



# Enterprise Edition

Version 1.10.0

## System Requirements and Technology Overview

The Scholastic Achievement Manager (SAM) is the learning management system and technology platform for all Scholastic Enterprise Edition (EE) applications. EE applications take advantage of advances in technology, address the needs of schools created by the introduction of NCLB, and provide a platform for district-wide implementation of Scholastic products.

SAM provides administrators with the ability to implement and monitor applications on a district-wide basis based on scalable technology, as well as district-wide capabilities such as district reporting, AYP demographic grouping and reporting, and AYP demographic filtering. SAM also provides teachers with multiple supports for data-driven instruction.

### SAM Technology Platform

SAM and EE applications are built using Internet and industry-standard technology such as MySQL and JBoss in order to provide for high levels of concurrent usage and reliability. EE applications use standard Internet components that simplify setup and optimize issues surrounding student access to servers. Clients connect to application servers over HTTP or HTTPS using the server IP Address.

The recommended system requirements outlined in the following sections are based on a certification process in which applications are put through a rigorous set of tests to determine their stability, performance, and compatibility with each other and with a wide variety of hardware and software environments. Scholastic lists requirements that have been tested and will be supported by Scholastic should issues arise. Noncertified configurations may be compatible with EE applications but Scholastic cannot support these configurations.

System Requirements for individual Scholastic EE programs begin on *page 8*.

**Contact Scholastic Customer Support at 1-800-283-5974 for specific questions regarding these requirements or any of the information contained in this document.**



## Enterprise Edition System Requirements

### Servers

EE programs use two types of servers: **application servers** (which run the programs and hold student data) and **aggregation servers** (an optional server which holds data aggregated from multiple application servers within the district). System requirements are generally the same for both types of servers. (Scholastic Hosting Services customers require no server, see *page 7* for more information.)

Servers must have a minimum of 2 GB of memory and a static IP address. For large, centralized servers, additional memory may be required. Scholastic recommends the use of 64-bit operating systems and a minimum of 4 GB of RAM for implementations involving very large databases or very high numbers of concurrent users. **Contact Scholastic Customer Support at 1-800-283-5974 to discuss specific requirements.**

Scholastic recommends the use of multi-core Intel® Xeon® processors operating at 2.0 GHz or better for servers. *Faster processors, more cores, and more memory all contribute to the ability of the server to handle higher numbers of concurrent users.*

Scholastic EE programs will run on the latest release of the servers operating systems for 32-bit and 64-bit versions of the software:

- Windows® 2008, Windows 2003
- Mac® OS X Server 10.6, 10.5, 10.4.11
- Novell®: SUSE Linux® Enterprise Server 11 (32 bit only), 10

EE v1.10.0 and later versions require that application servers have Internet access for SAM Connect registration.

Scholastic EE programs may be installed on virtual servers using virtualization software such as VMWare ESX. Resources for the Scholastic VM should be dedicated, not shared.

Scholastic EE programs are **not** supported on servers using the following operating systems:

- Windows 2000 Server, Windows NT
- Mac OS X Server 10.0 through 10.3.9
- Novell Netware
- Novell SUSE Linux Enterprise Server 9
- Novell SUSE Linux Enterprise Server 11 (64 bit)

For installations that serve a large number of concurrent users or 100,000 active student accounts, additional application servers may be required (see **Concurrency**, *page 4*).

Scholastic strongly recommends that EE programs be installed on a dedicated server not used by other applications. Installing EE programs on a server shared with other applications will reduce overall system performance (see **Concurrency**, *page 4*).

