

## System Requirements

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

In addition to the following requirements, Blackbaud strongly recommends the purchase and scheduled use of a tape or archival 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 of your backups to ensure reliability.

## The Education Edge / The Financial Edge

| standalone/workstation requirements |  |
|-------------------------------------|--|
| operating system                    | <ul style="list-style-type: none"> <li>Windows 8, or Windows 8.1 (32-bit and 64-bit).</li> </ul> <p><b>Note:</b> Home editions of Windows operating systems are not supported.</p>   |
| processor (CPU)                     | 1.7GHz Intel Pentium IV equivalent or faster   |
| memory (RAM)                        | 1 GB or higher   |
| disk space                          | 1 GB or higher for program and system files; plus 500 MB free disk space for processing activities.  |
| display                             | Screen resolution 1024x768.  |
| database server requirements        |  |
| operating system                    | <ul style="list-style-type: none"> <li>Windows Server 2012 and Windows Server 2012 R2.</li> </ul> <p><b>Note:</b> Domain controllers, Small Business Servers, NT 4.0 Server, and peer-to-peer networks are not supported.</p>  |
| SQL server                          | <ul style="list-style-type: none"> <li>SQL Server 2005 (Express, 32-bit, and 64-bit), SP4</li> <li>SQL Server 2008 (Express, 32-bit, and 64-bit), SP1, SP2 and SP3</li> <li>SQL Server 2008 R2 (Express, 32-bit, and 64-bit), SP1 is required and SP2 is supported.</li> <li>SQL Server 2012 (32-bit and 64-bit), SP1 and SP 2 are supported.</li> <li>SQL Server 2014 (32-bit and 64-bit)</li> </ul> <p><b>Note:</b> SQL Server 2005, 2008 and 2008 R2 are not compatible when running a combined build of <i>Accounting for Nonprofits 6 (Student Billing, Payroll, etc.)</i> and <i>The Education Edge 7</i>.</p> |

|                 |   |
|-----------------|---|
| processor (CPU) | <ul style="list-style-type: none"> <li>Fewer than 10 <b>Education Edge</b> users and/or small databases (fewer than 250,000 records): 1.7GHz Pentium IV equivalent or better.</li> <li>More than 10 <b>Education Edge</b> users and/or large databases (more than 250,000 records): 3.0GHz Pentium IV equivalent or better.</li> <li>Larger networks and databases require faster processors.</li> <li>A dedicated database server, especially with high user loads and activity, is recommended. No mission-critical databases or other client/server applications, including other Blackbaud applications, should run on the same server.</li> <li>If you run more than one client/server application on the same server, the server needs to exceed the requirements for optimal performance.</li> </ul>   |
| memory (RAM)    | <p>1 GB or higher. More memory may be required for databases larger than 1 GB.</p> <ul style="list-style-type: none"> <li>SQL Server 2005, 2008, 2012, and 2014 Express: Maximum memory utilized is 1 GB.</li> <li>SQL Server 2005 and 2008 Standard and Enterprise Editions, and SQL Server 2012 and SQL Server 2014 Enterprise Edition: Maximum memory utilized is the maximum that your operating system will support</li> <li>SQL Server 2008 R2 and 2012 Standard Editions: Maximum memory utilized is 64 GBs</li> <li>SQL Server 2008 R2 Enterprise Edition: Maximum memory utilized is 2 TBs</li> <li>SQL Server 2014 Standard Edition: Maximum memory utilized is 128 GBs</li> </ul> <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>1.5 GB or higher for program, system, and database management console files; plus 750 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.</p>   |
| hard disk       | A high-performance disk subsystem is recommended.   |

Web Applications (Faculty Access for the Web, NetClassroom, Online Campus Community, WebPortal)

**Faculty Access for the Web and NetClassroom workstation requirements**

|                     |   |
|---------------------|---|
| browser             | <p><i>Faculty Access for the Web</i> and <i>NetClassroom</i> are compatible with W3C-compliant browsers (<a href="http://www.w3.org">www.w3.org</a>). The look and feel of the applications may vary across different client browsers based on their level of CSS support.</p> <ul style="list-style-type: none"> <li><b>Note:</b> Full-page functionality testing is conducted on IE 9.0, IE 10, &amp; IE 11, as well as the latest version of Chrome and Mozilla's Firefox family.</li> </ul> |
| internet connection | An internet connection is required to use <i>Faculty Access for the Web</i> and <i>NetClassroom</i> . A broadband (DSL or cable) or faster connection is recommended.   |

