

Odyssey PreK-8 Workstation Requirements

January 2008

PLATFORM	OPERATING SYSTEM	CPU	MEMORY	HARD DISK	DISPLAY	SOUND	NETWORK	WEB BROWSER	PLUG-INS
Windows®	<ul style="list-style-type: none"> Windows XP Windows Vista 	Pentium IV or greater	256 MB RAM or greater	100 MB available disk space for browser cache.	<ul style="list-style-type: none"> 800x600 resolution 256 colors or greater 	Windows Certified Sound Card, speakers or headphones	<ul style="list-style-type: none"> LAN 10/100 switched to desktop Internet access via LAN \geq 128 kbps per concurrent user¹ Home Access \geq 128 kbps broadband connection 	<ul style="list-style-type: none"> Internet Explorer 7 Firefox 2.0.0.4 	<ul style="list-style-type: none"> Macromedia Flash™ Player 9 Adobe Acrobat Reader® 7 & 8.x PrintOMatic™ Xtra™ Plug-in² Apple QuickTime® Player 7² Macromedia Shockwave® Player 10^{2,4} Sun Java Virtual Machine 1.4.2³ Javascript 1.2³ Java Q Group PLC Applet³
Mac®	Mac OSX 10.3.4, 10.4, 10.5	G3 processor or greater, Intel Duo Core processor	256 MB RAM or greater	100 MB available disk space for browser cache.	<ul style="list-style-type: none"> 800x600 resolution 256 colors or greater 	Macintosh sound, speakers or headphones	<ul style="list-style-type: none"> LAN 10/100 switched to desktop Internet access via LAN \geq 128 kbps per concurrent user¹ Home Access \geq 128kbps broadband connection 	<ul style="list-style-type: none"> Safari 2.0.1 (requires 10.4) Safari 3 (requires 10.5) Firefox 2.0.0.4 	<ul style="list-style-type: none"> Macromedia Flash™ Player 9 Adobe Acrobat Reader® 7 & 8.x PrintOMatic™ Xtra™ Plug-in² Apple QuickTime® Player² Macromedia Shockwave® Player 10^{2,4} Sun Java Virtual Machine 1.4.2³ Javascript 1.2³ Java Q Group PLC Applet³

Odyssey PreK-8 Print and Scan Option: Scantron scanner available through CompassLearning. Contact the Hardware Desk for pricing.
 ES2260LCAF Scanmark 2260 Optical Mark Reader/Translator; with 150 sheet automatic feeder and two year warranty.

Notes

¹ T-1 = 8 - 16 concurrent users, dependent upon available bandwidth and curriculum chosen. Call for consultation or request a site assessment.

² Required to run Pre-K learning activities.

³ Required for ELL content

⁴ Required for Algebra, Pre-K and ELL learning activities.

- Odyssey requires Pop-up blockers be turned off for the Odyssey site.
- Ports 80 and 443 (SSL Encryption) must be open at the firewall.
- Specific browser settings and additional configuration combinations can be found on the Systems Requirements page at <http://www.compasslearningodyssey.com/systemrequirements.html>
- Odyssey PreK-8 may require web caching to enhance performance and increase the number of concurrent users. See a CompassLearning representative.
- Odyssey PreK-8 Enterprise: The Odyssey Writer curriculum stores student work portfolios, allow a minimum of 25 MB per school. Additional space may be required dependent on use model.
- Odyssey PreK-8 Hosted: For Odyssey Writer, 25 MB of online disk storage is available per school. Additional storage is available at additional cost. Contact a CompassLearning sales representative.