**Please contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your district's servers.**



## Workstations

EE v1.10.0 supports a wide range of client workstations running many different processors and operating systems. As a general rule, any workstation or laptop purchased in the last four years should be capable of running any Enterprise Edition application. Districts considering using older workstations should consider the following factors:

1. CPU clock speed is not a reliable indicator of relative performance. The slowest Intel® Core 2 Duo is more powerful than the fastest Pentium® 4. A Core 2 Duo @ 2.13GHz is almost twice as fast as a P4 @ 2.8GHz. Since *System 44*® and *Scholastic Phonics Inventory*™ (SPI) work adequately on a 2.8GHz P4, they will work with **any** Core 2 Duo, regardless of clock speed.
2. Workstations that run an Intel Pentium M, Pentium D or Intel Celeron® must at minimum have a clock speed and RAM that are the same or greater than what is recommended for a Pentium 4 (512K, 2.8GHz in the case of *System 44*).
3. Workstations, laptops, or NetBooks with Atom Processors may or may not be suitable for running Enterprise Edition applications depending on the processor's version, clock speed, and supporting hardware. Scholastic recommends testing any Atom-based system with the application(s) you intend to use.
4. The table below shows which processor families are recommended and should be avoided, and which should be considered with caution, especially for use with *System 44* or *SPI*:

### Processor Brand Name

<ul style="list-style-type: none"> <li>▪ Intel 2x Core 2 Extreme</li> <li>▪ Intel Core i7</li> <li>▪ Intel Core 2 Quad</li> <li>▪ AMD Phenom</li> <li>▪ Intel Core 2 Duo</li> <li>▪ Dual-core Celeron 740</li> <li>▪ Intel Pentium EE</li> <li>▪ AMD Athlon II X2</li> </ul>	<p>FASTER</p>	
<hr/>		<p>Above this line is fine regardless of CPU spec</p>
<ul style="list-style-type: none"> <li>▪ Intel Atom</li> <li>▪ AMD Athlon 64</li> <li>▪ Pentium Dual-Core</li> <li>▪ Intel Pentium D</li> <li>▪ AMD Athlon X2</li> <li>▪ Intel Pentium 4</li> </ul>		<p>In this zone, the CPU needs a clock speed of ~2.8GHz or better for <i>System 44</i> and <i>SPI</i> (1.66 GHz for the Intel Atom)</p>
<hr/>		<p>Anything below this line is not recommended regardless of CPU speed</p>
<ul style="list-style-type: none"> <li>▪ Intel Celeron</li> <li>▪ Intel Pentium III</li> <li>▪ AMD Athlon B</li> <li>▪ AMD K6</li> <li>▪ Intel Pentium M</li> </ul>	<p>SLOWER</p>	

GHz numbers are only comparable within a processor family. A 2.8 GHz P4 is faster than a 2.0GHz P4, but a 1.8GHz Core 2 Duo is faster than either P4. In general, more cores mean faster, a larger L2 Cache means faster, and within a family higher clock speed (GHz) is faster.



Workstation requirements vary depending on the EE program. See *page 8* for program requirements.

**A Note Regarding NetBooks:** In the past two years, NetBooks (laptop-format miniature computers typically configured with an Intel Atom-class processor, Windows 7, Vista, or XP, reduced local storage, 1 GB of RAM and a small display) have been gaining in popularity. Some models of NetBooks are able to run EE programs successfully. Other models are not compatible because of inadequate local storage, underpowered processors, or screens not capable of displaying a minimum resolution of 800 x 600 (*System 44*<sup>®</sup> and *Scholastic Phonics Inventory*<sup>™</sup> require a minimum of 1024 x 768). In particular, Linux-based NetBooks or NetBooks with a maximum screen resolution of 1024 x 576 are not suitable for use with EE programs.

**Please contact Scholastic Customer Support at 1-800-283-5974 with questions regarding specific NetBook models.**

## Media Options

Media (CD or DVD-based media assets) may be deployed onto each student workstation or stored on a media server that resides on the same LAN as the student workstations. The media server may be any Macintosh, Windows, or Linux server (or NAS device) configured for file sharing. Any media shared over the network affects bandwidth.

For school-level deployments, Scholastic strongly recommends that media be installed on a dedicated media server or loaded onto each individual student workstation. In smaller class-level deployments, it may be feasible to use a single server as both an application and a media server.

