



PIVOTAL CRM

Compatibility Guide

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Third-Party Compatibility Guidelines

The following guidelines represent the current recommendations with respect to third-party product support for Pivotal CRM 6.5.3.

Guidance for Newer Versions of Third-party Products

Aptean strongly recommends that customers do not deploy a third-party product Service Pack until it is announced as supported. Customers are entitled to technical support for any Service Pack or Hot Fix released for any third party product that is currently listed as supported on the current version of Pivotal Platform.



Note: Microsoft and any other third party product compatibility is valid only for the period they are supported by the corresponding vendors.

Guidance for Older Versions of Third-party Products

- Aptean generally supports the last two versions of a third-party product on the latest version of Pivotal Platform, as long as the third-party continues to provide mainstream (not extended) support for their product.
- When a key third party product is moved to extended support by the vendor, Pivotal CRM customers on older Pivotal Platforms should plan to upgrade their Pivotal Platform in order to gain support for the latest version of the third-party product.

Operating Systems

Server Operating Systems

Table 1 below lists details of the Server Operating Systems compatible with Pivotal CRM 6.5.3.

Table 1 Server Operating Systems

Product	Version / Edition	Service Pack	Comments
Windows Server 2012 R2 Update	Standard and Datacenter		
Windows Server 2012 R2	Standard and Datacenter		
Windows Server 2012	Standard and Datacenter		
Windows Server 2008 R2	Standard and Enterprise	Service Pack 1	
Windows Server 2008	Standard and Enterprise, x86 or x64	Service Pack 2	

Client Operating Systems

Table 2 below lists details of the Client Operating Systems compatible with Pivotal CRM 6.5.3.

Table 2 Client Operating Systems

Product	Version / Edition	Service Pack	Comments
Windows 10	Enterprise, Professional, x86 or x64		
Windows 8.1	Enterprise, Professional, x86 or x64		
Windows 8	Enterprise, Professional, x86 or x64		
Windows 7	Professional, Enterprise, and Ultimate, x64, or x86	Service Pack 1	
Windows Vista	Business, Enterprise, and Ultimate, x86	Service Pack 2	
Windows 8 Surface Pro			It is recommended that you use Pivotal Client 6.5.3 on a Windows 8 Surface Pro in Laptop mode.
Windows 8 Surface Pro 3			

Citrix Server

Pivotal Packaged Client 6.5.3 can be installed on a Citrix Farm environment or on a single Citrix Server. *Table 3 below* lists details of the Citrix Server on which Pivotal Packaged Client 6.5.3 can be installed.

Table 3 Citrix Server

Product	Version	Service Pack	Comments
Citrix XenApp	7.6		
Citrix XenApp	6.5		
Citrix XenApp	6.0		
Citrix XenApp	5.0	Feature Pack 2	
Citrix Presentation Server for Windows	4.5	Feature Pack 1	

Distribution Software

Distribution software is required if you plan to push the Pivotal Packaged Client 6.5.3 installation package to client computers. *Table 4 below* lists details of the distribution software required to push the Pivotal Packaged Client 6.5.3 installation package to client computers.

Table 4 Distribution Software

Component	Requirements
Distribution Software	One of the following: <ul style="list-style-type: none"> • Microsoft System Center Configuration Manager 2007 • Windows Server 2008-based Group Policy Implementation

Database Servers

Microsoft SQL Server or Oracle performs the function of a database server in Pivotal Platform deployments. The database server stores the databases for a Pivotal CRM system. *Table 5 below* lists details of the Microsoft SQL Server and Oracle compatible with Pivotal CRM 6.5.3.



Note: Microsoft SQL Server Express Edition with Advanced Services can be used for mobile systems with Enterprise Data that are smaller than 10 GB.

Table 5 Database Servers

Product	Version	Service Pack	Comments
Microsoft SQL Server			
Microsoft SQL	Standard or Enterprise		

Table 5 Database Servers (continued)

Product	Version	Service Pack	Comments
Server 2016	Editions, x64, or x86		
Microsoft SQL Server 2016	Express Edition with Advanced Services		
Microsoft SQL Server 2014	Standard or Enterprise Editions, x64, or x86		
Microsoft SQL Server 2014	Express Edition with Advanced Services		
Microsoft SQL Server 2012	Standard or Enterprise Editions, x64, or x86	Service Pack 2	
Microsoft SQL Server 2012	Express Edition with Advanced Services	Service Pack 2	
Microsoft SQL Server 2008 R2	Standard or Enterprise Editions, x64, or x86	Service Pack 3	
Microsoft SQL Server 2008 R2	Express Edition , x64, or x86	Service Pack 3	
Microsoft SQL Server 2008 R2	Express Edition with Advanced Services, x64 or x86	Service Pack 3	
Microsoft SQL Server 2008	Standard or Enterprise Editions, x64, or x86	Service Pack 4	
Microsoft SQL Server 2008	Express Edition	Service Pack 4	
Oracle			
Oracle 12c	Release 1 (12.1.0.2) (Standard or Enterprise Edition)		
Oracle 11g	Release 2 (11.2.0.2, 11.2.0.3,11.2.0.4) (Standard or Enterprise Edition)		 Note: Oracle 11.2.0.4 with patch 8 or Oracle 11.2.0.3 with patch 22 would be supported with Pivotal Syncstream 6.5.3
Oracle 11g	Release 1 (11.1.0.7)		

Table 5 Database Servers (continued)

