

### Minimum System Requirements

This document lists the required system infrastructure to run your Blackbaud system. Blackbaud recommends the purchase of top-of-the-line equipment when possible and that organizations budget for continual upgrades to their system. Please note that minimum system requirements are subject to change, so make sure you have the latest information before making any purchases.

In addition to the following minimum requirements, Blackbaud strongly recommends the purchase and scheduled use of a backup solution. The Blackbaud Management Console includes a backup utility to make or schedule backups while the database engine is running. Blackbaud recommends regular testing to ensure reliability.

### The Raiser's Edge 7 SQL Server

#### standalone / workstation minimum requirements

operating system	<table border="1"> <thead> <tr> <th>Operation System</th> <th>No SP</th> <th>SP1</th> </tr> </thead> <tbody> <tr> <td>Windows 8 (32-bit and 64-bit)</td> <td>Yes</td> <td>Yes‡</td> </tr> <tr> <td>Windows 8.1 (64-bit)</td> <td>Yes</td> <td>Yes‡</td> </tr> <tr> <td>Windows 8.1 (32-bit)</td> <td>No</td> <td>Yes‡</td> </tr> <tr> <td>Windows 10 (64-bit)</td> <td>Yes*</td> <td>Yes‡</td> </tr> <tr> <td>Windows 10 (32-bit)</td> <td>No</td> <td>No</td> </tr> </tbody> </table>	Operation System	No SP	SP1	Windows 8 (32-bit and 64-bit)	Yes	Yes‡	Windows 8.1 (64-bit)	Yes	Yes‡	Windows 8.1 (32-bit)	No	Yes‡	Windows 10 (64-bit)	Yes*	Yes‡	Windows 10 (32-bit)	No	No
	Operation System	No SP	SP1																
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	Windows 10 (64-bit)	Yes*	Yes‡																
Windows 10 (32-bit)	No	No																	
<p><b>Note: Blackbaud does not support the use of Home operating systems.</b></p> <p><b>Note:</b> Microsoft Office 2007, Office 2010, Office 2013 (32-bit), or Office 2016 (32-bit) is required to use the Microsoft Integration features.</p> <p>*Not supported as standalone</p> <p>‡ Later service packs for compatible operating systems, SQL server versions, and other infrastructure components are not specifically tested but are assumed compatible. Customers are still encouraged to test any new hardware update before releasing it into a production environment.</p>																			
processor (CPU)	Pentium IV-class or higher																		
memory (RAM)	2GB minimum																		
disk space	1 GB minimum for program and system files and an additional 500 MB free disk space for processing activities																		
	<p><b>Note:</b> For standalone workstations, use the Disk Space chart under Database Server Requirements to estimate the disk space needed for database files.</p>																		
display	SVGA (800 x 600 resolution; 256 colors) minimum, 8-bit color or better																		

## database server minimum requirements

operating system	Windows Server	No SP	SP1	SP2
	Windows Server 2012 (64-bit)	Yes	N/A	N/A
	Windows Server 2012 R2 (64-bit)	Yes	N/A	N/A
	Windows Server 2016	Yes	N/A	N/A

**Note:** Domain controllers, Small Business Servers and peer-to-peer networks, terminal servers and RDC access by workstations are not supported. (Review KB 105893 for more details.)

SQL server	SQL Server	No SP	SP1	SP2	SP3	SP4
	SQL Server 2012 (32-bit & 64-bit)	No	Yes	Yes	Yes	Yes‡
	SQL Server 2012 Express (32-bit & 64-bit)	Yes (as of patch 17)	Yes (as of patch 17)	Yes (as of patch 17)	Yes (as of patch 17)	Yes (as of patch 17)
	SQL Server 2014 (32-bit & 64-bit)	Yes	Yes	Yes‡	Yes‡	N/A
	SQL Server 2014 Express (32-bit & 64-bit)	Yes (as of patch 17)	Yes (as of patch 17)	Yes (as of patch 17)	Yes (as of patch 17)	N/A
	SQL Server 2016 (64-bit)*	Yes (as of Patch 10)	Yes‡	Yes‡	N/A	N/A
	SQL Server 2016 Express	No	No	No	N/A	N/A

\*When using SQL 2016, backups must be performed through SQL Server Management Studio instead of the Blackbaud Management Console. See KB 118849 for more information.

