Server Minimum Requirements

Servers for Alliant Systems products utilizing the SQL Server Database are sized based on the number of users the system will typically be hosting and the amount of data being stored. General guidelines have been listed below. We would be happy to discuss your specific situation with you, should you have any questions about which category you may fall into. **Keep in mind that these are minimum requirements and that it is best to purchase a server and workstations well above the minimum to allow for future growth and enhancements.**

1 – 3 User System
➢ Pentium Xeon Processor (Multiple processors recommended to increase performance)
➢ 16 GB RAM (**Higher recommended**)
➢ 250 GB of available SATA or SAS/SATA Hard Drive space (a fault-tolerant RAID 5 or disk mirroring setup is highly recommended) (**Additional space is recommended**)
➢ Network card
➢ UPS Power Supply
➢ Backup to external drive or media, or to a remote site
➢ Microsoft Windows Server 2012 or 2012 R2 Standard **OR**
➢ Microsoft Windows Server 2016 Standard
➢ Microsoft SQL Server 2012 Standard Edition **OR**
➢ Microsoft SQL Server 2014 Standard Edition **OR**
➢ Microsoft SQL Server 2016 Standard Edition
➢ Microsoft SQL Server 2016 Express (Only for use with systems requiring less than 5 users and less than 10 GB of data storage. Can only utilize 1 GB of RAM and 1 physical processor. Please contact Alliant Systems to discuss requirements.)

4 – 8 User System
➢ Pentium Xeon Processor (Multiple processors recommended to increase performance)
➢ 32 GB RAM (**Higher recommended**)
➢ 500 GB of available SATA or SAS/SATA Hard Drive space (a fault-tolerant RAID 5 or disk mirroring setup is highly recommended) (**Additional space is recommended**)
➢ Network card
➢ UPS Power Supply
➢ Backup to external drive or media, or to a remote site
➢ Microsoft Windows Server 2012 or 2012 R2 Standard **OR**
➢ Microsoft Windows Server 2016 Standard
➢ Microsoft SQL Server 2012 Standard Edition **OR**
➢ Microsoft SQL Server 2014 Standard Edition **OR**
➢ Microsoft SQL Server 2016 Standard Edition
➢ Stand-Alone SQL Server should be considered based on amount of data and other server activity.

9 User System and above
➢ Pentium Xeon Processor (Multiple processors recommended to increase performance)
➢ 64 GB RAM (**Higher recommended**)
➢ 1 TB of available SATA or SAS/SATA Hard Drive space (a fault-tolerant RAID 5 or disk mirroring setup is highly recommended) (**Additional space is recommended**)
➢ Network card
➢ UPS Power Supply
➢ Backup to external drive or media, or to a remote site
➢ Microsoft Windows Server 2012 or 2012 R2 Standard **OR**
➢ Microsoft Windows Server 2016 Standard

- ➢ Microsoft SQL Server 2012 Standard Edition **OR**
- ➢ Microsoft SQL Server 2014 Standard Edition **OR**
- ➢ Microsoft SQL Server 2016 Standard Edition
- ➢ Stand-Alone SQL Server should be considered based on amount of data and other server activity.

General Server Information

Memory (RAM) has a tremendous impact upon performance. When buying a server, as much RAM as possible should be acquired. Having said that, take the following into account when purchasing RAM:

- • Microsoft SQL Server 2012 Standard Edition supports up to 64 GB RAM
- • Microsoft SQL Server 2012 Enterprise Edition supports the maximum RAM allowed by the operating system
- • Microsoft SQL Server 2014 Standard Edition supports up to 128 GB RAM
- • Microsoft SQL Server 2014 Enterprise Edition supports the maximum RAM allowed by the operating system
- • Microsoft SQL Server 2016 Standard Edition supports up to 128 GB RAM
- • Microsoft SQL Server 2016 Enterprise Edition supports the maximum RAM allowed by the operating system
- • Microsoft Windows Server 2012 Standard supports up to 4 TB RAM
- • Microsoft Windows Server 2012 R2 Standard supports up to 4 TB RAM
- • Microsoft Windows Server 2016 Standard supports up to 24 TB RAM

