

## Minimum System Requirements

This document lists the recommended minimum system infrastructure required to run your Blackbaud system. Blackbaud recommends that you purchase top-of-the-line equipment when possible and budget for continual upgrades to your system. In addition to the system requirements, Blackbaud strongly recommends the purchase and scheduled use of a tape or archival backup solution. Blackbaud recommends that you regularly test your backups to ensure their reliability.

In addition, each implementation of Blackbaud CRM is unique. Specific system requirements and suggestions are different for each organization. Contact Blackbaud to discuss your environment and business processes to develop the recommendations specific to your situation. For the **Blackbaud CRM** SDK, see [Blackbaud CRM SDK Developer Environment Setup](#).

**Note:** System requirements are subject to change. Before you make any purchase or installation decisions, ensure you have the latest system requirements and check for third-party compatibility information in the Knowledgebase. If you use multiple Blackbaud products, refer to the system recommendation for each product; the total requirements may be different from what is listed below.

## Blackbaud CRM

workstation requirements	
browser	Internet Explorer 11.0 or higher; latest versions of Firefox, Safari, Chrome and Microsoft Edge. Mobile browsers: the latest versions of Safari and Chrome on Android can be used for the Mobilize area.
processor (CPU)	Intel Pentium/Celeron family, 2 Ghz clock speed or faster.
memory (RAM)	Minimum requirements for your operating system.
disk space	150 MB minimum for processing activities and download cache.
display	SVGA (1024 x 768 minimum). Text and browser zoom of 100%.
internet connection	Broadband (business grade cable modem or DSL).
database server requirements	
operating system	Windows Server 2008 R2 SP1 or higher with IIS 7.5. Windows Server 2012 R2 with IIS 8.0 or IIS 8.5. Windows Server 2016. .NET Framework 4.5.2. 64-bit supported on x64 hardware
transactional database	SQL Server 2012 Enterprise SP4 with compatibility level 110. SQL Server 2014 Enterprise SP1 with compatibility level 110 or SP2 with compatibility level 110. Compatibility level 120 is not supported. SQL Server 2016 Enterprise SP1 (CL 130) with version 4.0, Hotfix 61 and above. <b>Note:</b> PowerShell 5.0 or higher is required for running jobs in SQL2016.
data warehouse	SQL Server 2012 Enterprise SP4 with compatibility level 110. SQL Server 2014 Enterprise SP1 with compatibility level 110 or SP2 with compatibility level 110. Compatibility level 120 is not supported. SQL Server 2016 Enterprise SP1 (CL 130) with version 4.0, Hotfix 61 and above.
processor (CPU)	Please contact Blackbaud to determine the requirements for your specific configuration.
memory (RAM)	Please contact Blackbaud to determine the requirements for your specific configuration.
web server requirements	
operating system	Windows Server 2008 R2 SP1 or higher with IIS 7.5. Windows Server 2012 R2 with IIS 8.0 or IIS 8.5. Windows Server 2016. .NET Framework 4.5.2. 64-bit supported on x64 hardware
network security	Blackbaud recommends Transport Layer Security (TLS) if you connect over a public non-secure network.
scale out	<ul style="list-style-type: none"> <li>◆ Load balancing is supported with single-client affinity.</li> <li>◆ No limit is placed on the number of web servers that you can employ for load balancing.</li> </ul>
hard disk	The web server makes minimal use of the disk. Therefore, a high-performance disk subsystem is not required on the individual web servers.
security	Blackbaud recommends securing your web server with Layer Security (TLS) 1.2 or equivalent technology to prevent unauthorized access to transmitted data.  <b>Note:</b> Blackbaud is not responsible for the installation, configuration, or testing of any web-security measures. Blackbaud assumes no responsibility for the security of your web server or any adverse consequences resulting from security issues. Blackbaud software does not establish or modify security

## Blackbaud CRM and Blackbaud Internet Solutions 4.0



	on the web server. Refer to <a href="http://www.microsoft.com">www.microsoft.com</a> for specific security measures and NTFS permissions needed by Windows Server 2008 R2, Windows Server 2012 and IIS.  If you are a Blackbaud hosted client, your workstation should support TLS 1.1 or greater.
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### deployment requirements

data warehouse	Beginning with 4.0 Service Pack 11, the Blackbaud Data Warehouse (BBDW) is a system requirement.  Existing and future Blackbaud CRM functionality requires the presence of the BBDW. Additionally, performance defects in the OLTP database with a commercially-viable alternative in the BBDW will not be addressed. This does not limit your organization from also using an additional data warehouse.
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## Blackbaud Internet Solutions