Product	Version	Service Pack	Comments
	(Standard or Enterprise Edition)		
Oracle 11g	Release 1 (11.1.0.6) with patch 17 or later (Standard or Enterprise Edition)		 Note: Oracle 11g Release 1 (11.1.0.6.0) with patch 17 or later (Standard or Enterprise Edition) is supported only for Pivotal SyncStream 6.5.3.
Oracle 10g	Release 2 (10.2.0.5.0) (Standard or Enterprise Edition)		
Oracle 10g	Release 2 (10.2.0.4.0) (Standard or Enterprise Edition)		 Note: Oracle 10g Release 2 (10.2.0.4.0) is supported only for Pivotal SyncStream 6.5.3.
Oracle 10g	Release 2 (10.2.0.3.0) with patch 17 or later (Standard or Enterprise Edition)		 Note: Oracle 10g Release 2 (10.2.0.3.0) with patch 17 or later (Standard or Enterprise Edition) is supported only for Pivotal SyncStream 6.5.3.



Note: Mobile computers can only use Microsoft SQL Server Database.

Oracle Drivers

Table 6 on the next page, lists the Oracle drivers and client-side components required by Pivotal Business Server, Pivotal driver for Crystal Reports and the administration computer for Oracle

databases.



Note: Only the 32-bit versions of Oracle client and Oracle drivers are supported by Pivotal CRM 6.5.3 and higher. This applies to machines with 64-bit Windows operating systems.

Table 6 Oracle 12c Release 1 (12.1.0.2)

Required Driver	Version
Client Tools	12.1.0.2
ODBC Drivers	12.1.0.2
Oracle Provider for OLE DB	12.1.0.2
Oracle Services for MTS	12.1.0.2
ODP.NET	12.1.0.2

Table 7 Oracle 11g Release 2 (11.2.0.4)

Required Driver	Version
Client Tools	11.2.0.4 with patch 8 or later
ODBC Drivers	11.2.0.4
Oracle Provider for OLE DB	11.2.0.4 with patch 4 or later
Oracle Services for MTS	11.2.0.4
ODP.NET	Oracle Data Provider for .NET 4 version 11.2.04 (file version 4.112.2.0)811.2.0.4 patch 8 or later

Table 8 Oracle 11g Release 2 (11.2.0.2)

Required Driver	Version
Client Tools	11.2.0.2 with patch 4 or later Note: Patch 4 has the Oracle Patch ID 11896290.
ODBC Drivers	11.2.0.2
Oracle Provider for OLE DB	11.2.0.2 with patch 4 or later Note: Patch 4 has the Oracle Patch ID 11896290
Oracle Services for MTS	11.2.0.2
ODP.NET	Oracle Data Provider for .NET 4 version 11.2.0.2 (file version 4.112.2.0)

Table 9 Oracle 11g Release 2 (11.2.0.3)

Required Driver	Version
Client Tools	11.2.0.3 patch 22 or later, 11.2.0.4 Patch 8 or later
ODBC Drivers	11.2.0.3 patch 22 or later, 11.2.0.4 Patch 8 or later
Oracle Provider for OLE DB	11.2.0.3 patch 22 or later, 11.2.0.4 Patch 8 or later
Oracle Services for MTS	11.2.0.3 patch 22 or later, 11.2.0.4 Patch 8 or later
ODP.NET	Oracle Data Provider for .NET 4 version 11.2.0.3 (file version 4.112.3.0), 11.2.0.4 Patch 8 or later



Note: After installing the 11.2.0.3 client, follow the instructions in Oracle Document ID 1380742.1 to resolve a problem with the Oracle 11.2.0.3 client installation.

Oracle Drivers for Pivotal SyncStream 6.5.3



Note: Only the 32-bit versions of Oracle client and Oracle drivers are supported by Pivotal CRM 6.5.3. This applies to machines with 64-bit Windows operating systems.

Table 10 below lists the Oracle drivers, which are supported by Pivotal SyncStream 6.5.3.

Table 10 Oracle Drivers Supported by Pivotal SyncStream 6.5.3

Oracle Driver	Client Tools	ODBC Drivers	Oracle Provider for OLE DB
Oracle 12.1.0.2	12.1.0.2	12.1.0.2	12.1.0.2
Oracle 11.2.0.4	11.2.0.4 patch 8 or later	11.2.0.4 patch 8 or later	11.2.0.4 patch 8 or later
Oracle 11g Release 2 (11.2.0.3)	11.2.0.3 patch 22 or later	11.2.0.3 patch 22 or later	11.2.0.3 patch 22 or later
Oracle 11g Release 2 (11.2.0.2)	11.2.0.2 with patch 4 or later	11.2.0.2	11.2.0.2 with patch 4 or later
Oracle 11g Release 1 (11.1.0.7)	11.1.0.7.0	11.1.0.7.0	11.1.0.6.20
Oracle 11g Release 1 (11.1.0.6)	11.1.0.6.0	11.1.0.6.0	11.1.0.6.20
Oracle 10g Release 1 (10.2.0.4.0)	10.2.0.4.0	10.2.0.4.0	10.2.0.4.0
Oracle 10g Release 1 (10.2.0.3.0)	10.2.0.3.0 with patch 13 or later	10.2.0.3.13	10.2.0.2.21

Browsers

Table 11 below lists details of browsers compatible with Pivotal CRM 6.5.3.

Table 11 Supported Browsers

Product	Version	Service Pack	Comments
Internet Explorer	11		 Note: IE 11 is supported on Windows 7 SP1, Windows 8.1, Windows 2008 R2 SP1, and Windows 2012 R2.
Internet Explorer	10		 Note: IE 10 is supported only on Windows Server 2012.
Internet Explorer	9		 Note: IE 9 is supported on Windows Vista SP2 and Windows 2008 SP2.