## Concurrency

Concurrency refers to the number of simultaneous users that may be logged in to a program before there is a noticeable reduction in the program's responsiveness.

Servers that meet the recommended specifications have been lab-tested to be capable of supporting 700 concurrent users in *Fraction Nation*<sup>®</sup>, 750 concurrent users in *READ 180*<sup>®</sup> and *System 44*, and 1000 concurrent users in all other applications. These benchmarks were established by simulating a district infrastructure with high-speed WAN, gigabit Ethernet switch, and 100Base-T connections to all workstations from the servers described on *page 2*.

These concurrence levels represent a best-case scenario. Real-world performance may be considerably lower as concurrency is affected by many factors, including:

- Network bandwidth across the enterprise
- Bandwidth utilization
- Packet prioritization availability
- Firewall configurations
- Processor speed on the server
- Server virtualization
- Available memory on the server
- Other server settings
- Content filtering settings

In addition, concurrency is affected by running class, school, or district reports while students are using the applications. Impact from running reports is most noticeable when running large district-level reports or when a server is running near full capacity from student sessions. Therefore, Scholastic recommends running reports whenever possible outside of normal class time.

In testing, server performance was found to be comparable on Macintosh<sup>®</sup>, Windows<sup>®</sup>, and Linux<sup>®</sup> servers. To achieve highest levels of performance, multiple cores and a 64-bit OS (e.g., Windows 2008 64 bit) are required.

**Please contact Scholastic Customer Support at 1-800-283-5974 for help with selecting and tuning an Enterprise Server to best match your installation's product mix and expected usage.**



## Bandwidth Requirements

As a rule of thumb, plan for an average of 100 kbit/s of bandwidth per active workstation, bearing in mind that *average*, *peak*, and *initial* bandwidth requirements vary greatly depending on the product and the student, teacher, or administrator usage. For example, *READ 180*<sup>®</sup> uses only 4.4 kbit/s on average over a 20-minute session, but during Zone transitions in the software, as well as login and logging off, bandwidth can briefly spike to 100 kbit/s. Similarly, uploading a long student recording will momentarily use significant bandwidth. Over a T3 connection (45 MB/s) this upload may only require a few milliseconds, but over a T1 connection (1.5 MB/s) the network could be saturated for several seconds.

Similarly, *Scholastic Reading Counts!*<sup>®</sup> requires a T1 connection's full bandwidth for a few seconds when a student first starts a session, but thereafter consumes very little bandwidth. Therefore, 30 students using *SRC!* at different times throughout the day over a T1 connection may not see any impact on performance. But if 30 students all log into *Scholastic Reading Counts!* at the same time over a T1 connection, there will likely be noticeable delays.

No matter how fast a network you have between workstation and server, if other bandwidth-intensive activities (VoIP, streaming video, audio downloads, database backups, etc.) are running anywhere on the network at the same time, performance on Enterprise Edition applications may suffer. For this reason, Scholastic recommends the use of packet shaping techniques on heavily trafficked networks.

EE programs operate over TCP/IP networks including wireless (802.11.a, g, n). When employing a wireless network, it is important not to overload the access point with too many connections, or student sessions may be dropped. Scholastic recommends using an industry-standard switched network for optimal performance.

**Contact Scholastic Customer Support at 1-800-283-5974 for specific questions regarding bandwidth concerns.**

## District-Wide Deployment Options

Enterprise Edition product lines are designed for flexibility. SAM and EE applications may be deployed using one of five basic deployment options or configurations, depending on the district's bandwidth, infrastructure, hardware CPU and memory, and the estimated level of concurrent usage. Local deployment options require:

- **Student workstations** in a classroom (desktops or laptops)
- One **teacher workstation**
- An **application server** that the workstations are networked to