### administrative workstation requirement

browser	Internet Explorer 11.0 or higher and the latest version of Firefox, Chrome and Microsoft Edge with cookies and JavaScript enabled for the <b>Blackbaud Internet Solutions</b> administrative workstations.
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### Blackbaud Internet Solutions web server requirements

operating system	Windows Server 2008 R2 SP1 or higher with IIS 7.5. Windows Server 2012 R2 SP1 or higher with IIS 8.5. Microsoft .NET Framework 4.5.2. 64-bit supported on x64 hardware.  <b>Note:</b> <b>Blackbaud Internet Solutions</b> does not support domain controllers or peer-to-peer networks.
disk space	1.2 GB minimum for <b>Blackbaud Internet Solutions</b> program, system, and database management console files; plus 50 MB for the workstation deployment files, which can be installed in a different location.
Internet connection	Dedicated circuit (such as full T1 to a tier 1 ISP) scaled to aggregate the concurrent applications users (100-200 kbps per typical web user). Necessary speed of the connection depends on your website's usage by visiting users and should be reviewed with your consultant during implementation.  HTTPS traffic requires port 443, and HTTP traffic requires port 80. Non-default ports are not supported.
security	Blackbaud recommends securing your web server with Transport Layer Security (TLS) 1.2 or equivalent technology to prevent unauthorized access to transmitted data.  <b>Note:</b> Blackbaud is not responsible for the installation, configuration, or testing of any web-security measures. Blackbaud assumes no responsibility for the security of your web server or any adverse consequences resulting from security issues. Blackbaud software does not establish or modify security on the web server. Refer to <a href="http://www.microsoft.com">www.microsoft.com</a> for specific security measures and NTFS permissions needed by Windows Server 2008 R2, Windows Server 2012 and IIS.  If you are a Blackbaud hosted client, your workstation should support TLS 1.1 or greater.

## Other Compatibility Information

### software requirements

Microsoft Exchange	The Microsoft Exchange integration supports Exchange 2010, Exchange 2013 and Exchange 2016.
Microsoft Office	The Microsoft Office integration supports Office 2010, Office 2013 and Office 2016.  As of BBCRM 4.0SP9, the Microsoft Office integration also supports Office 365; however, the support of Office 365 does not allow for mail merges and OData to be performed through the web. To perform mail merges and use OData functionality, please access the desktop version of Microsoft Office.

	<p>If you are using Internet Explorer and Microsoft Office 2010 or higher, you must have the Blackbaud CRM application start page listed as a trusted site in your browser in order to access the Utilities page.</p>
credit card processing	<p>Credit card processing in <b>Blackbaud Internet Solutions</b> works with <b>Blackbaud Merchant Services</b>. For more information about other supported gateways, see the Tier 3 <a href="#">gateways</a> page.</p> <p><b>Note:</b> Direct debit processing is not managed by these vendors. For Paypal Payflow Pro, a Paypal PayFlow Pro account is required and Payments Pro is not supported.</p>
client browser	<p><b>Blackbaud Internet Solutions</b> supports a Document Type Declaration of XHTML 1.0 Transitional. Depending on your web design, the look and feel of your website may vary across different client browsers. Consider modifying layouts, templates, page designs, and styles to accommodate these differences.</p> <p>You must enable cookies for all <b>Blackbaud Internet Solutions</b> form validations.</p>
data services	<p>If you are using Blackbaud data services, your firewall must allow connections between your organization and Blackbaud. Make sure that your <b>Blackbaud CRM</b> environment can connect to Public IP 54.86.94.244 on port 443 for HTTPS requests. In addition, port 20 should be open for incoming traffic and port 21 should be open for outgoing traffic from IP address 216.235.192.143.</p> <p>For security purposes Blackbaud will also need to whitelist your <b>Blackbaud CRM</b> web server's public IP address. If you are using Blackbaud data services, create a case with Blackbaud Customer Support providing the public IP address of your <b>Blackbaud CRM</b> web server. Include all possible locations if your organization is load balanced.</p>