Datapel Software and System Hardware Requirement Guidelines

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Contents

System Requirements

1. Overview

The following are recommended system requirements for Datapel Systems software. Datapel Systems software includes the following product suites:

- Inventory Controller XE (ICXE)
- Warehouse Management System Plus (WMS PLUS)
- Warehouse Management System Professional (WMS PRO)
- Warehouse Management System Enterprise (WMS ENT)
- Datapel Mobility Server (INV ASSIST)
- Datapel Breeze API (DPL API)

You must ensure that your system meets these listed minimum requirements. However, we strongly suggest you are using the **recommended requirements or greater** specifications to ensure performance of your system is best suited to your business operations. The requirements for memory and processors are indicative only, more RAM or disk space may be required when running Datapel Systems software in conjunction with additional 3rd Party software.

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                    Important
                      note:

 Datapel Systems software will run on the minimum requirements
  when no other applications (including virus scanners), other
   than the operating system, are running. If you use Datapel
 Systems software and other applications simultaneously, please
      ensure that your system meets at least the recommended
                        requirements.

  Please consult your Datapel System representative to ensure
      that your IT provisioning and implementation has been
       configured correctly to meet the number of users and
           applications required by your organisation.
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2. Server requirements

A server is not required if installation is standalone (that is, where the software is used on one machine only and installed on the local hard drive). Please consult the workstation requirements for standalone recommendations.

2.1 General Server Requirements

	Minimum	**Recommended**
Processor	Quad Core Server class processor	8 Core Server Class Processor
RAM	12GB or more* *See User Indexing Requirement	
Hard Disk	SAS or 10,000 RPM Base of 8GB + 40MB per user Allow an increase of 300MB per year per WMS workspace.	
Display	Minimum: 1024 x 768 or higher resolution monitor with 16 bit colour.	
Operating System	**0-10** Users: Windows Server 2008 R2 as the Domain Controller and Separate Windows Terminal Server or dedicated Windows Terminal Server 2008R2. **10-20** Users: Single Windows Server 2008R2 as SQL and Single Windows Terminal Server 2008R2.	**0-10** Users: Windows Server 2008 R2/ Windows Server 2012R2 as the Domain Controller and Separate Windows Terminal Server or dedicated Windows Terminal Server 2008R2/2012R2 and above only. **10-20** Users: Single Windows Server 2008/2012 R2 as SQL and Single Windows Terminal Server 2008/2012 R2 and above.
Other	Adobe Acrobat Reader 7.0 or later;* *Required for Viewing forms and emailing forms. Microsoft Outlook 2003, 2007, 2010 or 2013; Required for Sending emails. Microsoft Word 2003 or 2007,2010 or 2013; Required for Preparing letters. Microsoft Excel 2003, 2007,2010 or 2013; Required for Exporting reports. Office 365 Business Editions only.	
Network	1GB Ethernet / Switch	1GB Ethernet / Switch

A server is not required if using ICXE single user standalone (that is, where the software is used on one machine only and installed on the local hard drive).
Please consult the workstation requirements for standalone recommendations.

2.2 Windows Terminal or Application Server Requirements

	Minimum	**Recommended**
Processor	Quad Core Server class processor	8 Core Server class processor
RAM	5 Users 12GB 10 Users 16GB 15 Users 32GB 20 Users 64GB or more	5 Users 16GB 10 Users 32GB 15 Users 64GB 20 Users 128GB or more
Hard Disk	SAS 10k or 15k RPM x 2 Base of 20GB for Application + 1GB per user Allow an increase of 100MB per year per application	SSD x 2 Base of 16GB + 100MB per user RAID 0/1 configuration
RDP / Citrix Client	XPUnlimited, WinConnect, Microsoft Remote Desktop Services, Citrix Server	XPUnlimited, WinConnect, Microsoft Remote Desktop Services, Citrix Server
Network	1GB Ethernet	1GB Ethernet

2.3 Server Recommendations

These recommendations apply to all server operating systems. For comprehensive advice, Datapel Systems recommend consulting your IT provider or Manager.