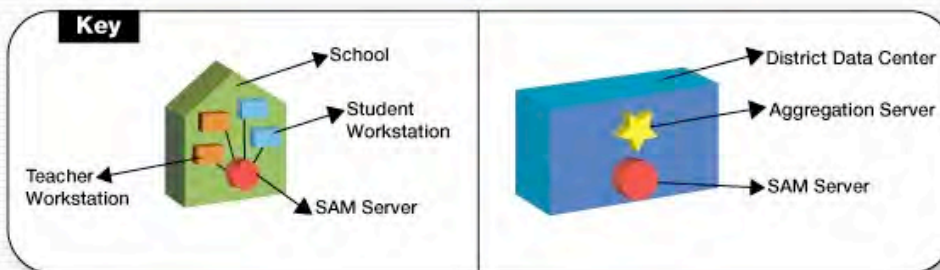
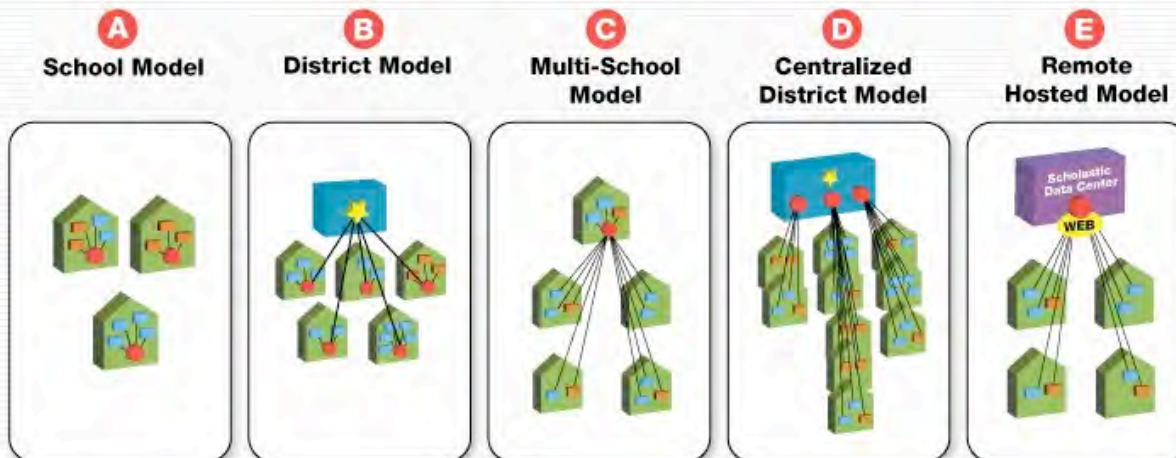
Additionally, for large deployments with multiple application servers, the following may also be required:

- A **data aggregation server** that can receive student data from multiple application servers to create district-wide reports. (If aggregation is not desired, or all schools are supported by one application server, no aggregation server is needed.)

Scholastic recommends that application servers be dedicated to SAM and EE applications to ensure best possible performance. A high-speed network with sufficient bandwidth may enable you to locate one or more servers centrally and use each to service multiple schools with multiple classrooms. Districts that do not have a minimum of 20 MB/s or better intranet or WAN capability should deploy local servers.



# Planning Your Deployment



**Option A School Model (Local Application Server[s] and no Data Aggregation Server):** Recommended for districts or schools that do not have high-speed infrastructures and have no desire to aggregate data. There are no district-wide reporting or data aggregation capabilities since this option does not include a data aggregation server.

**Option B District Model (Local Application Server[s] and Centralized Data Aggregation Server):** Recommended for districts that deploy application servers locally but also want to run district-wide reports. SAM aggregation tools may be used to consolidate data from multiple application servers into a single aggregated database at a central location.

**Option C Multi-School Model (Centralized Application Server[s] and no Data Aggregation Server):** Recommended for districts with high-speed infrastructures that have a centralized application server capable of supporting multiple schools. Depending on concurrency, multiple centralized application servers may need to be employed.



**Option D Centralized District Model (Centralized Application Server[s] and Data Aggregation Server):** Recommended for districts with high-speed infrastructures and multiple centralized application servers, each capable of supporting multiple schools. Data from the application servers may then be aggregated to a district-wide aggregation server.