**Online Campus Community (OCC)**

|               |   |
|---------------|---|
| compatibility | <b>The Education Edge</b> requires <b>Online Campus Community 6.51</b> or higher. Please refer to the OCC system requirements for more information. |
|---------------|---|

**WebPortal workstation requirements**

|                     |  |
|---------------------|--|
| browser             | <ul style="list-style-type: none"> <li>PCs: Internet Explorer 8, 9, 10, and 11. Latest version of Firefox and Chrome.</li> <li>Macintosh: Latest version of Firefox.</li> <li>Screen resolution 1024x768.</li> </ul> |
| internet connection | An internet connection is required to use <i>WebPortal</i> . A broadband (DSL or cable) or faster connection is recommended.   |

**web server requirements for Faculty Access for the Web, NetClassroom and WebPortal**

|                  |   |
|------------------|---|
| operating system | <ul style="list-style-type: none"> <li>Windows Server 2012. <b>Please see KB tip # <a href="#">BB744883</a>.</b></li> </ul> |
|------------------|---|

|                     |   |
|---------------------|---|
|                     | <ul style="list-style-type: none"> <li>Windows Server 2012 R2. <b>Please see KB tip # <a href="#">BB744883</a>.</b></li> </ul> <p><b>Note:</b> Domain controllers, Small Business Servers, NT 4.0 Server, and peer-to-peer networks are not supported.</p> <p><b>Note:</b> Separate web and database servers are required for <i>Faculty Access for the Web</i>, <i>NetClassroom</i>, and <i>Online Campus Community</i>. It is recommended for <i>WebPortal</i>. <b>NetClassroom</b> requires a dedicated web server (e.g., not installed on the same web server as <i>Faculty Access for the Web</i> or <i>WebPortal</i>).</p> <p><b>Note:</b> <b>The Education Edge</b> client needs to be installed on the Blackbaud web application web server(s).</p> |
| processor (CPU)     | 3.0GHz Pentium IV equivalent or better  |
| memory (RAM)        | 1 GB or higher  |
| disk space          | 2 GB or higher for program and system files   |
| internet connection | If the web application is accessed via the Internet, Blackbaud recommends using a high-speed Internet connection.   |
| security            | <p>Blackbaud recommends securing your web server with Secure Socket Layer (SSL) or equivalent technology to prevent unauthorized access to transmitted data.</p> <p><b>Note:</b> Blackbaud is not responsible for the installation, configuration, and testing of any web security measures. Blackbaud assumes no responsibility for the security of your web server and 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">http://www.microsoft.com</a> for specific security measures and NTFS permissions needed by Windows Server 2012 and 2012 R2 and IIS.</p>   |

### Accounting Forms/Blackbaud Forms

With the optional module *Accounting Forms*, you can print accounting forms (including checks, statements, invoices, and purchase orders) on blank paper. You can print checks according to your bank's specifications on standard blank check stock. An HP LaserJet series printer that supports Magnetic Ink Character Recognition (MICR) is required to print checks. For more information, visit <http://www.blackbaud.com/blackbaud-forms>

*Blackbaud Forms* provides computer forms (such as checks, statements, and purchase orders) and envelopes specifically designed for use with **The Education Edge / The Financial Edge**. Blackbaud forms are guaranteed to align correctly and can be customized to your organization's specifications, using your logo, special inks, and print styles. Pre-printed forms from other suppliers are not guaranteed to align properly and are not supported by Blackbaud.

### School Store Manager/Point of Sale

Blackbaud's *School Store Manager* includes Microsoft's Retail Management System (RMS) Store Operations™ and version 1.2 is compatible with **Student Billing**. Both versions of Student Billing are supported with RMS 1.3 and 2.0. However RMS version 1.3 and 2.0 is only supported with **Student Billing** if it does not integrate with RMS for **The Raiser's Edge 7**. QuickSell 2000 is not supported with **Student Billing**. If you plan to use *School Store Manager* with **Student Billing**, convert to Retail Management Systems before converting to **Student Billing**.

*Point of Sale 7* includes Retail Management System Store Operations™ and is compatible with **The Raiser's Edge 7** (see **The Raiser's Edge** system recommendations for specific compatibility requirements). Microsoft Dynamics *Point of Sale* 2009 is not supported for **The Financial Edge**. For Retail Management Systems Store Operations™ and QuickSell 2000™ system requirements, visit <http://www.microsoft.com>. If you use SQL Server 2005 and have *School Store Manager*, you must activate ad-hoc querying.