Mail Servers

Table 12 below lists details of mail servers compatible with Pivotal CRM 6.5.3.

Table 12 Supported Mail Servers

Product	Version	Service Pack	Comments
IBM Domino	9.0		 Note: Pivotal CRM 6.5.3 provides support for any version of Domino Server that is currently supported by LinkPoint 360 and IBM. For more information about version support, contact LinkPoint 360 customer support at http://www.aptean.com/en/support
Microsoft Exchange 2016			
Microsoft Exchange 2013		Service Pack 1	
Microsoft Exchange		Service Pack 3	

Table 12 Supported Mail Servers (continued)

Product	Version	Service Pack	Comments
2010			
Microsoft Exchange Online			

Email Client Applications

Table 13 below lists details of the e-mail client applications compatible with Pivotal CRM. 6.5.3.

Table 13 E-mail Client Applications

Product	Service Pack	Comments
IBM Notes 9.0		 Note: To install LinkPoint 360 for Pivotal, you must install IBM Notes 9.0.
Microsoft Outlook 2016 x86/x64 ¹		
Microsoft Outlook 2013 x86/x64	Service Pack 1	 Note: Install the latest KB available from Microsoft, see https://support.office.com/en-us/article/Update-history-for-Office-2013-19214f38-85b7-4734-b2f8-a6a598bb0117?ui=en-US&rs=en-US&ad=US&fromAR=1 .
Microsoft Outlook 2010, x86/x64	Service Pack 1, Service Pack 2	After installing Microsoft Outlook 2010, it is mandatory to apply the following patch: http://support.microsoft.com/kb/2516474/  Note: Upgrade to VSTO 4.0 Service Pack 1 if you plan to upgrade to Microsoft Office 2010 Service Pack 1 for 32-bit systems. The VSTO 4.0 Service Pack 1 installer is available in the PIMO6.5.3.zip file or you can download it from http://go.microsoft.com/fwlink/?LinkId=158917 .

¹Microsoft has discontinued support for MSP, which provided users the ability to view their Pivotal Contacts within Outlook. Hence, this feature is unavailable for Microsoft Outlook from 6.5.3 release onwards.

Microsoft Office Applications

Table 14 below lists details of the Microsoft Office Applications compatible with Pivotal CRM 6.5.3.

Table 14 Microsoft Office Applications

Product	Version	Service Pack	Comments
Microsoft Office 2016 x86/x64 ¹			
Microsoft Office 2013 x86/x64		Service Pack 1	
Microsoft Office 2010 x86/x64		Service Pack 1, Service Pack 2	Upgrade to VSTO 4.0 Service Pack 1 if you plan to upgrade to Microsoft Office 2010 Service Pack 1 for 32-bit systems. The VSTO 4.0 Service Pack 1 installer is available in the PIMO6.5.3.zip file or you can download it from http://go.microsoft.com/fwlink/?LinkId=158917 .
Microsoft SharePoint Foundation 2010		Service Pack 1, Service Pack 2	
Microsoft SharePoint Server 2010	Standard and Enterprise	Service Pack 1, Service Pack 2	
Windows SharePoint Services 3.0		Service Pack 3	
Microsoft SharePoint Server 2013		Service Pack 1	
Microsoft SharePoint Foundation Server 2013		Service Pack 1	



Note: Ensure that Microsoft Word and Microsoft Excel are installed on the client machines. These applications are required for Pivotal Client operations such as Mail Merge and Export to Excel.

¹Microsoft has discontinued support for MSP, which provided users the ability to view their Pivotal Contacts within Outlook. Hence, this feature is unavailable for Microsoft Outlook from 6.5.3 release onwards.

Web Server

Table 15 below lists details of the Web Server compatible with Pivotal CRM 6.5.3.

Table 15 Web Server

Product	Version	Service Pack	Comments
Microsoft Internet Information Server (IIS)	8.5		Installed by Windows Server 2012 R2.
Microsoft Internet Information Server (IIS)	8		Installed by Windows Server 2012.
Microsoft Internet Information Server (IIS)	7.5		Installed by Windows Server 2008 R2 and Windows 7.
Microsoft Internet Information Server (IIS)	7.0		Installed by Windows Server 2008 and Windows Vista.

Other Applications

Table 16 below lists details of all other applications compatible with Pivotal CRM 6.5.3.

Table 16 Other Applications

Product	Version	Service Packs	Comments
BizTalk Server 2004		Service Pack 2	Required by Pivotal Integration Connector 6.0.
Pervasive Data Integrator	6		
LinkPoint for Pivotal	Lotus Notes Edition (R2)		Required for IBM Notes 9.0 to work with Pivotal CRM
Visual Studio 2010		Service Pack 1	
Microsoft VSTO 4.0 Runtime		Service Pack 1	This is used for Microsoft Outlook 2010 Service Pack 1
Microsoft VSTO 4.0 Runtime			This is used for the Microsoft Outlook 2010 addin.
Microsoft .NET Framework 4			 Note: Pivotal CRM 6.5.3 is compatible with .NET Framework 4. Pivotal CRM is not compatible with .NET Framework 3.5. All Client

Table 16 Other Applications (continued)

Product	Version	Service Packs	Comments
			 machines and Server machines running on Pivotal 6.5.3 products (except Portal server) need to have .NET Framework 4 installed.