**Option E Remote Hosted Model:** Using Scholastic Hosting Services, this option uses a Scholastic data center to host your applications, with workstations connecting to the data center over the Internet (workstation software still needs to be installed, as per program installation requirements). There are no school or district servers (though some districts may still require a Media Server). This option is recommended for districts that want to eliminate the cost of installing and maintaining local application servers, as well as Novell Netware districts or any district moving toward an ASP or SaaS deployment model. No aggregation server is required.

## Data Management

See the [SAM Data Management Manual](#), available at the [Scholastic Education Product Support](#) website, [www.scholastic.com/sam/productsupport](http://www.scholastic.com/sam/productsupport), for information on data movement: aggregation; data migration; importing, exporting, or transferring data; or backing up EE systems.

**Contact Scholastic Customer Support at 1-800-283-5974 for specific questions regarding moving data within SAM, from one SAM installation to another, or from Student Management Systems into SAM.**



## System Requirements for System 44<sup>®</sup> Workstations

*System 44* and the programs in the *System 44* Suite (*System 44*, *Scholastic Phonics Inventory*<sup>™</sup>, *Scholastic Reading Inventory*<sup>™</sup>) run on Windows<sup>®</sup> and Macintosh<sup>®</sup> computers. Computers manufactured after 2006 should be capable of running the entire *System 44* Suite without functionality issues. System configurations are based on Scholastic's certification process (*page 1*). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run *System 44*, depending on their configuration; however, Scholastic may not have certified these configurations. Thin Client workstations have not been certified and are not recommended for EE programs.

Scholastic recommends Dual Core Intel processors for both Windows and Macintosh workstations. See *page 3* for specific processor recommendations.

The *System 44* Suite is certified for workstations using the following operating systems, all with the latest service packs:

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

The *System 44* Suite is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

*System 44* requires workstations to have a minimum of 1GB of memory (depending on operating system and other applications) and 2.5 GB free hard disk space.

*System 44* also requires workstations to have the following:

- DVD/CD-ROM drive for installation
- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but application performance may be limited by the network's bandwidth capacity)
- Adobe<sup>®</sup> AIR<sup>®</sup> (installed by the *System 44* installer)
- Apple<sup>®</sup> QuickTime<sup>®</sup>
- Adobe<sup>®</sup> Reader
- Headsets w/microphones (Scholastic recommends analog 3.5 mm headsets over USB models)

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

EE programs are certified with the following Internet browsers:

- Windows: Internet Explorer<sup>®</sup> 7.x, 8.x; Firefox<sup>®</sup> 3.x; or Safari<sup>®</sup> 3.x
- Macintosh: Safari 2.x and later, and Firefox 3.x

**Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**



## System Requirements for *READ 180*® Workstations

*READ 180*, and the programs in the *READ 180* Suite (*READ 180* Student Client, *Scholastic Reading Counts!*® *Scholastic Reading Inventory*™, *rSkills*® Tests) run on Windows and Macintosh computers. Computers manufactured after 2006 should be capable of running the entire *READ 180* Suite without functionality issues. System configurations are based on Scholastic's certification process (page 1). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run *READ 180*, depending on their configuration; however, not all of these configurations have been certified by Scholastic. Thin Client workstations have not been certified and are not recommended for EE programs.

**NOTE:** *System 44*® requirements are higher than those for *READ 180*. If running both programs or suites on the same system, make sure your computers meet *System 44* requirements (page 8).

Scholastic recommends Dual Core Intel processors for both Windows and Macintosh workstations. See page 3 for specific processor recommendations.

The *READ 180* Suite is certified for workstations using the following operating systems (with the latest service packs):

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

The *READ 180* Suite is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

*READ 180* requires workstations to have a minimum of 512 MB RAM and 500 MB free hard disk space. Depending on your operating system and other applications on the workstation, Scholastic recommends that workstations have 1 GB of memory. Additionally, *READ 180* Topic CDs require 5 GB of free disk space on either the media server or on local workstations.

