

# PRONTO Xi

Specifications Guide



Software and Hardware  
Specifications  
Version 740.2

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Software and Hardware Specifications guide

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# 1 Introduction

This guide covers the required software and hardware configurations for optimal use of the Pronto Xi Enterprise Management System.

The specifications in this document describe the minimum requirements required for running Pronto Xi, except where stated as being recommended. Where there are recommended requirements, the minimum requirements might not produce optimal results.

## 1.1 Maintenance levels

Pronto Xi software and operating system components, and configurations, are listed as Active, Maintenance, or Retired.

- Active environments are currently tested by Pronto Software.
- Maintenance environments might also be tested, but testing might be limited, or support be based on compatibility statements from Pronto Software partners and third-party vendors.  
Older releases of environments can transition from Active to Maintenance over time as significant testing would have occurred in previous Pronto Xi releases.

## 1.2 Summary of changes from 740.1 to 740.2

- Pronto Xi Runtime updated to 7.4 v2.4
- Pronto Xi Server on Microsoft Windows updated to Microsoft Windows Server 2016 and Microsoft SQL Server 2016 SP1
- Added Pronto Xi Business Intelligence standalone Linux hardware specifications
- Pronto Xi Web Server version updated to 2.2
- Microsoft Internet Explorer version for Pronto Xi Enterprise Client updated to Microsoft Internet Explorer 11 (previous versions have reached their end of life)
- TrueForm Neo updated to 4 CPU Cores and 8GB RAM and added Microsoft Windows Server 2016

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# 2 Pronto Xi servers

See the following topics for server requirements:

- Virtual servers (p.3)
- Pronto Xi Server active operating systems (p.4)
- Pronto Xi Server UNIX and Linux hardware specifications (p.4)
- Pronto Xi Server on Windows hardware specifications (p.5)
- Pronto Xi Business Intelligence server active operating systems (p.5)
- ON-bar (p.6)
- Pronto Xi Runtime (p.7)
- Pronto Xi Web Server (p.7)
- ODBC driver (p.7)

## 2.1 Virtual servers

For all products provided by Pronto Software (Pronto Xi, **Business Intelligence** and other applications hereinafter referred to as Pronto Xi), it is your (the customer's) responsibility to ensure that the virtual servers comply with Pronto Software's published recommended specifications on operating system requirements.

For all support enquiries where Pronto Xi is running in a virtual environment, Pronto Software will make reasonable efforts to resolve the problem. We will assume the issue is common to both native and virtual operating environments. If we suspect that a problem is the result of the virtualisation technology, it can be necessary to recreate the issue in a native environment before providing continued support. This will guide subsequent ownership of the problem for further troubleshooting. Pronto Software does not provide support or assistance with the set up and configuration of virtual environments. You must contact your virtualisation provider for the implementation and support of your virtualisation infrastructure.

### 2.1.1 IBM Cognos virtualisation

IBM Cognos can run on selected virtual environments to host the **Business Intelligence** server operating systems .

Software product compatibility reports can be generated from the following link.  
<http://pic.dhe.ibm.com/infocenter/prodguid/v1r0/clarity/vesForProduct.html>.

Select **Business Intelligence** and then your BI version, for example, 10.2.1.

## 2.2 Pronto Xi Server active operating systems

The following configurations are for new installations.


Hardware	Operating system	Database
x86 64 bit	Red Hat Enterprise Linux ES/AS 6	IBM Informix 12.10 FC4XHXN *  IBM Informix 12.10 FC5XT *
x86 64 bit	Red Hat Enterprise Linux ES/AS 7  For more information, see Pronto Xi Business Intelligence server active operating systems (p.5).	IBM Informix 12.10 FC5XT *
x86 64 bit	Red Hat Enterprise Linux ES/AS 6	Oracle 11g
x86 64 bit	Microsoft Windows Server 2016	Microsoft SQL Server 2016 SP1


\*When performing a database migration from an earlier version of IBM Informix, it is recommended that you migrate your database from 2k to 4k+. For more information, see the *Informix Installation guide*.


## 2.3 Pronto Xi Server UNIX and Linux hardware specifications

The following is the minimum recommended specifications for new installations.

Informix default onconfig	Customer profile					Server requirements		
	Users	Transactions per day	Company size	Table size	Number of companies	Total server memory	Database memory	Processor
Small	Up to 49	0-5k	0-50 GB	0-2 GB	0-6	36 GB	16 GB	4 Cores
Medium	50-199	5k-10k	50-100 GB	2-5 GB	7-20	48-64 GB	32 GB	8 Cores
Large	200+	10k+	100+ GB	5 GB+	21+	96-128 GB	64 GB	For sites larger than 200 users, contact the Technical Support team before finalising configurations.