‡Later service packs for compatible operating systems, SQL server versions, and other infrastructure components are not specifically tested, but are assumed compatible. Customers are still encouraged to test any new hardware update before releasing it into a production environment.

**processor (CPU)** Pentium IV-class or higher, 2 GHz minimum for large networks. SQL Server provides enhanced support for Windows servers with multiple processors. It is designed to improve the performance of multi-user databases under heavy use and increase the workload the database can handle. It can also handle larger databases and/or a large numbers of users (20 and more). A dedicated database server, especially with high user loads and activity, should be considered. No mission-critical databases or other client/server applications, including other Blackbaud applications, should run on the same server. If you run more than one client/server application on the same server, that server needs to exceed the minimum requirements for optimal performance.

**Note:** Larger networks and databases require faster processors.

memory (RAM)	1 GB minimum. More memory may be required for databases larger than 1 GB.	
	SQL server	maximum memory supported
	SQL Server 2012 Standard Edition	64 GB
	SQL Server Express 2012 and 2014	1GB
	SQL Server 2012 R2 and 2014 Standard Editions	128 GB
	SQL Server 2016 Standard Edition	128GB
SQL Server 2012, 2012 R2, 2014, and 2016 Enterprise Editions	Maximum that your operating system supports	

	<p><b>Note:</b> SQL Server can dynamically allocate the optimal amount of memory (or cache) to the database to increase performance. Consider purchasing more than the required RAM to allow for a larger cache.</p>														
disk space	<p>1 GB minimum for <i>Raiser's Edge</i> program, system, and database management console files and an additional 500 MB for the workstation deployment files, which can be installed in a different location. Additional space is required for the database.</p> <p><b>Note:</b> Requirements vary, depending on the number of records and the additional modules used. Review the table below:</p> <table border="1"> <thead> <tr> <th>total number of records (constituents and gifts)</th> <th>minimum disk space for database</th> </tr> </thead> <tbody> <tr> <td>Fewer than 100,000</td> <td>300 MB</td> </tr> <tr> <td>100,000 – 250,000</td> <td>750 MB</td> </tr> <tr> <td>500,000 – 1,000,000</td> <td>4 GB</td> </tr> <tr> <td>1,000,000 – 2,000,000</td> <td>5 GB</td> </tr> <tr> <td>2,000,000 – 5,000,000</td> <td>7 GB</td> </tr> <tr> <td>5,000,000+</td> <td>10GB + 4GB for each additional one million records</td> </tr> </tbody> </table>	total number of records (constituents and gifts)	minimum disk space for database	Fewer than 100,000	300 MB	100,000 – 250,000	750 MB	500,000 – 1,000,000	4 GB	1,000,000 – 2,000,000	5 GB	2,000,000 – 5,000,000	7 GB	5,000,000+	10GB + 4GB for each additional one million records
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5,000,000+	10GB + 4GB for each additional one million records														
hard disk	A high-performance disk subsystem, such as SCSI-2 and RAID technology, is recommended.														

## Luminate Online Integration (RELO)

**Supported Versions:** The Raiser's Edge build 796.6401 or higher is required.

### Operating System confirmed compatibility:

- Microsoft .NET Framework Full Build 4.6 (Client Profile and Extended) is required on the server and all workstations that will be running the Luminate Online Plug-In
- Windows Server 2012 (64-bit), SP1
- Windows Server 2012 R2 (64-bit)
- Windows 2003 is not supported.