*READ 180* also requires workstations to have the following:

- DVD/CD-ROM drive for installation
- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but performance may be limited by network bandwidth capacity)
- Apple® QuickTime
- Adobe® Reader for reports
- Headset w/microphone (Scholastic recommends analog 3.5 mm headsets over USB models)

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

EE programs are certified with the following Internet browsers:

- Windows: Internet Explorer 7.x, 8.x; Firefox 3.x; or Safari 3.x
- Macintosh: Safari 2.x and later, and Firefox 3.x.

A DVD player or projection system, or interactive whiteboard, connected to the teacher workstation, is recommended for *READ 180* classrooms in order to view *rBook*® anchor videos. **Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**



## System Requirements for *ReadAbout*® Workstations

*ReadAbout* and the programs in the *ReadAbout* Suite (*ReadAbout* and *Scholastic Reading Inventory*) run on Windows® and Macintosh® computers. Computers manufactured after 2006 should be capable of running the entire *ReadAbout* Suite without functionality issues. System configurations are based on Scholastic's certification process (*page 1*). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run *ReadAbout*, depending on their configuration; however, these configurations may not have been certified by Scholastic. Thin Client workstations have not been certified and are not recommended for EE programs.

**NOTE:** *System 44*® requirements are higher than those for *ReadAbout*. If running both programs or suites on the same system, make sure your computers meet *System 44* requirements (*page 8*).

Scholastic recommends Dual Core Intel processors for both Windows and Macintosh workstations. See *page 3* for specific processor recommendations.

The *ReadAbout* Suite is certified for workstations using the following operating systems (with the latest service packs):

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

The *ReadAbout* Suite is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

*ReadAbout* requires workstations to have a minimum of 512 MB RAM and 500 MB free hard disk space. Depending on your operating system and other applications on the workstation, Scholastic recommends that workstations have 1 GB of memory.

*ReadAbout* also requires workstations to have the following:

- DVD/CD-ROM drive for installation
- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but application performance may be limited by the network's bandwidth capacity)
- Apple® QuickTime
- Adobe® Reader for reports

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

EE programs are certified with the following Internet browsers:

- Windows: Internet Explorer® 7.x, 8.x; Firefox® 3.x; or Safari® 3.x
- Macintosh: Safari 2.x and later, and Firefox 3.x

**Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**



## System Requirements for *FASTT Math*<sup>®</sup> Workstations

*FASTT Math* launches from a browser running on Windows and Macintosh computers. Computers manufactured after 2006 should be capable of running *FASTT Math* without functionality issues. System configurations are based on Scholastic's certification process (*page 1*). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run *FASTT Math*, depending on their configuration; however, these configurations may not have been certified by Scholastic. Thin Client workstations have not been certified and are not recommended for EE programs.

Scholastic recommends Dual Core Intel processors for both Windows<sup>®</sup> and Macintosh<sup>®</sup> workstations. See *page 3* for specific processor recommendations.

*FASTT Math* is certified for workstations using the following operating systems (with the latest service packs):

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

*FASTT Math* is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

*FASTT Math* requires workstations to have a minimum of 512 MB RAM. Depending on your operating system and other applications on the workstation, Scholastic recommends that workstations have 1 GB of memory.

*FASTT Math* also requires workstations to have the following:

- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but application performance may be limited by the network's bandwidth capacity)
- Adobe<sup>®</sup> Flash<sup>®</sup> 9 or higher (plug-in or ActiveX controller required for browser)
- Adobe Reader for reports
- Headset w/microphone (Scholastic recommends analog 3.5 mm headsets over USB models)

*FASTT Math* uses a browser client. *FASTT Math* is certified with the following Internet browsers:

- Windows: Internet Explorer<sup>®</sup> 7.x, 8.x; Firefox<sup>®</sup> 3.x; or Safari<sup>®</sup> 3.x
- Macintosh: Safari 2.x and later, and Firefox 3.x

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

**Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**



## System Requirements for Fraction Nation<sup>®</sup> Workstations

Fraction Nation launches from a browser running on Windows and Macintosh computers. Computers manufactured after 2006 should be capable of running Fraction Nation without functionality issues. System configurations are based on Scholastic's certification process (*page 1*). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run Fraction Nation, depending on their configuration; however, these configurations may not have been certified by Scholastic. Thin Client workstations have not been certified and are not recommended for EE programs.