 The ratio of memory allocated between the database and the operating system must be at least 50%, with a preferred ratio of 100%. For example, 16GB Informix and 8GB for the operating system (50%) is the minimum ratio, where 16GB Informix and 16GB Operating System (100%) is the preferred ratio.

 To maintain current performance when upgrading from C-ISAM to Informix, CPU capacity must be increased by at least 3 to 4 times than what you are currently operating on.

 The minimum recommended specifications in the table above are suitable for running Pronto Xi Enterprise Client and the Pronto Xi Web Server. For any other applications or tools, ensure that you combine the additional minimum specifications (as indicated where appropriate in this guide) on top of this.

## 2.4 Pronto Xi Server on Windows hardware specifications

Users	Transactions per day	Company size	Table size	Number of companies	Memory	Processor
Up to 49	0-5k	0-50 GB	0-2 GB	0-6	64GB	4 Core
50-199	5k-10k	50-100 GB	2-5 GB	7-20	64GB	8 Core
200+	10k+	100+ GB	5 GB+	21+	For sites larger than 200 users, contact the Technical Support team before finalising configurations.	

## 2.5 Pronto Xi Business Intelligence server active operating systems

### 2.5.1 Microsoft Windows

Operating system	Database	IBM Cognos
Microsoft Windows Server 2012 R2	Microsoft SQL Server 2014 Standard Edition	IBM Cognos Business Intelligence 10.2.2 FP7

The following is the minimum recommended hardware requirements for new installations of Pronto Xi Business Intelligence:

Processor	Memory	Hard disk
Quad Core 2.0GHz	16GB (minimum recommended)	Recommended disk layout: 4 disk RAID 10 Recommended <i>usable</i> capacity: 500GB

## 2.5.2 Linux

The Linux configuration is in addition to, and does not replace, the existing configuration where **Business Intelligence** is installed on a Microsoft Windows Server. This configuration is suitable for smaller customers and allows **Business Intelligence** to be deployed on the same Linux server that Pronto Xi is installed on, or on a separate Linux server. In both cases a separate instance of IBM Informix is used.



Pronto Xi Analytics Cubes requires Microsoft SQL Server. They are not compatible where the IBM Cognos server is running on Linux and using IBM Informix as the **Business Intelligence** Content Store.

Hardware	Operating system	Database	Pronto Xi	IBM Cognos
x86 64-bit	Red Hat Enterprise Linux ES/AS 6	IBM Informix 12.10 FC5	720.x 730	10.2.1 FP4
x86 64-bit	Red Hat Enterprise Linux ES/AS 6 and 7	IBM Informix 12.10 FC5	740.x +	10.2.2 FP7

Configuration	Informix default onconfig	Total server memory	Processor
Business Intelligence only	Small	32 GB	6 Cores Preferably 8 cores
Pronto Xi and Business Intelligence	Small	64 GB	6 Cores Preferably 8 cores

For more information about small, medium, and large configurations, see Pronto Xi Server UNIX and Linux hardware specifications (p.4).

For medium and large configurations, contact your Account Manager.

## 2.6 ON-bar

ON-bar is a backup tool that, in conjunction with Informix version 12.10FC3 and above, enables a more granular backup than what is possible with ON-tape.

Previously the entire IBM Informix instance needed to be backed-up. Now with the selection of individual database spaces, it is possible to only backup selected companies.

This conserves disk space and shortens the backup duration.

## 2.7 Pronto Xi Runtime

The Pronto Xi runtime is a component of the Pronto Xi Foundation. There is generally only one supported Pronto Xi Runtime version for a particular operating system and the version number can be different for each operating system. The Runtime will generally run on a newer version of the operating system, but might not run on an older version.

There is no Pronto Xi Runtime support for superseded hardware, operating system, or database versions.

- Version 7.4v 2.4

## 2.8 Pronto Xi Web Server

The **Pronto Xi Web Server** provides a single-server web services architecture for running the Pronto Xi web applications, including:

- Pronto Xi web interface
- Employee Portal
- Service Scheduler
- Mobile Service

Pronto Xi Web Server includes the following components:

- Pronto Connect
- Pronto Xi Web Middleware

The two processes that run the Pronto Xi Web Server are Netty and Oracle Java VM.

- Version 2.2

### 2.8.1 Pronto Connect component

**Pronto Connect** is a web services connectivity component introduced in Pronto Xi version 710.1 and is now incorporated in the new Pronto Xi Web Server. **Pronto Connect** replaced the PIE server but provides backward compatibility support for applications built for PIE.

For information on migrating to **Pronto Connect**, see the *Pronto Xi Web Server Deployment Guide*.

