Hardware Requirements for BS&A .NET Applications

Questions? From your BS&A program, go to **Help>Contact Customer Support** and select **Request Support Phone Call** or **Email Support**. Or, you may call us at (855) 272-7638 and ask for the appropriate support team. <u>Questions for our I.T. Team</u> may be submitted by phone (same number), or by emailing tech@bsasoftware.com.

The recommended requirements are subject to change.

Personal Computer Specifications

WORKSTATION

Recommended Minimum

3.2 GHz Intel® Core™ i5 (or faster) Processor

2.8 GHz Intel® Core™ i3 Processor

8 GB RAM 4 GB RAM

80 GB free disk space 40 GB free disk space

Windows 10 (Professional or above) Windows 7 (Professional 64-bit or 32-bit)

TABLET PC (Community Development Field Inspection .NET Application)

See Page 4 for tablet model recommendations

Recommended Minimum

Intel® Core™ i5 520 UM (or faster) Processor

2.8 GHz Intel® Core™ i3 Processor

8 GB RAM 4 GB RAM

80 GB free disk space*

40 GB free disk space*

Windows 10 (Professional or above) Windows 7 (Professional 64-bit or 32-bit)**

*Note: The amount of free disk space required is dependent upon the size of the database and the number of attachments required

Server Specifications (defined as a computer running a Windows Server Operating System)

DATABASE SERVER (fewer than 15 users)

Recommended Minimum

1 Xeon E5 series Quad-Core 2.4 GHz Processor (or faster) 2 GHz Multi-Core Xeon Processor

8 GB RAM 4 GB RAM

6x SATA 7.5K RPM 1TB (3x RAID 1) 250 GB free disk space

Separate RAID for Operating System Windows Server 2008 Standard (32-bit)

Windows Server 2016 (Essentials or above)



^{**}Note: BS&A applications are NOT compatible with Windows RT

DATABASE SERVER (15 to 30 users)

Recommended

1 Xeon 2.3 GHz E5 Six-Core Processor (or faster)

24 GB RAM

4x SATA 7.5K RPM 1TB (2x RAID 1)

2x 500GB Solid State Drive (SSD)

Separate RAID for Operating System

Windows Server 2016 (Essentials or above)

Minimum

Xeon 2 GHz Multi-Core Processor

16 GB RAM

500 GB free disk space

Windows Server 2008 Standard (64-bit)

DATABASE SERVER (30 to 50 users)

Recommended

(2) Xeon 2.5 GHz E5 Six-Core Processors (or faster)

48 GB RAM (DDR3 1333 or faster)

4x 10K RPM SAS 1TB Hard Disks (2x RAID 1)

2x 500GB Solid State Drive (SSD) Separate RAID for Operating System

Windows Server 2016 (Essentials or above)

Minimum

Xeon 2.8 GHz Quad-Core Processor

24 GB RAM

1 TB free disk space

Windows Server 2008 Standard (64-bit)

DATABASE SERVER (50 to 100 users)

Recommended

(2) Xeon 2.5 GHz E5 Eight-Core Processors (or faster)

64 GB RAM (DDR3 1600 or faster)

8x SATA 15K RPM 1TB (2x RAID 10)

2x 500GB Solid State Drive (SSD)

Separate RAID for Operating System

Windows Server 2016 (Essentials or above)

Minimum

(2) Xeon 2.8 GHz Quad-Core Processors

48 GB RAM

1 TB free disk space

Windows Server 2008 Standard (64-bit)

SERVER (over 100 users)

Please email our IT Team at tech@bsasoftware.com



Terminal Services/Citrix Environments

Recommended Application Server Specifications

Dual Quad-Core Xeon Processor
4096 MB RAM plus an additional 1024 MB RAM per user, per application
500 GB free disk space
Windows Server 2016 (Essentials or above)
Limit of 50 total users

Please see the help doc entitled "BS&A Software and Best Practices in Terminal Server/RDP Environments." http://bsasoftware.com/references/whitepapers helpdocs/tech/articles whitepapers/white terminallimits.pdf

Please see the help doc entitled "BS&A Software and Remote Desktop Services 2016" http://bsasoftware.com/references/whitepapers helpdocs/tech/articles whitepapers/remotedesktopservices2016.pdf

Virtual Servers

Please see the help doc entitled "BS&A Software and Best Practices in Virtual Environments." http://bsasoftware.com/references/whitepapers helpdocs/tech/articles whitepapers/White vmSupport.pdf

SQL Software Edition Recommendations

Please see the help doc entitled "SQL Server Edition Recommendations & Resellers." http://bsasoftware.com/references/whitepapers_helpdocs/tech/articles_whitepapers/sqlserver_recom_resell.pdf

I.T. Recommendation

BS&A has worked with IT Right for network services and implementation since 1999. If you are in need of IT services, please visit their site:

http://www.itright.com



Printer and Desktop Scanner Recommendations

Printers

BS&A Software does not officially maintain a master list of all the different printers that work with our applications. A general rule of thumb would be that any printers that are compatible with Windows are also compatible with BS&A.