Scholastic recommends Dual Core Intel processors for both Windows<sup>®</sup> and Macintosh<sup>®</sup> workstations. See *page 3* for specific processor recommendations.

Fraction Nation is certified for workstations using the following operating systems (with the latest service packs):

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

Fraction Nation is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

Fraction Nation requires workstations to have a minimum of 512 MB RAM. Depending on your operating system and other applications on the workstation, Scholastic recommends that workstations have 1 GB of memory.

Fraction Nation also requires workstations to have the following:

- Adobe<sup>®</sup> Flash<sup>®</sup> 9 or higher (plug-in or ActiveX controller required for browser)
- Adobe Reader for reports
- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but application performance may be limited by the network's bandwidth capacity)
- Headset w/microphone (Scholastic recommends analog 3.5 mm headsets over USB models)

Fraction Nation uses a browser-based client. EE programs are certified with the following Internet browsers:

- Windows: Internet Explorer<sup>®</sup> 7.x, 8.x; Firefox<sup>®</sup> 3.x; or Safari<sup>®</sup> 3.x
- Macintosh: Safari 2.x and later, and Firefox 3.x

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

**Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**



## System Requirements for *Scholastic Phonics Inventory* Workstations

*Scholastic Phonics Inventory* (*SPI*) runs on Windows® and Macintosh® computers. Computers manufactured after 2006 should be capable of running *SPI* without functionality issues. System configurations are based on Scholastic's certification process (*page 1*). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run *SPI*, depending on their configuration; however, these configurations may not have been certified by Scholastic. Thin Client workstations have not been certified and are not recommended for EE programs.

Scholastic recommends Dual Core Intel processors for both Windows and Macintosh workstations. See *page 3* for specific processor recommendations.

*SPI* is certified for workstations using the following operating systems (with the latest service packs):

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

*SPI* is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

*SPI* requires workstations to have a minimum of 1GB of memory (depending on operating system and other applications) and 2.5 GB of free hard disk space.

**NOTE:** Other EE program requirements are higher than those for *SPI*. If running these programs on the same system, make sure computers meet the higher requirements.

*SPI* also requires workstations to have the following:

- DVD/CD-ROM drive for installation
- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but application performance may be limited by the network's bandwidth capacity)
- Adobe® AIR (installed by the *System 44* installer)
- Adobe Reader for reports
- Headset w/microphone (Scholastic recommends analog 3.5 mm headsets over USB models)

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

EE programs are certified with the following Internet browsers:

- Windows: Internet Explorer® 7.x, 8.x; Firefox® 3.x; or Safari® 3.x
- Macintosh: Safari 2.x and later, and Firefox 3.x

**Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**



## System Requirements for *Scholastic Reading Counts!*<sup>®</sup> Workstations

*Scholastic Reading Counts! (SRC!)* runs on Windows and Macintosh computers. Computers manufactured after 2006 should be capable of running *SRC!* without functionality issues. System configurations are based on Scholastic's certification process (*page 1*). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run *SRC!* depending on their configuration; however, these configurations have not been certified by Scholastic. Thin Client workstations have not been certified and are not recommended for EE programs.

Scholastic recommends Dual Core Intel processors for both Windows and Macintosh workstations. See *page 3* for specific processor recommendations.

*SRC!* is certified for workstations using the following operating systems (with the latest service packs):

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

*SRC!* is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

*SRC!* requires workstations to have 512MB to 1GB of memory (depending on operating system) and 60MB of free hard disk space.

**NOTE:** Other EE program requirements are higher than those for *SRC!* If running these programs on the same system, make sure computers meet the higher requirements.