### 2.8.2 Supported operating systems

- Red Hat Enterprise Linux ES/AS 6 or 7
- Microsoft Server 2016 - Standard Edition



AIX is not supported.

## 2.9 ODBC driver


The Pronto Software ODBC driver should not be used for new installations. It is provided for the legacy support of existing implementations only. The native RDBMS ODBC driver should be used for new installations.

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# 3 Pronto Xi Enterprise Client

See the following topics for Pronto Xi Enterprise Client hardware requirements:

- Screen resolution (p.9)
- Microsoft Windows Remote Desktop Services (p.9)

 If you are running as a POS redundancy server, the below specifications do not apply. In this case contact your local Pronto Software support office.

The following table defines the minimum hardware and operating system configurations for the Pronto Xi Enterprise Client and Thick client.

Using IBM Cognos Business Intelligence	Not using IBM Cognos Business Intelligence
<ul style="list-style-type: none"> <li>• 2.0GHz dual core PC running Microsoft Windows 7 SP1</li> <li>• 1280 x 1024 display with 24-bit colours</li> <li>• 4GB memory</li> </ul>	<ul style="list-style-type: none"> <li>• 1GHz PC running Microsoft Windows 7 (this is the same minimum as required by Microsoft)</li> <li>• 1152x 864 display with 32k (16-bit) colours</li> <li>• 200MB hard disk space for the Thick client or 100MB hard disk space for Enterprise client.</li> </ul>
<ul style="list-style-type: none"> <li>• Dumb (Wyse/VT) terminals are not supported</li> </ul>	

For information on minimum software requirements, see Pronto Xi Enterprise Client (p.11).

## 3.1 Screen resolution

Recommended	Supported
1280 x 1024 or above	1152 x 864
	1024 x 768*

\* This resolution is not supported for all monitors. Some Pronto Xi screens will not fit within the workspace without the need to scroll or reposition. To optimise a 1024 x 768 resolution, try the following adjustments:

- Reduce the font size to 12.
- Minimise the toolbar ribbon.
- Auto-hide the Pronto Xi menu pane.

## 3.2 Microsoft Windows Remote Desktop Services

- 1152 x 864 display with 16-bit colours

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# 4 Pronto Xi software

See the following topics for Pronto Xi software requirements:

- Pronto Xi Enterprise Client-supported operating systems (p.11)
- Pronto Xi Enterprise Client (p.11)
- Pronto Xi web interface browser (p.12)
- Supported browsers for XML reports (p.12)
- Export target formats (p.12)
- Web applications (p.12)
- Pronto Xi Business Intelligence (p.13)
- Pronto Xi Business Intelligence mobile operating systems (p.13)
- Java Runtime Environment (p.13)



In the following tables, a status of *Active* indicates that version of the software is supported. A *Compatible* status indicates that version should work but is not supported.



Pronto Xi is supported in a native Windows application (Pronto Xi Enterprise Client) and as a web interface (Pronto Xi web interface). Pronto Xi web interface is recommended except where the following functionality is required:

- POS
- RF
- Screen Customiser
- Visual Debugger
- Service Scheduler
- Manufacturing Scheduler
- Calculator

## 4.1 Pronto Xi Enterprise Client-supported operating systems

Pronto Software only supports Microsoft-supported operating systems for the Pronto Xi Enterprise Client.

The supported versions are:

- Microsoft Windows 10 (64 bit)
- Microsoft Windows 8.1 (x86 32/x86 64 bit)
- Microsoft Windows 7 SP1 (32/64 bit)

## 4.2 Pronto Xi Enterprise Client

- Version 7.4v2.4 (minimum)
- Microsoft Internet Explorer 11



Web components – Additional, limited graphical functions are provided in particular modules by Microsoft Office 2003 web components. Microsoft Office web components are shipped with Microsoft Office 2003. If running later versions of Microsoft Office, web components must be installed separately from the following website:

<http://www.microsoft.com/downloads/en/details.aspx?FamilyId=7287252C-402E-4F72-97A5-E0FD290D4B76&displaylang=en>.

## 4.3 Pronto Xi web interface browser

Pronto Software supports the following web browser for use with the Pronto Xi web interface:

- Google Chrome for desktop computers

## 4.4 Supported browsers for XML reports

The following browsers are currently supported for XML reports:

- Microsoft Internet Explorer 11 (compatibility mode)

## 4.5 Export target formats

A PDF Reader must be installed.