Server and Client Computer Details

The details of the computers (server and client) are as follows:



Note: Based on your organization setup you may or may not require all computers (server and client) mentioned in this section.

- [Database Servers](#)
 - [Microsoft SQL Server](#)
 - [Oracle Server](#)
 - [Oracle Drivers](#)
- [SyncStream Servers](#)
 - [HTTP Message Server](#)
 - [Active Notification Manager \(ANM\) Server](#)
 - [Data Synchronization Manager \(DSM\) Server](#)
- [Pivotal Business Server](#)
- [Deployment Server](#) (required only for ClickOnce Deployment method)
- Any one of the following (required for Pivotal Packaged Client Deployment method):
 - [Distribution Server](#)
 - [Terminal Server or Citrix Server](#)
- [Client Computers](#)
- [Mobile Computers](#)
- [Pivotal Synchronization Service with Microsoft Exchange Server](#)
- [SharePoint Portal Server](#)

Database Servers

Microsoft SQL Server

Microsoft SQL Server performs the function of a database server in Pivotal Platform deployments. The database server stores the databases for a Pivotal CRM system. The system requirements listed here are applicable if you configure a dedicated computer to host SQL Server databases for the Pivotal CRM 6.5.3 platform. *Table 17 below* lists details of the Microsoft SQL Server.

Table 17 Microsoft SQL Server

Component	Requirements	Comments
Database - Server	<p>One of the following:</p> <ul style="list-style-type: none"> • Microsoft SQL Server 2016 (Standard or Enterprise Editions, x86 or x64) • Microsoft SQL Server 2014 (Standard or Enterprise Editions, x86 or x64) • Microsoft SQL Server 2012 (Standard or Enterprise Editions, x86 or x64) Service Pack 2 • Microsoft SQL Server 2008 R2 (Standard or Enterprise Editions, x86 or x64) Service Pack 3 • Microsoft SQL Server 2008 (Standard or Enterprise Editions, x86 or x64) Service Pack 4 	
Database - Mobile Computers	<ul style="list-style-type: none"> • Microsoft SQL Server 2016 (Express Edition) • Microsoft SQL Server 2014 (Express Edition) • Microsoft SQL Server 2012 (Express Edition with Advanced Services) • Microsoft SQL Server 2012 (Express Edition Service Pack 2) • Microsoft SQL Server 2008 R2 (Express Edition with Advanced Services (x86, and x64), Service Pack 3) 	

Table 17 Microsoft SQL Server (continued)

Component	Requirements	Comments
	<ul style="list-style-type: none"> • Microsoft SQL Server 2008 R2 (Express Edition Service Pack 3) • Microsoft SQL Server 2008 (Express Edition Service Pack 4) 	

Oracle Server

Oracle performs the function of a database server in Pivotal Platform deployments. The database server stores the databases for a Pivotal CRM system.

The system requirements listed here apply if you configure a dedicated computer to host Oracle databases for the Pivotal CRM 6.5.3 Platform. *Table 18 below* lists details of the Oracle Server.

Table 18 Oracle Server

Component	Requirements	Comments
Database - Server	<ul style="list-style-type: none"> • Oracle 12c Release 1 (12.1.0.2) • Oracle 11g Release 2 (11.2.0.4) (Standard or Enterprise Edition) • Oracle 11g Release 2 (11.2.0.2 or 11.2.0.3) (Standard or Enterprise Edition) • Oracle 11g Release 1 (11.1.0.7) (Standard or Enterprise Edition) • Oracle 11g Release 1 (11.1.0.6.0) (Standard or Enterprise Edition) • Oracle 10g Release 2 (10.2.0.5) (Standard or Enterprise Edition) • Oracle 10g Release 2 (10.2.0.4) (Standard or Enterprise Edition) • Oracle 10g Release 2 (10.2.0.3.0) with patch 17 or later (Standard or Enterprise Edition) 	<p> Note: For Unicode deployments, use AL16UTF16 as the National Character Set and AL32UTF8 as the Database Character Set. Also set NLS_LENGTH_SEMANTICS to CHAR.</p> <p> Note: Oracle 11g Release 1 (11.1.0.6.0) (Standard or Enterprise Edition), Oracle 10g Release 2 (10.2.0.4.0) (Standard or Enterprise Edition), and Oracle 10g Release 2 (10.2.0.3.0) with patch 17 or later (Standard or Enterprise Edition) are only supported by Pivotal SyncStream 6.5.3.</p>

Oracle Drivers

For more information about compatible Oracle drivers, see [Oracle Drivers](#).



Note: It is recommended that you have a dedicated Oracle server. Mobile computers use only Microsoft SQL databases even if you have an Oracle database for the master or satellite system.

SyncStream Servers

HTTP Message Server

A master system with connected satellite or mobile systems requires an HTTP Message Server for data synchronization. The HTTP Message Server uses Microsoft Internet Information Services (IIS) to store synchronization messages that are in transit between master, satellite, and mobile systems.

When using data synchronization, it is recommended that you have a dedicated HTTP Message Server. The HTTP Message Server is the temporary repository for all synchronization messages.

Calculate disk requirements based on the total number of mobile users and the frequency of synchronization. *Table 19 below* lists details of requirements for the HTTP Message Server.

Table 19 HTTP Message Server

Component	Requirements	Comments
Operating system	One of the following: <ul style="list-style-type: none"> Windows Server 2012 R2 (Standard or Datacenter Edition) Windows Server 2012 (Standard or Datacenter Edition) Windows Server 2008 R2 Service Pack 1 (Standard or Enterprise Edition) Windows Server 2008 Service Pack 2 (Standard or Enterprise Edition, x86 or x64) 	
Oracle client	See Oracle Drivers for driver requirements.	
Processor speed	2 GHz	Minimum recommended hardware requirement.
Memory	2 GB	Minimum recommended hardware requirement.