### Environment requirements:

- Internet Connection: The machine on which your web service is installed must have a permanent internet connection, and access to The Raiser's Edge. Blackbaud recommends using a high-speed internet connection.
- Firewall:
  - Outbound traffic must be allowed over ports: 80 (http), 443(https), and 9350-9354.
  - If you would like to restrict outbound traffic to our RELO Azure services the range of IP addresses are documented here: <https://www.microsoft.com/en-us/download/details.aspx?id=41653>. The IP address ranges listed for the US South Central data center are the ones that are applicable. Please ensure that you don't have a firewall rule preventing outbound traffic to these IP ranges.

Address	Ports Needed	Protocol	What it is
Azure US South(re-luminate.servicebus.windows.net)	80,443,9350-9354	TCP	RELO Application Connectivity
bbg7ps.blackbaudhosting.com	80 & 443	TCP	Provisioning/Subscription Service Check

bbwsupdate1.blackbaud.com (63.128.0.14)	80 & 443	TCP	Update Service (Soap Request)
70.37.92.127	80 & 443	TCP	

## Address Accelerator

This optional subscription service is available via download from our web site.

## The Raiser's Edge Mobile Web Service

In order for mobile users to connect to your database in **The Raiser's Edge**, you must have the *Mobile Service for The Raiser's Edge* installed and running on your server or a single workstation that stays on, and is always connected to the Internet.

**Note:** *The Raiser's Edge* does not need to be open and running at all times for users to use the mobile application. Rather, the server or workstation just needs to remain on.

### Supported Devices:

#### Android

v2.2 and above

#### iOS

iPhone, iPad, iPod Touch v4.4 and above

## Mobile Event Management

In order for Mobile Event Management users to connect to your database in **The Raiser's Edge**, you must have the *Blackbaud Web Services for The Raiser's Edge* installed and running on your server or a single workstation that stays on, and is always connected to the Internet.

**Note:** *The Raiser's Edge* does not need to be open and running at all times for users to use the mobile event management application. Rather, the server or workstation just needs to remain on.

### Supported Device:

#### iOS

iPad v4.4 and above

## Other Compatibility Information

<b>third-party software</b>	<p>The following third-party software is included with <b>The Raiser's Edge 7</b> installation:</p> <ul style="list-style-type: none"><li>◆ Microsoft SQL Server Express 2008 R2 SP2</li><li>◆ Microsoft SQL Server Express 2005 Backward Compatibility Components</li><li>◆ Microsoft Windows Installer 3.1</li><li>◆ Microsoft Windows Installer 4.5</li><li>◆ Microsoft Data Access Components (MDAC) 2.8</li><li>◆ Microsoft .NET Framework 4.6</li><li>◆ Visual Basic for Applications (VBA) Components</li></ul>
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	<ul style="list-style-type: none"> <li>◆ Crystal Report XI Runtime Components</li> <li>◆ <i>Visual Basic for Applications</i> (optional module)</li> <li>◆ Microsoft System CLR Types 2012</li> <li>◆ Microsoft SQL Server 2012 Shared Management Objects</li> </ul> <p><b>Note:</b> If you do not own a license for SQL Server and have a database smaller than 9.5 GBs, you can consider using the Microsoft SQL Server Express which comes bundled with <i>The Raiser's Edge 7</i>. If you have a database larger than 9.5 GBs, then you will need to budget and purchase your own license for a full version of SQL Server that is compatible with <i>The Raiser's Edge</i>. SQL Server Express only recognizes 1 GB of RAM. For more information on SQL Server Express hardware limitations or for SQL Server information, please visit Microsoft's web site, <a href="http://www.microsoft.com">http://www.microsoft.com</a>.</p> <p><b>Note:</b> Blackbaud does not support case sensitive collation sequences with SQL Server.</p> <p><b>Note:</b> Custom reports can be created in Crystal XI</p>
bar code scanner	<p>A laser printer and bar code reader capable of reading a 12-point 3 of 9 bar code font are required to support bar code printing and scanning in mailing and batch entry facilities.</p> <p><b>Note:</b> Serial bar code scanners are not supported.</p>
credit card processing	<p>Credit card processing in <i>The Raiser's Edge Enterprise</i> works with Blackbaud Merchant Services (BBMS), IATS, CyberSource and Beanstream to authorize and transfer credit card transactions. For more information on processing credit cards in <i>The Raiser's Edge Enterprise</i>, refer to 38453 in our Knowledgebase.</p> <p><b>Note: Multiple merchant accounts are supported with The Raiser's Edge Enterprise and BBMS or IATS.</b></p>
electronic funds transfer	<p>The optional module <b>RE:EFT for Electronic Funds Transfer</b> transactions. Following are the supported bank EFT formats:</p> <ul style="list-style-type: none"> <li>◆ CPA 1464 Standard Format</li> <li>◆ CIBC 1464 Standard Format</li> <li>◆ Royal Bank 1464 Standard Format</li> <li>◆ National Bank 1464 Standard Format</li> <li>◆ Toronto Dominion 1464 Standard Format</li> <li>◆ Scotia Bank</li> </ul> <p><b>RE:EFT</b> also works with IATS to process electronic transmission files for credit card gifts. Refer to the Credit Card Processing section for IATS product information.</p> <p>Following are the supported bank EFT formats for Standing Orders in the United Kingdom:</p> <ul style="list-style-type: none"> <li>◆ Barclays</li> <li>◆ Natwest</li> <li>◆ Bank of Scotland</li> <li>◆ Lloyds</li> <li>◆ Royal Bank of Scotland</li> <li>◆ Bank of Ireland</li> <li>◆ HSBC</li> <li>◆ Co-Operative Bank</li> </ul> <p>For direct debits in the United Kingdom <b>The Raiser's Edge</b> works with any bank that have a BACS eligible system.</p>
email	<p>A MAPI-compliant (a Microsoft email standard) email system is required.</p> <p><b>Note:</b> Some vendors do not fully implement the MAPI standard. Blackbaud cannot guarantee these products will work with email features in <b>The Raiser's Edge</b>. Blackbaud has tested compatibility with Microsoft Outlook 2007, 2010, 2013 SP1 (32-bit), and 2016 (32-bit) only.</p>
mail merge	<p>Microsoft Word versions 2007, 2010, 2013 SP1 (32-bit), and 2016 (32-bit) Professional are supported.</p>