Export target formats	IBM Cognos BI server
Microsoft Excel 2016	Active
Microsoft Excel 2013	Active


## 4.6 Web applications

Pronto Software provides the following web applications:

- Employee Portal
- Mobile Service

The following is the supported mobile operating systems and browsers for the Pronto Xi web applications:

System component	Details
Mobile OS	Android iOS Windows Phone 8.1
Browser	Google Chrome * Microsoft Internet Explorer Mozilla Firefox Safari

 \* Web applications are optimised for Google Chrome.

## 4.7 Pronto Xi Business Intelligence

For the latest web browser support information for Cognos, see <https://www.ibm.com/software/reports/compatibility/clarity-reports/report/html/prereqsForProduct?deliverableId=1391013543612&sw-17>

## 4.8 Pronto Xi Business Intelligence mobile operating systems

Pronto Xi **Business Intelligence** supports iOS and Android mobile operating systems.

For specific information about supported platforms for operating systems, including mobile operating systems, and software limitations for IBM Cognos, see:

- For version 10.2.1  
<http://www-01.ibm.com/support/docview.wss?uid=swg27037784>
- For version 10.2.2  
<http://www-01.ibm.com/support/docview.wss?uid=swg27042164>

## 4.9 Java Runtime Environment

Java 1.8 is installed by default during a Pronto Xi installation and is the minimum version required for the Pronto Xi applications. This will be used where required for the majority of the Pronto Xi solutions.

The following table describes the Java versions that are used.

Application	Java version
Pronto Xi Web Server	1.8
IBM Cognos on Windows (Java version shipped and installed by the IBM Cognos installer)	1.7
IBM Cognos on Linux (Java version installed by Pronto Software. IBM does not ship a Java version for Linux)	1.8
DI Object to Business Intelligence SDK app	1.8
Avalara	1.8

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# 5 Other Pronto Xi applications

See the following topics for other application requirements:

- Pronto Xi TrueForm Neo (p.15)
- Pronto Avenue / eCommerce APIs web server requirements (p.15)
- Pronto Service Connect web server requirements (p.16)
- Pronto Xi sales tax and managed returns (Avalara\*) (p.17)
- Application tools (p.17)
- Third party components (p.18)

## 5.1 Pronto Xi TrueForm Neo

The following minimum specifications apply to TrueForm Neo when running on a standalone server.

If TrueForm Neo is installed on a shared server (for example, the Windows Business Intelligence server), you must ensure the server is equipped with at least the combined minimum processor and memory requirements.

Server	Hardware	CPU Core Requirement	Memory	Total Server Disk Capacity
Microsoft Windows Server 2008 R2	64-bit	4	8 GB	80 GB
Microsoft Windows Server 2012 R2	64-bit	4	8 GB	80 GB
Microsoft Windows Server 2016	64-bit	4	8 GB	80 GB

The following must also be installed:

- .NET Framework 4.0
- LPD Server (print service for Unix)
- IIS
- VS2010 C++ runtime

## 5.2 Pronto Avenue / eCommerce APIs web server requirements



It is not possible to run Pronto Avenue / eCommerce APIs with other applications on the same web server.

### Supported operating systems

- Red Hat Enterprise Linux 7
- CentOS Linux 7
- Ubuntu 16.04 LTS

### Supported databases

- Enterprise MySQL
- Community MySQL

## Hardware requirements

- CPU: minimum dual core 2.0GHz
- Memory size: minimum 4GB, based on number of expected web users
- Hard Disk Space: 150GB available

## Data transmission

Firewall Ports pass-through:

- ERP to website: 80, 443 (SSL)
- Website to ERP: 7083, 8443 (SSL)

## ERP interface requirements

- Pronto Xi v670.7 to v700: Avenue Connector 7
- Pronto Xi v710 upwards: Pronto Xi Web Server

## Installation requirements

- Direct SSH 'root' access via IP address is required for our automated licensing and deploy system to configure web server. We can provide a source IP address for security.
- We only require the web server with the pre-requisite operating system installed. All other components including DB will be set up by us.
- The web server can be a virtual or a physical standalone machine.

## 5.3 Pronto Service Connect web server requirements



It is not possible to run Service Connect with other applications on the same web server.

## Supported operating systems

- Red Hat Enterprise Linux 7
- CentOS Linux 7
- Ubuntu 16.04 LTS

## Supported databases

- Enterprise MySQL
- Community MySQL

## Hardware requirements

- CPU: minimum dual core 2.0GHz
- Memory size: minimum 4GB, based on number of expected web users
- Hard Disk Space: 150GB available

## Data transmission

Firewall Ports pass-through:

- ERP to website: 80, 443 (SSL)
- Website to ERP: 7083, 8443 (SSL)

## ERP interface requirements

- Pronto Xi v670.7 to v700: Avenue Connector 7
- Pronto Xi v710 upwards: Pronto Xi Web Server

## Installation requirements

- Direct SSH ‘root’ access via IP address is required for our automated licensing and deploy system to configure web server. We can provide a source IP address for security.
- We only require the web server with the pre-requisite operating system installed. All other components including DB will be set up by us.
- The web server can be a virtual or a physical standalone machine.