Active Notification Manager

The Active Notification Manager (ANM) server is required to send notification changes. If your deployment includes data synchronization, the ANM will also store these changes for the Data

Synchronization Manager (DSM). *Table 20 below* lists details of the requirements for the ANM server.

Table 20 Active Notification Manager

Component	Requirements	Comments
Operating system	One of the following: <ul style="list-style-type: none"> • Windows Server 2012 R2 (Standard or Datacenter Edition) • Windows Server 2012 (Standard or Datacenter Edition) • Windows Server 2008 R2 Service Pack 1 (Standard or Enterprise Edition) • Windows Server 2008 Service Pack 2 (Standard or Enterprise Edition, x86 or x64) 	
Processor speed	2 GHz	Minimum recommended hardware requirement.
Memory	2 GB	Minimum recommended hardware requirement.

Data Synchronization Manager

The Data Synchronization Manager (DSM) is required for data synchronization between parent and child systems. Each master and satellite system requires a DSM server. Install the DSM service on the server designated to be the DSM server. Mobile systems must also have the DSM installed, but the DSM on a mobile system runs as an application and is installed as part of the mobile system installation package. *Table 21 below* lists details of the requirements for the Data Synchronization Manager.

Table 21 Data Synchronization Manager

Component	Requirements	Comments
Operating system	One of the following: <ul style="list-style-type: none"> • Windows Server 2012 R2 (Standard or Datacenter Edition) • Windows Server 2012 (Standard or Datacenter Edition) • Windows Server 2008 R2 Service Pack 1 (Standard or Enterprise Edition) • Windows Server 2008 Service Pack 2 (Standard or Enterprise Edition, x86 or x64) 	
Application disk space	At least five times the size of largest mobile data set.	

Table 21 Data Synchronization Manager (continued)

Component	Requirements	Comments
Oracle client	See Oracle Drivers for driver requirements.	
Processor speed	2 GHz	Minimum recommended hardware requirement.
Memory	2 GB	Minimum recommended hardware requirement.

Pivotal Business Server

Table 22 below lists details of the requirements for the Pivotal Business Server.

Table 22 Pivotal Business Server

Component	Requirement	Comments
Operating system - Server	One of the following: <ul style="list-style-type: none"> • Windows Server 2012 R2 Standard or Datacenter Edition) • Windows Server 2012 (Standard or Datacenter Edition) • Windows Server 2008 R2 Service Pack 1 (Standard or Enterprise Edition) • Windows Server 2008 Service Pack 2 (Standard or Enterprise Edition, x86 or x64) 	In addition, install Microsoft Internet Information Server (IIS).
Operating system - mobile	<ul style="list-style-type: none"> • Windows 10 (Enterprise, Professional, x86 or x64) • Windows 8.1 (Enterprise, Professional, x86 or x64) • Windows 8 (Enterprise, Professional, x86 or x64) • Windows 7 (Professional, Enterprise or Ultimate Service Pack 1, x86 or x64) • Windows Vista Business, Enterprise or Ultimate Service Pack 2, x86 	Mobile installation only. In addition, install Microsoft Internet Information Server (IIS).
E-mail client	Any one of the following:	Only one e-mail client is necessary and is required only if Pivotal Business Server is

Table 22 Pivotal Business Server (continued)

Component	Requirement	Comments
	<ul style="list-style-type: none"> Microsoft Outlook 2016¹ Microsoft Outlook 2013 Service Pack 1 Microsoft Outlook 2010 Service Pack 1, Service Pack 2 IBM Notes 9.0 	<p>not configured to use SMTP.</p> <p> Note: IBM Notes is supported only if the Pivotal Business Server is running on a Mobile System.</p>
Application disk space	1 GB	The estimate for application disk space does not include the operating system, data, and run-time disk space requirements.
Oracle client	See Oracle Drivers for driver requirements.	For Oracle environments, to communicate with the Oracle database, the Oracle Client is required on the Pivotal Business Server.
Processor speed	2 GHz	Minimum hardware requirement. Minimum of two processor cores is recommended.
Memory	2 GB	Minimum hardware requirement.

Deployment Server

A deployment server is required if you plan to deploy Pivotal Client using the ClickOnce Deployment method. *Table 23 below* lists details of the requirements for the Deployment Server.

Table 23 Deployment Server

Component	Requirements	Comments
Operating system	<p>One of the following:</p> <ul style="list-style-type: none"> Windows Server 2012 R2 (Standard or Datacenter Edition) Windows Server 2012 (Standard and Datacenter Edition) Windows Server 2008 R2 Service Pack 1 (Standard or Enterprise Edition) Windows Server 2008 Service Pack 2 (x86 or x64) 	
Web server	Microsoft Internet Information Services	

¹Microsoft has discontinued support for MSP, which provided users the ability to view their Pivotal Contacts within Outlook. Hence, this feature is unavailable for Microsoft Outlook from 6.5.3 release onwards.

Table 23 Deployment Server (continued)

Component	Requirements	Comments
Browser	Internet Explorer 11 Internet Explorer 10 Internet Explorer 9	
Application disk space	150 MB	The estimate for application disk space does not include the operating system, data, and run-time disk space requirements.
Processor speed	2.4 GHz	Minimum hardware requirement.
Memory	2 GB	Minimum hardware requirement.