printers	<p>Blackbaud does not make specific printer requirements. Reports and forms in Blackbaud products are specifically designed and tested with HP LaserJet printers. We cannot design for and test reports and forms with every printer; therefore, results with other printers may vary.</p> <p>Speed, quality, and usability are generally best achieved with more recent printer models. Updated printer drivers, available directly from the printer or operating system manufacturer, may be necessary for compatibility with Blackbaud products. Consult with reputable vendors and suppliers to determine the best choice for your organization's needs.</p>
server-based computing ("thin-client" technology)	<p>Blackbaud also offers Hosting Services for <b>The Raiser's Edge 7</b>, for which we host <b>The Raiser's Edge 7</b> application and database. Access to the application is provided via your Web browser (Internet Explorer or Firefox) over a secure Citrix client connection. The hosted version provides access to complete Raiser's Edge functionality including a temporary storage directory for exporting and transferring files. For more information, contact your account manager.</p> <p><b>The Raiser's Edge</b> is compatible with Windows 2008 Terminal Services, and Citrix hosting solutions. These thin-client technologies provide complete access to Blackbaud applications over low-bandwidth connections (dial-up, 56K, ISDN) from low-end legacy PCs or from computers running non-supported operating systems such as Macintosh or OS/2. In these environments, all application processing occurs on a single, centralized server.</p> <p>For information on Microsoft Terminal Services Edition, visit <a href="http://www.microsoft.com">http://www.microsoft.com</a>. For information on Citrix, visit <a href="http://www.citrix.com">http://www.citrix.com</a>. To determine your hardware requirements, Citrix suggests a pilot setup and the use of performance tools to measure the impact that users, applications, and location have on setup. Consult with qualified information systems professionals when implementing this technology.</p> <p>Wide Area Network (WAN) and Virtual Private Network (VPN) connections are not supported. for more information, refer to Knowledgebase solution <a href="#">BB50293</a>.</p>