Scanners

In order for a scanner to communicate directly with BS&A applications, a TWAIN-compatible driver needs to be used. This TWAIN driver allows us to connect directly to the scanner from within the applications. If your scanner is not TWAIN-compatible, the document will need to be scanned into an intermediary folder and then attached within the BS&A applications.

Our customers have had success with the following scanners:

- o Epson GT-1500: http://www.epson.com/cgi-bin/Store/jsp/Product.do?sku=B11B190011
- o FUJITSU FI-6110: http://www.fujitsu.com/us/products/computing/peripheral/scanners/fi/workgroup/fi6110/

Receipt Printer Recommendations

BS&A Software has tested and confirmed the compatibility of the following Epson receipt printer models:

Epson TM-H6000IV Model: M253A
 Epson TM-H6000III Model: M147G
 Epson TM-H6000III Model: M147H

BS&A has only tested and confirmed the above printers work with our .NET products. If you are considering purchasing a model other than the recommended one, we cannot guarantee its success with our applications. We will, however, make our best effort to assist you. Please visit the following link for more information:

http://www.bsasoftware.com/References/WhitePapers_HelpDocs/Tech/Help_Docs/rctprntrec.pdf

***Note: Ithaca Series 90/150 printers are compatible with Windows XP, but **will not work** on Windows Vista or newer.



^{**}Note: When considering which scanner or printer to purchase, it is necessary to consider its intended use. Pick a device that has the speed, capacity, paper size, and duty cycle that its job requires.

Tablet Recommendations

Below are a few of the most commonly utilized tablets for Field Inspection.NET. These have been verified to be compatible with FI and are widely used by our municipalities.

- 1. Motion Tablet
 - a. http://www.motioncomputing.com/products/tablet_pc_f5.asp
- 2. Panasonic Toughbook
 - a. http://business.panasonic.com/toughbook/laptop-computers.html
- 3. Lenovo ThinkPads
 - a. http://shop.lenovo.com/SEUILibrary/controller/e/web/LenovoPortal/en_US/catalog.workflow:category.details?current-catalog-id=12F0696583E04D86B9B79B0FEC01C087¤t-category-id=89ECFD45CA0654775864CDBAD2606AC7
- 4. Microsoft Surface Pro
 - a. http://www.microsoftstore.com/store/msusa/en_US/cat/All-Surface/categoryID.69403400

The Motion and Toughbook tablets are more rugged than the ThinkPads and Surface Pros. However, more and more users have begun to use the Surface tablets and have given them very high marks.

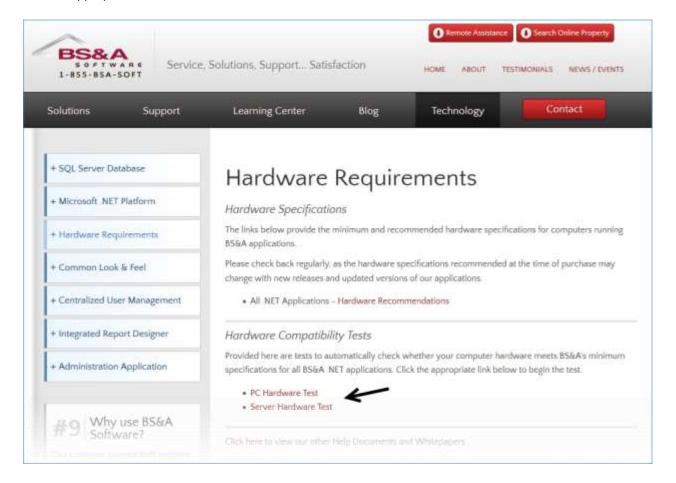
We recommend these tablets for Field Inspection .NET, however, any tablet that meets our published hardware specifications will perform nicely.



Workstation/Tablet and Server Hardware Tests

Servers running Microsoft SQL need to pass the BS&A Software .NET Hardware compatibility test.

- 1. Follow this link: http://www.bsasoftware.com/Technology/Hardware-Requirements
- 2. Click the appropriate link: PC Hardware Test or Server Hardware Test.



3. Follow the prompts. When the test is complete, a page appears from I.T. Right with the specifications detected.