- Install enough processing power, RAM and hard disk space in your server to cater for ALL applications and services that are being run. These requirements may vary depending on the number of users on the system, applications running and level of usage.
- Ensure that you have offline backup capability that is used on a regular basis - should be at least weekly, preferably daily
- Disabling of any elaborate or complex (3D) screen savers, as these can impact significantly on the performance of your software.
- Optimise your virus scanner.
- Hard Disk Performance is critical and Datapel Systems recommends SSD high speed devices.

2.4 Optimising Datapel Systems in a Terminal Server Environment

Following are some suggestions relating to use of the Terminal Server solution.

- If you install a Terminal Server solution and all processes and applications that previously ran on the workstation run via the Terminal Server Client and on the Terminal Server, it is extremely important that the server is configured correctly and hardware is sufficient for the number of users and applications.
- Consideration must be given to other software also loaded and running on the system
- Limit usage of DOS/16 bit applications running via the Terminal Server session
- Avoid the use of applications that are CPU or memory intense via a Terminal Server session.
- Avoid loading server-based applications on the Terminal Server, e.g. Microsoft Exchange Server, Microsoft SQL Server/SQL Express.
- Ensure that the appropriate operating system Service Packs and patches are applied.
- Do not use complex or 3D screen savers. Clients should avoid running complex screen savers, for example those that render 3D images. Running screen savers imposes an additional load on the server and network. This can reduce performance for other users who are connected to the server.

3. Workstation Requirements

A server is not required if installation is standalone (that is, where the software is used on one machine only and installed on the local hard drive). Please consult the workstation requirements for standalone recommendations.

3.1 Workstation (client Install)

	Minimum	Recommended
Processor	Quad Core	Quad core or higher
RAM	8GB	16GB or more
Hard Disk	10GB free space	20GB free space or more
Display	1024 x 768 or higher resolution monitor with 16 bit colour.	
Operating System	Windows 8.1, all Pro and above.	
RDP Client Version	Remote Desktop Connection (RDC) 8.1 client or later. Citrix Receiver 4.2.	
Other	Adobe Acrobat Reader 7.0 or later Internet access and internet email available from at least one workstation. Microsoft Word 2003 or 2007, 2010 or 2013; Required for Preparing letters. Microsoft Excel 2003, 2007,2010 or 2013; Required for Exporting reports. Office 365 or above	

4. Printers

A laser quality printer is recommended for printing reports, manifests and documents. A thermal label printer is recommended for printing various types of labels.
Datapel Systems operates with most standard printers that are supported by the Windows Operating System that have both a 32/64bit driver.

5. Network connectivity

When operating on a network, the following areas will impact performance:

- Cabling will impact significantly on the reliability and speed of your software. A minimum of UTP Category 5e cabling is required as it offers the best reliability and performance for your practice.
- For local area networks, we recommend investing in 1GBps switches and 1GBps network cards.
- We recommend that only necessary protocols are loaded on both the server and workstation.
- Terminal Server Client access via wireless is not recommended always use a fixed network connection where possible.
- If using Wi-Fi Handhelds (Portable Data Terminals) with Datapel Systems it is recommended that the Wi-Fi network is set on and able to support 802**.**11 **b**/**g** radio frequencies.
- Warehousing/manufacturing**:** Experience has shown that Enterprise Grade Access Point that has an omni-directional antenna mounted at 20 to 25 feet typically provides the best overall coverage.
- Small office/small retail store**:** An Commercial Grade Access Point with standard dipole may provide adequate coverage in these areas depending on the location of the radio device.
- Enterprise/large retail store: Experience has shown that Enterprise Grade Access Points with omni-directional antennas mounted just below the ceiling girders or just below the drop ceiling typically provide the best coverage.
- Prior to considering and installing a Wireless Network it is strongly advice that a through spectrum analysis be conducted by a certified Wireless Consultant for any areas to be covered.

6. Virus Scanning

It is extremely important that your organisation is protected from virus infection. However, it is also important that your virus scanning software does not adversely impact the performance of your network and software.

Common settings in virus scanners that impact performance

- If a virus scanner is installed on both your server and workstation, and both are set to scan both incoming and outgoing files, you may be scanning each file twice (once at the server end and once at the workstation). Speak to your network engineer about getting one of these disabled.

- If the option is available in your virus scanning software, disable heuristic scanning

- Exclude MYOB application and Datapel Systems executables from the scan list. This may improve performance.

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