Note: For performance and scalability reasons, it is recommended that you use a dedicated server as the SharePoint server. For running SharePoint portals on the deployment server, ensure to install both .NET Framework 3.5 Service Pack 1 and .NET Framework 4.

Terminal Server or Citrix Server

Pivotal Packaged Client can also be installed on a Terminal server or a Citrix server. *on page 12* lists details of the requirements for the terminal server or citrix server.

Table 24 Terminal Server or Citrix Server

Component	Requirements	Comments
Operating System	Any one of the following: <ul style="list-style-type: none"> Windows Server 2012 R2 (Standard or Datacenter Edition) Windows Server 2012 (Standard and Datacenter Edition) Windows Server 2008 R2 Service Pack 1 (Standard or Enterprise Edition) Windows Server 2008 (Standard or Enterprise Edition, x86) Service Pack 2 	
Citrix Software	Citrix XenApp 7.6	
	Citrix XenApp 6.5	
	Citrix XenApp 6.0	
	Citrix XenApp 5.0	
	Citrix Presentation Server 4.5	

Table 24 Terminal Server or Citrix Server (continued)

Component	Requirements	Comments
Pivotal Software	Pivotal CRM 6.5.3 Prerequisites	If you use IBM Notes as the email client, then install Pivotal CRM 6.0.10.1_LN Prerequisites for IBM Notes.
Processor speed	Quad core Processor - Intel Xeon 3.60 GHz	
Application Disk Space	160 GB Hard Disk with RAID Controller	The estimate for application disk space does not include the operating system, data, and run-time disk space requirements.
Memory	4 GB RAM	Recommended hardware requirement.

Client Computers

The system requirements listed in this section are for each Pivotal Client end user computer that will access the master system. *Table 25 below* lists details of the client computers.

Table 25 Client Computers

Component	Requirements	Comments
Prerequisite components (for Outlook clients)	<ul style="list-style-type: none"> Microsoft VSTO 4.0 Runtime Microsoft .NET Framework 4 Microsoft Visual C++ 2010 Runtime Libraries Microsoft Office Primary Interop Assemblies for Microsoft Outlook 2010 	<p>These components are installed by the Pivotal CRM 6.5.3 Prerequisites installer.</p> <p> Note: Upgrade to VSTO 4.0 Service Pack 1 if you plan to upgrade to Microsoft Office 2010 Service Pack 1 for 32-bit systems. The VSTO 4.0 Service Pack 1 installer is available in the PIMO 6.5.3.zip file or you can download it from http://go.microsoft.com/fwlink/?LinkId=158917.</p>
Prerequisite components (for IBM Notes Clients)	<ul style="list-style-type: none"> Microsoft .NET Framework 4 Microsoft Visual C++ 2010 Runtime Libraries Microsoft Primary Interoperability Assemblies 2005 	These components are installed by the Pivotal CRM 6.0.10.1_LN Prerequisites for IBM Notes installer.
Operating	Any one of the following:	

Table 25 Client Computers (continued)

Component	Requirements	Comments
system	<ul style="list-style-type: none"> • Windows 10 (Enterprise, Professional, x86 or x64) • Windows 8.1 (Enterprise, Professional, x86 or x64) • Windows 8 (Enterprise, Professional, x86 or x64) • Windows 7 (Professional, Enterprise, or Ultimate) Service Pack 1, x64 • Windows 7 (Professional, Enterprise, or Ultimate) Service Pack 1, x86 • Windows Vista Ultimate Service Pack 2, x86 • Windows Vista Enterprise Service Pack 2, x86 • Windows Vista Business Service Pack 2, x86 • Windows 8 Surface Pro • Windows 8 Surface Pro 3 <p>Note: It is recommended that you use Pivotal Client 6.5.3 on a Windows 8 Surface Pro in Laptop mode.</p>	
Browser	<ul style="list-style-type: none"> • Internet Explorer 11 • Internet Explorer 10 • Internet Explorer 9.0 	
Reporting software	<ul style="list-style-type: none"> • Crystal Reports 2008 Service Pack 3 • Crystal Reports 2011 Service Pack 4 • Crystal Reports 2013 Service Pack 4 	Required to edit reports.
E-mail client	Any one of the following:	

Table 25 Client Computers (continued)

Component	Requirements	Comments
	<ul style="list-style-type: none"> Outlook 2016¹ Outlook 2013 Service Pack 1 Outlook 2010 Service Pack 1, Service Pack 2 	
Microsoft applications	Any one of the following: <ul style="list-style-type: none"> Excel 2016 Excel 2013 Service Pack 1 Excel 2010 Service Pack 1, Service Pack 2 	Microsoft Excel is required for Exporting Search Results List items.
	Any one of the following: <ul style="list-style-type: none"> Word 2016 Word 2013 Service Pack 1 Word 2010 Service Pack 1, Service Pack 2 	Microsoft Word is required for LetterExpress and is mandatory for client computers.
Application disk space	65 MB	Application disk space estimates do not include operating system, data, and run-time disk space requirements.
Processor speed	Core 2 Duo 2.3 GHz	Recommended hardware requirement.
Hard Disk	SATA, 7200 rpm or higher	Recommended hardware requirement.
Memory	2 GB	Recommended hardware requirement.

Mobile Computers

The system requirements listed in this section are for each Pivotal Client end user mobile computer. *Table 26 below* lists details of mobile computers.