### Microsoft Dynamic POS

For Microsoft Dynamic POS system requirements, visit <http://www.microsoft.com/dynamics/en/gulf/using/pos-system-requirements.aspx>

### F9

For F9 system requirements, visit <http://www.f9trialhosting.com/downloads/F9SystemRequirements.aspx>.

**ABM**

For ABM system requirements, visit <http://www.blackbaud.com/files/support/downloads/abm/abmsysreq.pdf>.

**PaperSave**

For PaperSave 5 system requirements, visit <http://downloads.papersave.com/Support/Documentation/Blackbaud/PaperSave%205%20PreReqs%20for%20FE%20v4.pdf>.

**Other Compatibility Information**

|                                  |  |
|----------------------------------|--|
| <p>third-party software</p>      | <p>The following third-party software is included with <b>The Education Edge</b> installation:</p> <ul style="list-style-type: none"> <li>◆ Microsoft SQL Server 2005 Express with SP3</li> <li>◆ Microsoft SQL Server 2005 Backwards Compatibility Components</li> <li>◆ Jet 4.0</li> <li>◆ Microsoft .Net Framework Version 2.0.50727</li> <li>◆ Microsoft Data Access Components 2.8</li> <li>◆ Windows Installer 3.1</li> <li>◆ Microsoft XML3 Components</li> <li>◆ Microsoft XML4 Components</li> <li>◆ Adobe Acrobat Reader</li> <li>◆ <i>Visual Basic for Applications</i> (optional module)</li> <li>◆ Crystal Decisions <i>Crystal Reports for Blackbaud</i> version 8.5 Standard (one user license for <b>The Education Edge / The Financial Edge</b>; <i>Crystal Reports Professional</i> is supported, but not included).</li> <li>◆ <i>Crystal Reports XI-viewer</i> is installed to view custom reports within <b>The Education Edge / The Financial Edge</b> that were written in Crystal XI.</li> </ul> <p><b>Note:</b> Microsoft Office 2007 or Office 2010 is required to use the Microsoft Integration features.</p> <p>Microsoft offers different licensing models for customers to license SQL Server 2005, 2008, 2008 R2. Each model is designed to meet specific customer needs. For Web applications, Microsoft recommends a separate Processor license for each processor used by the SQL Server instance. It includes access for an unlimited number of users or devices to connect to the SQL Server instance from either inside or outside the firewall. You do not need to purchase additional Server Licenses or Client Access Licenses (CALs) when licensed under the per processor model.</p> <p>When purchasing Blackbaud Web applications, you should review your Microsoft SQL licenses and ensure you have the required licensing. For further information about Microsoft's SQL Server licensing requirements, click <a href="http://www.microsoft.com/sqlserver/en/us/product-info.aspx">http://www.microsoft.com/sqlserver/en/us/product-info.aspx</a>.</p> <p><b>Note:</b> Blackbaud does not support case sensitive collation sequences with SQL Server.</p> |
| <p>electronic funds transfer</p> | <p>The optional module <i>Electronic Funds Transfer</i> allows you to process direct debits and credit card transactions to your <b>Accounts Payable</b> bank account.</p> <p>Supported bank EFT formats for the United States:</p> <ul style="list-style-type: none"> <li>◆ U.S. bank standard EFT format</li> </ul> <p>Supported bank EFT formats for Canada:</p> <ul style="list-style-type: none"> <li>◆ Bank of Nova Scotia (Scotiabank) format</li> <li>◆ CIBC 1464 standard format</li> <li>◆ CPA 1464 format (default)</li> <li>◆ EFT Canada Excel format</li> <li>◆ National Bank 1464 standard format</li> <li>◆ Royal Bank 1464 format</li> <li>◆ Toronto Dominion 1464 standard format</li> </ul> <p>Supported bank EFT formats for Australia:</p> <ul style="list-style-type: none"> <li>◆ Australia bank standard EFT format</li> </ul> <p>Supported bank EFT formats for New Zealand:</p>   |

|   |   |
|---|---|
|   | <ul style="list-style-type: none"> <li>◆ BNZ bank standard EFT format</li> <li>◆ ANZ bank standard EFT format</li> </ul>  |
| email   | <p>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 <i>The Education Edge / The Financial Edge</i>. Blackbaud has tested compatibility with Microsoft Outlook 2010.</p>  |
| mail merge  | <p>Microsoft Word versions Professional, 2007, and 2010 are supported.</p>  |
| printers  | <p>Reports and forms in Blackbaud products have been specifically designed and tested with HP LaserJet laser printers.</p>  |
| server-based computing ("thin-client" technology) | <p>For information on Microsoft Terminal or Remote Desktop Services, 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> |