## 5.4 Pronto Xi sales tax and managed returns (Avalara\*)

Required components: CURL and Java

### CURL

- AIX - Version 7.9.3 (powerpc-ibm-aix4.3.3.0) libcurl 7.9.3
- Linux - Version 7.15.5-2.1el5\_3.5

### Java

Operating System	Java Version
Microsoft Windows 8.1	JRE 1.8.0 and higher
Microsoft Windows 7 SP1	
Microsoft Windows Server 2008 R2	
Linux Redhat ES 6	JRE 1.8.0 and higher
AIX 6.0	IBM JRE 1.8.0 and higher

\* Avalara is a third party service used to calculate tax rates specifically for US customers.

For more information, see the Avalara specifications on the Avalara website ([www.avalara.com](http://www.avalara.com)).

## 5.5 Application tools

All the application tools listed below have the same minimum configuration as in Pronto Xi Enterprise Client (p.9). Specific requirements for each tool are as follows.

### Message Bus

This is configured on a site-by-site basis.

### Screen Customiser

Screen Customiser version 7.1.11.18 is supported.

## Service Scheduler

Service Scheduler version 8.0.0.6 is supported.

## 4GL Debugger and IDE

The 4GL debugger is supported on Pronto Xi runtime version 7.0.0.3 and higher.

## XML Print Service

The XML Print Service is supported on Microsoft Windows version 2003 R2 or higher.

## Manufacturing Scheduler

Manufacturing Scheduler version 6.0.0.3 is supported.

## 5.6 Third party components

### SAMBA

Version 3.0 and higher is required.

# 6 Web application security considerations

Components of the Pronto Xi product suite are designed to be accessed from the Internet to enable maximum functionality and benefit for the customer. Where the customer has requested that a component of Pronto Xi be made available so that it is accessible from the Internet, then it is important careful consideration is given to the required security.

Pronto Software has taken steps to minimise the risks associated with making these components available on the Internet. These steps include penetration testing and architectural reviews by independent third parties.

While these actions provide knowledge and help identify any potential issues, it is important to realise they are point in time actions and as such they demonstrate the security profile of the software at a specific point in time. As software is further developed, they might no longer be valid.

At the current time the list of components that can be exposed to the internet include:

- Pronto Xi web interface
- Employee Portal
- Mobile Service
- Mobile Sales/CRM
- Pronto APIs via Pronto Connect
- Avenue (it is recommended that this is hosted through Pronto Hosted Services rather than in a customer's own network, due to the network traffic profile)
- Pronto Xi Business Intelligence
- Payroll Kiosk

It is recommended that they are all exposed through a reverse proxy that is set up within a customer's DMZ portion of their network with access controlled through a properly configured firewall.

In general, Pronto Software recommends a layered approach to IT security. The idea here is to have different security protocols and structures in place and layered on top of one another to create a complex and difficult to penetrate environment to protect a customer's physical IT environment and the data it contains. The following are examples of some actions that can be taken to build up the layers, this is not an exhaustive or comprehensive list:

- When making Pronto components available through the reverse proxy to the Internet, there should also be Apache authentication in front of the login pages
- If you're only going to be accessing Pronto components from a region, you can use IP blocking to ensure only users within the region can even see the components
- For certain services, using a Web Application Firewall (WAF) such as Modsecurity might be beneficial
- Implement a secure and robust password policy for all users
- Correctly configure and maintain the permissions and user details within the Pronto Xi runtime administration system
- Disable remote root logins to servers
- Disable RF scanner and possibly POS user logins from the Internet
- Engage a third party security monitoring service to constantly monitor the customer's infrastructure and resources

All communications between the web browser and the customer's network can be encrypted using an SSL certificate. Many of the Pronto components come with a self-signed SSL certificate, this is really only included for usage during initial set up and testing. For a production environment, it is recommended that an SSL certificate be purchased from a recognised and reputable Certificate Authority and that a self-signed certificate not be used.

Finally, security is a complex and continually evolving area of research. While the above are some recommendations they are by no means exhaustive or fully prescriptive. It is best to ensure a customer discusses their concerns and questions with their IT professionals. If they have concerns, they can also engage a third party security consultant to obtain professional guidance specific to their network environment.