Odyssey PreK-8 Enterprise File Server System Requirements

January 2008

MICROSOFT® WINDOWS™ 2003 SERVER 32 BIT WITH IIS AND MICROSOFT SQL 2005 STD EDITION

USERS	CPU	MEMORY	HARD DISK	NIC	OTHER
1-40 (single server)	Single 2.0 GHz Xeon processor or greater	1 GB RAM	1-drive channel: RAID 1 (2-300 GB 10K HD min, 15K recommended)	100 mbps or greater	DVD drive
41-100 (single server)	Dual 2.0 GHz Xeon processors or greater	2 GB RAM	RAID 5 drive channel (3-300 GB 10K HD min, 15K recommended)	100 mbps or greater	DVD drive
101-300 (single server)	Dual 2.0 GHz Xeon processors or greater	3 GB RAM	2-drive channels: <ul style="list-style-type: none"> ▪ RAID 1 (2-146 GB 10K HD min, 15K recommended.) OS, IIS, and SQL LOG ▪ RAID 5 (3-300 GB 10K HD min, 15K recommended.) SQL data and graphics 	100 mbps or greater	DVD drive
301-600 (single server)	Dual 2.0 GHz Xeon processors or greater	3 GB RAM	3-drive channels: <ul style="list-style-type: none"> ▪ RAID 1 (2-146 GB 10K HD min, 15K recommended) NOS,IIS ▪ RAID 1 (2-146 GB 10K HD min, 15K recommended) SQL Log ▪ RAID 5 (3-300GB 10K HD min, 15K recommended) SQL data and graphics 	100 mbps or greater	DVD drive
601- 1000 (2 servers: 1 database server, 1 Web servers) 1000+ Call for assistance	Dual 2.0 GHz Xeon processors or greater on each server	3 GB RAM on each server	<ul style="list-style-type: none"> ▪ 2-drive channels on database server: <ul style="list-style-type: none"> ○ RAID 1 (2-146 GB 10K HD min, 15K recommended.) NOS, SQL Log ○ RAID 5 (3-300 GB 10K HD min, 15K recommended) SQL data ▪ WEB Server <ul style="list-style-type: none"> ○ RAID 5 (3-300 GB 10K HD min, 15K recommended) 	Two 100 mbps or greater on each server	DVD drive

Notes

- Windows Server 2003 64 bit not supported.
- CompassLearning recommends that Odyssey Enterprise be installed on its own server(s) with the MS SQL database dedicated to Odyssey.
- Windows 2000 or 2003 Server 32 bit with IIS and appropriate number of user or device licenses are required.
- Windows SQL 2005 STD Edition is required for the database. One license per processor or server license with appropriate number of user licenses required and set up in mixed mode for authentication.
- In Windows 2000 Server domains the Odyssey Enterprise server cannot be a domain controller.
- Novell Netware, Apple OSX server or Linux network operating systems are not supported on Odyssey Enterprise servers.
- For over 1000+ concurrent users, contact the Hardware Desk at 1-800-334-9169 for information.
- Home Access may require additional servers and equipment.
- Please note that multiple web servers require load balancing equipment.
- Odyssey Enterprise requires an internet connection for account activation and remote diagnostics.
- Tape backup with software or other back-up procedure is highly recommended.
- Faster processors and hard drives will increase performance. Special drive channel and RAID configurations are for performance purposes. Not following these recommendations may affect performance and/or number of concurrent users.
- Odyssey Writer stores student work portfolios; allow a minimum of 100 MB per school. Additional space may be required dependent on use model.

BANDWIDTH

- 128 kbps per concurrent user to the host when management and content is retrieved for the main host. (Either the Odyssey PreK-8 Enterprise or Odyssey ASP Web server).
- 36 kbps per concurrent user to the host when the content is retrieved from a local web cache sever or appliance.
- The number of concurrent users is dependent upon the server configuration, network speed, use and placement of web cache servers or appliances.

NETWORK**Bandwidth Considerations**

- Existing network traffic. Is it used for voice too? Streaming video?
- Slow or congested network connections using Odyssey PreK-8 will require web caching and will support a limited number of concurrent users.
- Fractional T1s are not supported.
- 10 mbps or greater typically do not require web caching dependent upon available bandwidth and number of concurrent users.
- Consider measuring bandwidth over a one week period to determine your available bandwidth.
- CompassLearning will perform a Site Assessment at no charge to help determine the proper implementation model for your situation.

ODYSSEY PREK-8 AND WEB CACHING SERVERS**Web Caching Recommended**

To enhance web performance and preserve bandwidth, deployment of a Web caching for Odyssey PreK-8 is appropriate for some infrastructures that do not have adequate bandwidth.