Workstation Minimum Requirements

- ➢ Pentium IV Processor (**Higher recommended**)
- ➢ 4GB RAM **(More RAM recommended for users that are in Alliant all day or computers that will be scanning; however, keep in mind that the computer must have a 64 bit operating system in order to utilize 4+ GB RAM**)
- ➢ 40 GB Hard Drive
- ➢ Surge Suppressor
- ➢ Network Card
- ➢ Microsoft Windows 7 Professional **OR**
- ➢ Microsoft Windows 8 or 8.1 Professional **(When purchasing a Windows 8 or higher system, ensure that the installed version of Windows is not RT. Windows RT is not capable of running Alliant) OR**
- ➢ Microsoft Windows 10 Professional
- ➢ Monitor: **1024x768 minimum resolution**

Network Cabling Requirements

- ➢ Ethernet (Fast Ethernet recommended)
- ➢ Popular Name: 100/1000 BaseT
- ➢ Speed: 100 Mbps or 1000 Mbps if available
- ➢ Media: Category 5e Unshielded Twisted Pair **OR**
- ➢ Category 6 Unshielded Twisted Pair
- ➢ Maximum Segment Length: 100 Meters

Printer Requirements

- ➢ Must be compatible with the version of Windows in use on the workstation.
- ➢ All basic reporting in Alliant is printed to 8½ x 11 plain paper and therefore utilizes **laser** printers. These reports include Sales Volume, Route Settlement, Production Requirements, etc. Therefore, a **laser printer is required.**
- ➢ Form printing in older versions of Alliant's applications (for invoices, soil tickets, etc.) requires Epson FX driver emulation (such as DFX-5000 or FX-1080) for dot matrix printing.
- ➢ ID tape/barcode label printers – Several of our customers use thermal transfer printers such as Penn Emblem or Thermopatch, which sometimes require special programming to be used with the Alliant application.

Connectivity Requirements

Alliant Systems needs to be able to connect to your system for support purposes, such as sending program updates or reviewing support situations. We will need connection straight to the SQL Server, or a way to connect to the SQL Server, once connected to another server or workstation on your network. We can connect in one of the following ways:

➤ ScreenConnect (preferred) – This is provided and hosted by Alliant Systems at no cost. The client tools will be installed remotely with Alliant's assistance.
➤ Terminal Services/Remote Desktop
➤ VPN
➤ Other methods may be permitted. Check with Alliant if you would like other options.

Handheld Requirements

Alliant Mobile for Android will run on devices that meet the following requirements:
➤ Android 4.0 or greater
➤ Phones or tablets are acceptable
➤ Screen size should be no greater than 7 inches
➤ Devices must have Wi-Fi capability
➤ A workstation or server running Internet Information Services (IIS) is required for handheld connectivity
➤ If wanting to use real-time data/invoice transmittal:
    o A data plan is required.
    o A public web address is required. (If you have Alliant Online available to your customers, no further infrastructure enhancements are required.)
➤ Customers that wish to use Android devices must be on ARA 2.0.
➤ Check with Alliant to be sure the device you are purchasing meets the requirements.

Faxing Requirements

Faxing invoices and statements directly from Alliant Route Accounting 2.0 can be accomplished through a fax service which converts emails to faxes. The user would set up customers to be emailed from Alliant, such as faxnumber@faxservice.com, then the email would be faxed to the customer from a third party service. There is typically a monthly fee for these types of services which is usually dependent on the number of faxes being sent. One such fax service being used by Alliant customers is RapidFAX (www.rapidfax.com), but Alliant does not have a preference as to the fax service that is used.

Alliant Online Requirements

Alliant Online is hosted through Internet Information Services (IIS) and requires a connection to the SQL Server. Typically, a separate computer from the Alliant server is required for this software because of the access and speed that is needed. If your website is hosted on-site, Alliant Online can be placed on your web server. If your website is hosted off-site, then Alliant will install the software on a separate computer and the address will be given to the appropriate contact to link with the website.