*SRC!* requires workstations to have the following:

- DVD/CD-ROM drive
- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but performance may be limited by network bandwidth capacity)
- Adobe Reader for reports

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

EE programs are certified with the following Internet browsers:

- Windows: Internet Explorer<sup>®</sup> 7.x, 8.x; Firefox<sup>®</sup> 3.x; or Safari<sup>®</sup> 3.x
- Macintosh: Safari 2.x and later, and Firefox 3.x

**Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**



## System Requirements for *Scholastic Reading Inventory*™ Workstations

*Scholastic Reading Inventory (SRI)* runs on Windows® and Macintosh® computers. Computers manufactured after 2006 should be capable of running *SRI* without functionality issues. System configurations are based on Scholastic's certification process (*page 1*). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run *SRI* depending on their configuration; however, these configurations have not been certified by Scholastic. Thin Client workstations have not been certified and are not recommended for EE programs.

Scholastic recommends Dual Core Intel processors for both Windows and Macintosh workstations. See *page 3* for specific processor recommendations.

*SRI* is certified for workstations using the following operating systems (with the latest service packs):

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

*SRI* is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

*SRI* requires workstations to have 512MB to 1GB of memory (depending on operating system) and 60MB of free hard disk space.

**NOTE:** Other EE program requirements are higher than those for *SRI*. If running these programs on the same system, be sure computers meet the higher requirements.

*SRI* requires workstations to have the following:

- DVD/CD-ROM drive for installation
- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but performance may be limited by network bandwidth capacity)
- Adobe® Reader for reports

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

EE programs are certified with the following Internet browsers:

- Windows: Internet Explorer® 7.x, 8.x; Firefox® 3.x; or Safari® 3.x
- Macintosh: Safari 2.x and later, and Firefox 3.x

**Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**



## System Requirements for *Scholastic Math Inventory*™ Workstations

*Scholastic Math Inventory* (SMI) launches from a browser running on Windows® and Macintosh® computers. Computers manufactured after 2006 should be capable of running SMI without functionality issues. System configurations are based on Scholastic's certification process (page 1). Scholastic lists configurations that have been tested and will be supported should issues arise. Older computers may run SMI depending on their configuration; however, these configurations have not been certified by Scholastic. Thin Client workstations have not been certified and are not recommended for EE programs.

Scholastic recommends Dual Core Intel processors for both Windows and Macintosh workstations. See page 3 for specific processor recommendations.

SMI is certified for workstations using the following operating systems (with the latest service packs):

- Windows 7 Professional and Ultimate, Vista Business, Windows XP Pro
- Mac OS X 10.6, 10.5, 10.4.11

SMI is **not** certified and will not install properly on workstations using the following operating systems:

- Windows 7 Starter Edition, XP Home, 2000, NT, ME, CE, 98SE, 98, 95
- Mac OS X 10.0 through 10.3.9, Mac OS 9.x

SMI requires workstations to have 512MB to 1GB of memory, depending on operating system.

SMI is certified with the following Internet browsers:

- Windows: Internet Explorer® 6.x, 7.x, 8.x; Firefox® 3.x; or Safari® 3.x
- Macintosh: Safari 1.2 and 2.x and Firefox 3.x

SMI requires workstations to have the following:

- Adobe® Flash® 9 or higher (plug-in or ActiveX controller required for browser)
- Adobe Reader for reports
- Network Interface Card supporting TCP/IP (wireless networks, including 802.11a, 802.11g, or 802.11n, are supported, but performance may be limited by network bandwidth capacity)

**Teacher workstations** should have Internet access. SAM includes a searchable database of more than 2,000 downloadable resources (lesson plans, practice pages, reading passages, software manuals, graphic organizers, etc.). Internet access from the teacher workstation is required for access to the database. In some cases, using a proxy server will not allow access to the Resources database.

**Contact Scholastic Customer Support at 1-800-283-5974 with questions regarding your school or district's workstation computers.**