Table 26 Mobile Computers

Component	Requirements	Comments
Prerequisite components (for mobiles with Outlook)	<ul style="list-style-type: none"> Microsoft VSTO 4.0 Runtime Microsoft .NET Framework 4 	These components are installed by the Pivotal CRM 6.5.3 Prerequisites installer.

¹Microsoft has discontinued support for MSP, which provided users the ability to view their Pivotal Contacts within Outlook. Hence, this feature is unavailable for Microsoft Outlook from 6.5.3 release onwards.

Table 26 Mobile Computers (continued)

Component	Requirements	Comments
	<ul style="list-style-type: none"> • Microsoft Visual C++ 2010 Runtime Libraries • Microsoft Office Primary Interop Assemblies for Outlook 2010 	 Note: Upgrade to VSTO 4.0 Service Pack 1 if you plan to upgrade to Microsoft Office 2010 Service Pack 1 for 32-bit systems. The VSTO 4.0 Service Pack 1 installer is available in the PIMO 6.5.3.zip file or you can download it from http://go.microsoft.com/fwlink/?LinkId=158917 .
Prerequisite components (for IBM Notes Mobiles)	<ul style="list-style-type: none"> • Microsoft .NET Framework 4 • Microsoft Visual C++ 2010 Runtime Libraries • Microsoft Primary Interoperability Assemblies 2005 	These components are installed by the Pivotal CRM 6.0.10.1_LN Prerequisites for IBM Notes installer.
Operating system	<p>Any one of the following:</p> <ul style="list-style-type: none"> • Windows 10 (Enterprise, Professional, x86 or x64) • Windows 8.1 (Enterprise, Professional, x86 or x64) • Windows 8 (Enterprise, Professional, x86 or x64) • Windows 7 Professional, (Enterprise or Ultimate, Service Pack 1, x86 or x64) • Windows Vista (Business, Enterprise, Ultimate, Service Pack 2, x86) • Windows 8 Surface Pro • Windows 8 Surface Pro 3 <p> Note: It is recommended that you use Pivotal</p>	In addition, install Internet Information Services.

Table 26 Mobile Computers (continued)

Component	Requirements	Comments
	 Client 6.5.3 on a Windows 8 Surface Pro in Laptop mode.	
Database	See Database Servers .	
Browser	<ul style="list-style-type: none"> • Internet Explorer 11 • Internet Explorer 10 • Internet Explorer 9 	
Reporting software	<ul style="list-style-type: none"> • Crystal Reports 2008 Service Pack 3 • Crystal Reports 2011 and 2013 	Required to edit reports.
E-mail client	Any one of the following: <ul style="list-style-type: none"> • Outlook 2016¹ • Outlook 2013 Service Pack 1 • Outlook 2010 Service Pack 1, Service Pack 2 • IBM Notes 9.0 	
Microsoft applications	Any one of the following: <ul style="list-style-type: none"> • Excel 2016 • Excel 2013 Service Pack 1 • Excel 2010 Service Pack 1, Service Pack 2 	
	Any one of the following: <ul style="list-style-type: none"> • Word 2016 • Word 2013 Service Pack 1 • Word 2010 Service Pack 1, Service Pack 2 	Microsoft Word is required for Letter Express and is mandatory for client computers.

¹Microsoft has discontinued support for MSP, which provided users the ability to view their Pivotal Contacts within Outlook. Hence, this feature is unavailable for Microsoft Outlook from 6.5.3 release onwards.

Table 26 Mobile Computers (continued)

Component	Requirements	Comments
Application disk space	65 MB	Application disk space estimates do not include operating system, data, and run-time disk space requirements.
Processor speed	Core 2 Duo 2.3 GHz	Minimum hardware requirement.
Hard Disk	SATA, 7200 rpm or higher	Minimum hardware requirement.
Memory	2 GB	Minimum hardware requirement.

Pivotal Synchronization Service with Microsoft Exchange Server

Using the Pivotal Synchronization Service for Microsoft Exchange, you can make changes to Outlook meetings or tasks using an application such as Microsoft Outlook Web Application (OWA) and have the changes synchronized to Pivotal CRM.

OWA is a Microsoft Web application that directly interacts with a user's mailbox on the Exchange server.

Using Pivotal Synchronization Service for Microsoft Exchange, you can make changes to an appointment or task which has already been linked to Pivotal CRM. The changes made by users are synchronized with Pivotal CRM. You can create new appointments or tasks; however, you cannot link them to Pivotal CRM.

Pivotal Synchronization Service for Microsoft Exchange can be installed on the Pivotal Business Server or on a stand-alone server. *Table 27 below* lists details of the Pivotal Synchronization Service with Microsoft Exchange Server.

Table 27 Pivotal Synchronization Service for Microsoft Exchange Server

Component	Requirements	Comments
Operating system		
Processor speed	2 GHz	Minimum recommended hardware requirement.
Memory	2 GB	Minimum recommended hardware requirement.

SharePoint Portal Server

A SharePoint server with Microsoft Windows SharePoint Services 3.0 Service Pack 3, Microsoft SharePoint Foundation 2010 Service Pack 2, or Microsoft SharePoint Server 2010 Enterprise Edition Service Pack 2, Microsoft SharePoint 2013 Service Pack 1, Microsoft SharePoint Foundation Server 2013 Service Pack 1, and Pivotal Portal Resources 6.5 is also required for the Portal pages functionality of Pivotal Toolkit and Pivotal Client. *Table 28 on the next page* lists details of the SharePoint Portal Server.

