Yes** if warning message to save appears.
13. Click **OK** to close the *Internet Options* window.

NOTE: The above requirements are subject to change without notice. Please check the EbixASP On-line help for the most current specifications.