## Google Charts and customer data

The Pronto Xi components that use Google Charts create an HTML file containing a data structure holding the data to be visualised. The same file contains instructions to download and load the Google Visualisation scripts from Google's servers. The HTML file Pronto Xi creates is stored locally on the user's computer and opened in a web browser window. Pronto Xi uses the BarChart, Timelines and Organisation Chart visualisation formats. Basically, the data is held locally and the service is called down to the user's computer. The Google Charts data policy states "All code and data are processed and rendered in the browser. No data is sent to any server." No customer Pronto Xi data gets sent outside their network and nothing is sent to Google's servers.


# 7 Point of Sale hardware


The following describes the hardware specifications required to run the Pronto Xi Point of Sale (POS) module.

- Point of Sale PCs (p.21)
- Monitors (p.22)
- PCs running POS with AT Mode (p.22)
- Docket printers (p.22)
- Cash drawers (p.23)
- Scanners (p.23)
- Touch screens (p.23)
- Pole displays (p.23)
- Bar code scales (p.23)
- Programmable keyboards (p.23)
- Serial ports (p.24)
- Integrated EFTPOS (p.24)

## 7.1 Point of Sale PCs

The following specifications apply to those who are running the **Point of Sale** (POS) module on a PC terminal to access the main server using the Pronto Xi Enterprise Client.

 The following specifications assume Microsoft Windows 7 and higher. Microsoft Windows Vista is not recommended as there is potential for registry issues.

 Use the following specifications as a guideline for running POS in conjunction with any other programs that can cause a load on the same machine.

Component	Minimum Specification
CPU	Dual core 2.0GHZ
RAM	4GB
HDD	500MB free disk space to load Pronto Xi Enterprise Client and associated components
Network	100MB network card (on a 100MB LAN if required)
WAN connection	512/256kbps ADSL
Microsoft Windows	Microsoft Windows 7 SP1 and above  Microsoft Embedded (formerly WEPOS) is not certified. Please contact support for more details.

For more information on POS hardware vendors, see the following (opens external links in your default browser):

- [IBM Sure POS retail hardware](#)
- [POSIFLEX POS solution](#)


## 7.2 Monitors

The minimum resolution if running POS only is 1024X768. For running the wider Pronto Xi Enterprise Client v700 and higher application (for example inventory enquiry), the minimum specification is 1152x864.

The preferred resolution is 1280x1024.


## 7.3 PCs running POS with AT Mode

The following is the recommended specification when running both POS and AT Mode.

Component	Minimum specification
Chipset	32/64-bit Intel or AMD
CPU	Quad core processor
RAM	8 GB
HDD	250GB Hard Drive (optimal configuration for local DR: 2 x 300GB disks in a RAID 1 array ((to protect against disk failure)) with 60-100GB minimum free space)  SSD hard drive recommended
Network	Gigabit network card on a Gigabit LAN
WAN connection	1024/1024 kbps ADSL or better
Database	Microsoft SQL Server 2012 R2 or 2014 (Express or Server Standard Edition)   If you have over 10GB of data, you will need to purchase Microsoft SQL Server Standard Edition or above.
Operating System	Microsoft Windows 7 (32/64-bit)  Microsoft Windows 8.1 (32/64-bit)  Microsoft Windows 10 (64-bit)

## 7.4 Docket printers

Use Epson (or 100% compatible) docket printer (TM88 II onwards). USB (recommended) or serial based printers are also supported.

 For USB printers, ensure Microsoft Windows can drive the printer with either a generic text driver or printer specific driver.

 Most Pronto Software customers purchase TM-T88IV or T88V with USB.

## 7.5 Cash drawers

Use printer-triggered cash drawers. USB cash drawers are also supported.



For USB cash drawers, ensure Microsoft Windows can drive the printer with either a generic text driver or printer specific driver.

## 7.6 Scanners

Use a scanner with keyboard emulation (USB or keyboard wedge).

## 7.7 Touch screens

The minimum resolution when running POS is 1024x768. For running Pronto Xi Enterprise Client (v700 and higher) (for example inventory enquiry), the minimum specification is 1152x864.

The recommended resolution is 1280x1024.

## 7.8 Pole displays

Use Posiflex 2 x 20 character pole display (or 100% compatible).

For more information, see [http://www.posiflex.com/english/01\\_products/01\\_list.php?pid=86](http://www.posiflex.com/english/01_products/01_list.php?pid=86).

The following relates to manufacturers, suppliers, makes, and models of display poles.

To meet Pronto Xi Enterprise Client hardware requirements you need:

- at least two lines of 20 characters
- connection to a Microsoft Windows PC POS terminal
- connection through either a RS232 COM port or a USB virtual COM port

You can choose your own display pole supplier (as per your own criteria – cost, durability, ruggedness, style, size, brand-loyalty, and so on).