Table 28 SharePoint Portal Server

Component	Requirements	Comments
Operating system	<ul style="list-style-type: none"> Windows Server 2012 R2 (Standard and Datacenter Edition) Windows Server 2012 (Standard and Datacenter Edition) Windows Server 2008 R2 Service Pack 1 Windows Server 2008 (x86 or x64) Service Pack 2 	<p>Microsoft SharePoint Foundation 2010 Service Pack 1, and Microsoft SharePoint Server 2010 Service Pack 1 Enterprise Edition, works with only Windows Server 2008, or Windows Server 2008 R2 Service Pack 1.</p> <p>If you are running SharePoint 2010 in a Windows Server 2012 or Windows Server 2012 R2 environment, SharePoint 2010 with Service Pack 2 must be installed.</p>
Microsoft applications	<p>Any one of the following:</p> <ul style="list-style-type: none"> Windows SharePoint Services 3.0 Service Pack 3 Microsoft SharePoint Foundation 2010 Service Pack 1, Service Pack 2 Microsoft SharePoint Server 2010 Service Pack 1, and Service Pack 2 of Enterprise or Standard Edition Microsoft SharePoint Server 2013 Service Pack 1 Micorsoft SharePoint Foundation Server 2013 Service Pack 1 	<p>If you are only running SharePoint Server on the SharePoint Server machine, install only .NET Framework 3.5 Service Pack 1. If you are also running the deployment Server on the SharePoint server machine, also install .NET Framework 4 along with .NET Framework 3.5 Service Pack 1.</p>
Processor speed	Core 2 Duo 2.3 GHz	Minimum hardware requirement.
Hard Disk	SATA, 7200 rpm or higher	Minimum hardware requirement.
Memory	2 GB	Minimum hardware requirement.

Pivotal Toolkit

This section lists the system requirements for a machine with Pivotal Toolkit installed.

If Pivotal Toolkit is installed on supported operating systems, Visual Studio 2010 Isolated Shell is installed. Visual Studio is used to build and design Pivotal forms. *Table 29 on the next page* lists details of Pivotal Toolkit.

Table 29 Pivotal Toolkit

Component	Requirements	Comments
Operating system	<ul style="list-style-type: none"> • Windows Server 2012 R2 (Standard and Datacentre Edition) • Windows Server 2012 (Standard and Datacentre Edition) • Windows Server 2008 R2 Service Pack 1 • Windows Server 2008, x86 or x64, Service Pack 2 • Windows 10 (Professional, Enterprise , x86 or x64) • Windows 8.1 (Professional, Enterprise , x86 or x64) • Windows 8 (Professional, Enterprise , x86 or x64) • Windows 7 (Professional, Enterprise or Ultimate Service Pack 1, x86 or x64) • Windows Vista Business, Enterprise or Ultimate Service Pack 2, x86 	
Microsoft applications	Any one of the following: <ul style="list-style-type: none"> • Excel 2016 • Excel 2013 Service Pack 1 • Excel 2010 Service Pack 1, Service Pack 2 	
	Any one of the following: <ul style="list-style-type: none"> • Word 2016 • Word 2013 Service Pack 1 • Word 2010 Service Pack 1, Service Pack 2 	Microsoft Word is required for LetterExpress.
Integrated Development Environment	Visual Studio 2010 Isolated Shell	<p>The Pivotal Toolkit 6.5.3 installer, installs Visual Studio 2010 Isolated Shell by default. Additionally, the Pivotal Toolkit 6.5.3 installers also includes a bootstrap loader that will download and install .NET Framework 4.</p> <p>The compatible versions of Visual Studio that can be used to write client and server tasks are 2010, 2012, 2013, 2015, and Visual Studio</p>

Table 29 Pivotal Toolkit (continued)

Component	Requirements	Comments
		Express and Community editions.  Note: The Visual Studio Express and Visual Studio Community editions are free tools offered by Microsoft; for individual developers, open source projects, academic research, education, and small professional teams.
Reporting Software	<ul style="list-style-type: none"> • Crystal Reports 2013 Service Pack 4 • Crystal Reports 2011 Service Pack 4 • Crystal Reports 2008 Service Pack 3 	
Help viewer	Adobe Acrobat Reader X and later	Required for the <i>Pivotal Toolkit 6.5.3 Toolkit Guide</i> . <i>The Pivotal Toolkit 6.5.3 Toolkit Guide</i> is available after you install Pivotal Toolkit 6.5.3. Click Help in the Customization System to access the <i>Pivotal Toolkit 6.5.3 Toolkit Guide</i> .
Application disk space	160 MB	Application disk space estimates do not include operating system, data, pre-requisites and run-time disk space requirements.
Processor speed	Core 2 Duo 2.3 GHz	Minimum hardware requirement.
Hard Disk	SATA, 7200 rpm or higher	Minimum hardware requirement.
Memory	2 GB	Minimum hardware requirement.

Software Requirements for Other Pivotal Products

Table 30 below lists the supported software requirements for other Pivotal Products.

Table 30 Other Pivotal Products

Product	Requirements
Web Services Generator 6.0	<ul style="list-style-type: none">• Windows 2008 Server R2 Service Pack 1 (64-bit)• ASP.Net 2.0• Visual Studio 2008, Visual Studio 2005, and Visual Studio 2003• .NET Framework 3.5• Microsoft SQL Server 2008 Service Pack 2 (Enterprise Edition) Or• Oracle 12c Release 1 (12.1.0.2) or Oracle 11g Release 1 (11.1.0.6.0) or Release 2 (11.2.0.2) or Oracle 10g Release 2 with Patch 16 (10.2.0.3.0) (Standard or Enterprise Edition)