Advantages of Web Caching :

- Reduced bandwidth consumption (fewer requests and responses that need to go over the network)
- Reduced server load (fewer requests for the Odyssey server to handle)
- Reduced latency (responses for cached requests are available immediately and closer to the client)
- Increased number of concurrent users for Odyssey and other browser based activities.

WEB CACHE SERVER/APPLIANCE SPECIFICATIONS

Odyssey PreK-8 is designed from the ground as a browser based application. By design 80% of Odyssey PreK-8's content is cacheable. Implementing a web caching strategy in your network infrastructure will speed the delivery of the content to your students, while effectively utilizing the available bandwidth.

- Odyssey requires 20 GB of web cache hard drive space for efficient operation.
- Industry standard web caching software. Windows Server 2000/2003 with MS ISA, Volera, BorderManager, or other caching engine on an appropriate server that meets or exceeds the system requirements as published by the developer for the total number of internet/intranet users. (Not just Odyssey concurrent users.)
- Industry standard web cache appliance sized for the total number of internet/intranet concurrent users. (Not just Odyssey concurrent users.)

The New Odyssey High School Workstation Requirements

January 2008

PLATFORM	OPERATING SYSTEM	CPU	MEMORY	HARD DISK	DISPLAY	SOUND	NETWORK	WEB BROWSER	PLUG-INS
Windows®	<ul style="list-style-type: none"> ▪ Windows XP ▪ Windows Vista 	Pentium IV or greater	XP: 512 GB RAM or greater Vista: 1 GB RAM or greater	100 MB available disk space for browser cache.	<ul style="list-style-type: none"> ▪ 800x600 resolution ▪ 256 colors or greater 	Windows Certified Sound Card, speakers or headphones	<ul style="list-style-type: none"> ▪ LAN 100 MB switched to desktop ▪ Internet access via LAN \geq 256 kbps per concurrent user¹ ▪ Home Access \geq 256 kbps broadband connection 	<ul style="list-style-type: none"> ▪ Internet Explorer 7 ▪ Firefox 2.0.0.4 	<ul style="list-style-type: none"> ▪ Macromedia Flash™ Player 9 ▪ Adobe Acrobat Reader® 6 or greater ▪ Apple QuickTime® Player 7 or greater ▪ Macromedia Shockwave® Player 10 ▪ Sun Java Virtual Machine 1.4.2 Javascript 1.2
Mac®	Mac OSX 10.3.4, 10.4, 10.5	G4 processor (800 MHZ or higher) or greater, Intel Duo Core processor	512 MB RAM or greater	100 MB available disk space for browser cache.	<ul style="list-style-type: none"> ▪ 800x600 resolution ▪ 256 colors or greater 	Macintosh sound, speakers or headphones	<ul style="list-style-type: none"> ▪ LAN 100 MB switched to desktop ▪ Internet access via LAN \geq 256 kbps per concurrent user¹ ▪ Home Access \geq 256 kbps broadband connection 	<ul style="list-style-type: none"> ▪ Safari 2.0.1 (requires 10.4) ▪ Safari 3 (requires 10.5) ▪ Firefox 2.0.0.4 	<ul style="list-style-type: none"> ▪ Macromedia Flash™ Player 9 ▪ Adobe Acrobat Reader® 6 or greater ▪ Apple QuickTime® Player ▪ Macromedia Shockwave® Player 10 ▪ Sun Java Virtual Machine 1.4.2 Javascript 1.2

Notes

¹ T-1 = 4 - 8 concurrent users, dependent upon available bandwidth and curriculum chosen. Call for consultation or request a site assessment.

- Odyssey requires Pop-up blockers be turned off for the Odyssey site.
- Ports 80 and 443 (SSL Encryption) must be open at the firewall.
- Specific browser settings and additional configuration combinations can be found on the Systems Requirements page at <http://www.compasslearningodyssey.com/systemrequirements.html>.
- The New Odyssey High School may require Caching Servers to enhance local performance and increase the number of concurrent users. See a CompassLearning representative.
- Maintaining access to the internet with sufficient bandwidth is the responsibility of the customer.
- The New Odyssey High School provides a "Media Rich" user experience that requires adequate bandwidth for the delivery of content.
- It is highly recommend the use of Wired 100baseTx (100 MB) Switched networks in environments that use The New Odyssey High School.
- Sites implementing 802.11G wireless network may require additional support and configuration by the local network administrator in order to ensure a positive user experience.
- 10 MB (10BaseT) wired and 802.11A/B wireless networks are not supported.