Pronto Xi POS currently emits only two lines of 20 characters, but the messaging features in p50pos allows display of messages between sales and customers.

If you connect a 4 line x 64 character display, an RS232 SERIAL unit it will still work.

The p50pos display pole routines treat all displayed messages to the pole as if they were a report, and they send each two line report to a COM PORT configured as if it were a printer. There is a POS\_DISPLAY.exe program that is required to send it out the COM PORT.

A Logic controls LD9000 model has a 2 x 20 character display. A simple 4GL to a Microsoft Windows DOS interface can be created which permits control using PCS files. This allows the pole to be hooked to any Pronto Xi Enterprise Client screen and field, bypassing all requirements to set system control flags.

## 7.9 Bar code scales


Magellan Scales are supported, although any OPOS-Compliant scanner or scales device should be compatible. Most scales will require some degree of customisation.

## 7.10 Programmable keyboards


There is no specific requirement for programmable keyboards.

## 7.11 Serial ports

The number of serial ports required depends on the equipment configuration you (the client) are using.

 You might need a serial till printer, a serial EFTPOS, and serial scales. Therefore, you would need three serial ports.

However, USB till printers and EFTPOS units are more common, so you might only require one port.

 We recommend that scales use serial connections.

## 7.12 Integrated EFTPOS

Ingenico, Tyro, and Quest EFTPOS solutions are supported.

For a list of banks that support PC-EFTPOS, see <http://www.pceftpos.com/index.php?menu=173&page=banks>

# 8 Online Help

Pronto Xi Online Help (accessed by pressing **F1** from any screen or function in Pronto Xi) and Pronto Xi **Business Intelligence** Help is optimised for Microsoft Internet Explorer 8 and above.

Pronto Xi Help in web browser format provided exclusively for use with the Pronto Xi web interface is optimised for Google Chrome.

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# 9 Maintained and retired operating systems


See the following topics for maintained and retired operating systems:

- Pronto Xi server maintained operating systems (p.27)
- Pronto Xi Business Intelligence server maintained operating systems (p.27)
- Recently retired operating systems (p.28)
- Pronto Xi TrueForm (p.30)

## 9.1 Pronto Xi server maintained operating systems

A maintained operating system is one that is supported but not actively deployed for new installations. Bug fixes and compliance changes are provided by Pronto Software when required.


An operating system moves from Maintenance to Recently retired operating systems (p.28) when an operating system or database can no longer be supported.

 Pronto Xi Analytics Dimensions (our dimensionally-modelled relational data sources) does not run on Oracle 10g.

Hardware	Operating system	Database	Expected end of maintenance (if known)
x86 (IBM Series X) 64 bit	Red Hat Enterprise Linux ES/AS 5	IBM Informix 11.7fc4	TBA
The above combination requires Pronto Xi 700.x with minimum Kernel version 2.6.18 and glibc: 2.5.34.			
x86 (IBM Series X) 64 bit	Microsoft Windows Server 2008	Microsoft SQL Server 2008	TBA
IBM – Power Systems 64 bit	AIX 7	IBM Informix 12.10 fc4	TBA
IBM – Power Systems 64 bit	AIX 7	Oracle 11g	TBA

## 9.2 Pronto Xi Business Intelligence server maintained operating systems

Pronto Xi Business Intelligence uses IBM Cognos Business Intelligence.


 Pronto Xi does not support all possible configurations and features of IBM Cognos Business Intelligence.

For specific information about supported platforms for operating systems, including mobile operating systems, and software limitations for IBM Cognos, see:

- **For version 10.2.1**  
<http://www-01.ibm.com/support/docview.wss?uid=swg27037784>
- **For version 10.2.2**  
<http://www-01.ibm.com/support/docview.wss?uid=swg27042164>

Operating system	Database	IBM Cognos	Pronto Xi
Microsoft Windows Server 2008 R2	Microsoft SQL Server 2008 R2 Standard Edition	IBM Cognos Business Intelligence 10.2.1*	710.1 and above
Microsoft Windows Server 2008 R2	Microsoft SQL Server 2008 R2 Standard Edition	IBM Cognos Business Intelligence 10.1*	v700.1 and v700.2
Microsoft Windows Server 2008 R2	Microsoft SQL Server 2008 R2 Standard Edition	IBM Cognos Business Intelligence 10.1.1*	v700.3 to 710.0

\* Java 1.8.0 is required for the IBM Cognos trigger program.

 IBM Cognos Business Intelligence version 10.1.1 is not supported with Pronto Xi 710.1.

## 9.3 Recently retired operating systems

For the purpose of this guide, retired means an operating system is not supported or sold. An operating system will not be supported once the official vendor support for the hardware, operating system or database that constitutes that operating system has stopped.

Operating systems older than the ones specified below are also not supported. Contact Pronto Software support if details of a specific operating system are required.

Hardware	Operating system	Database	End of support date
Microsoft Windows XP (32/64 bit)	Microsoft Internet Explorer 6.0 (SP2) and higher	670.x and higher	31 July 2010
IBM – Power Systems 64 bit	AIX 5	C-ISAM 7.26	30 June 2012
IBM – Power Systems 64 bit	AIX 5	C-ISAM 7.26	30 June 2012
x86 (IBM Series X) 64 bit	Red Hat Enterprise Linux ES/AS 4	C-ISAM 7.26	30 June 2012
IBM – Power Systems 32 bit	AIX (all 32-bit versions)	Oracle	30 June 2013
x86 (IBM Series X) 32 bit	Red Hat Enterprise Linux ES/AS (all 32-bit versions)	Oracle	30 June 2013

Hardware	Operating system	Database	End of support date
x86 (IBM Series X) 64 bit	Red Hat Enterprise Linux ES/AS 5	Oracle 10g	31 December 2013
Sun SPARC 64 bit	Solaris 9	Oracle 10g	31 December 2013
IBM – Power Systems 64 bit	AIX 5	Oracle 10g	31 December 2013 Oracle to be upgraded to 11g
IBM – Power Systems 64 bit	AIX 7	IBM Informix 11.7fc4	EOY 2014 IBM Informix to be upgraded to 12.10fc4
IBM – Power Systems 64 bit	AIX 6.1 TL 4 Service Pack 3	IBM Informix 11.7fc4	EOY 2014 IBM Informix to be upgraded to 12.10fc4
IBM – Power Systems 64 bit	AIX 6	IBM Informix 11.5c8	EOY 2014 IBM Informix to be upgraded to 12.10fc4
IBM – Power Systems 64 bit	AIX 6	IBM Informix 11.5c5	EOY 2014 IBM Informix to be upgraded to 12.10fc4
x86 (IBM Series X) 64 bit	Red Hat Enterprise Linux ES/AS 6	IBM Informix 11.7fc4	EOY 2014 IBM Informix to be upgraded to 12.10fc4
x86 (IBM Series X) 64 bit	Red Hat Enterprise Linux ES/AS 6	IBM Informix 11.5c8	EOY 2014 IBM Informix to be upgraded to 12.10fc4
X86 (IBM Series X) 64 bit	Red Hat Enterprise Linux ES/AS 5	IBM Informix 11.5c5	EOY 2014 AIX to be upgraded to version 6 and IBM Informix to 12.10fc4
x86 (IBM Series X) 64 bit	Red Hat Enterprise Linux ES/AS 5	Oracle 11g	EOY 2014 AIX to be upgraded to version 6 and IBM Informix to 12.10fc4
IBM – Power Systems 64 bit	AIX 6	Oracle 11g	August 2015

## 9.4 Pronto Xi TrueForm

The below specifications apply to **TrueForm** when running on its own, not when combined with **Business Intelligence**. If installing **TrueForm** on the Pronto Xi **Business Intelligence** server, you must ensure the server is equipped with a minimum six core processor, with four for **Business Intelligence**, and two for **TrueForm**.



**TrueForm Neo** is the replacement forms management operating system for legacy TrueForm. For existing customers considering migration, contact your Account Manager.

### Details

TrueForm Server	<ul style="list-style-type: none"> <li>• Administrator privileges</li> <li>• Microsoft Windows Server 2008 R2 (32/64 bit)</li> <li>• 2GB RAM with 30MB of free hard disk space</li> <li>• Microsoft Internet Explorer 8, 9 and 10</li> <li>• Adobe Acrobat Reader 8.0 or higher (or equivalent PDF reader)</li> <li>• PostScript Level 2 printers and higher</li> <li>• Microsoft TCP/IP Printing Services installed and started (if you use TCP/IP to connect to the forms server)</li> </ul>
TrueForm Mailer	<ul style="list-style-type: none"> <li>• Microsoft Windows Server 2008 R2</li> <li>• 32MB RAM with 10MB free hard disk space</li> <li>• TrueForm Server 2.7 or higher to send secure PDFs by email</li> </ul>
TrueForm Director and Designer	<ul style="list-style-type: none"> <li>• Microsoft Windows 7 SP1/Microsoft Windows 8.1</li> <li>• Microsoft Internet Explorer 9 and 10</li> <li>• Adobe Acrobat Reader 9 or higher (for viewing the User Guide)</li> <li>• Approximately 30MB of free hard disk space</li> <li>• A PostScript level 2 or higher printer is recommended</li> </ul>