The New Odyssey High School Enterprise File Server System Requirements

January 2008

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41-100 (single server)	Dual 2.0 GHz Xeon processors or greater	2 GB RAM	RAID 5 drive channel (3-300 GB 10K HD min, 15K recommended)	100 mbps or greater	DVD drive
101-300 (single server)	Dual 2.0 GHz Xeon processors or greater	3 GB RAM	2-drive channels: <ul style="list-style-type: none"> ▪ RAID 1 (2-146 GB 10K HD min, 15K recommended.) OS, IIS, and SQL LOG ▪ RAID 5 (3-300 GB 10K HD min, 15K recommended.) SQL data and graphics 	100 mbps or greater	DVD drive
301-600 (single server)	Dual 2.0 GHz Xeon processors or greater	3 GB RAM	3-drive channels: <ul style="list-style-type: none"> ▪ RAID 1 (2-146 GB 10K HD min, 15K recommended) NOS,IIS ▪ RAID 1 (2-146 GB 10K HD min, 15K recommended) SQL Log ▪ RAID 5 (3-300GB 10K HD min, 15K recommended) SQL data and graphics 	100 mbps or greater	DVD drive
601- 1000 (2 servers: 1 database server, 1 Web servers) 1000+ Call for assistance	Dual 2.0 GHz Xeon processors or greater on each server	3 GB RAM on each server	<ul style="list-style-type: none"> ▪ 2-drive channels on database server: <ul style="list-style-type: none"> ○ RAID 1 (2-146 GB 10K HD min, 15K recommended.) NOS, SQL Log ○ RAID 5 (3-300 GB 10K HD min, 15K recommended) SQL data ▪ WEB Server <ul style="list-style-type: none"> ○ RAID 5 (3-300 GB 10K HD min, 15K recommended) 	Two 100 mbps or greater on each server	DVD drive

Notes

- Windows Server 2003 64 bit not supported.
- CompassLearning recommends that Odyssey Enterprise be installed on its own server(s) with the MS SQL database dedicated to Odyssey.
- Windows 2000 or 2003 Server 32 bit with IIS and appropriate number of user or device licenses are required.
- Windows SQL 2005 STD Edition is required for the database. One license per processor or server license with appropriate number of user licenses required and set up in mixed mode for authentication.
- In Windows 2000 Server domains the Odyssey Enterprise server cannot be a domain controller.
- Novell Netware, Apple OSX server or Linux network operating systems are not supported on Odyssey Enterprise servers.
- For over 1000+ concurrent users, contact the Hardware Desk at 1-800-334-9169 for information.
- Home Access may require additional servers and equipment.
- Please note that multiple web servers require load balancing equipment.
- Odyssey Enterprise requires an internet connection for account activation and remote diagnostics.
- Tape backup with software or other back-up procedure is highly recommended.
- Faster processors and hard drives will increase performance. Special drive channel and RAID configurations are for performance purposes. Not following these recommendations may affect performance and/or number of concurrent users.
- Odyssey Writer stores student work portfolios; allow a minimum of 100 MB per school. Additional space may be required dependent on use model.

The New Odyssey High School Bandwidth Requirements and considerations

January 2008

BANDWIDTH

- 256 kbps per concurrent user to the host when management and content is retrieved for the main host. (Either the New Odyssey High School Enterprise or Odyssey ASP Web server).
- 36 kbps per concurrent user to the host when the content is retrieved from a local web cache sever or appliance.
- The number of concurrent users is dependent upon the server configuration, network speed, use and placement of web cache servers or appliances.

NETWORK

Bandwidth Considerations

- Existing network traffic. Is it used for voice too? Streaming video?
- Slow or congested network connections using Odyssey will require web caching and will support a limited number of concurrent users.
- Fractional T1s are not supported.
- 10 mbps or greater typically do not require web caching dependent upon available bandwidth and number of concurrent users.
- Consider measuring bandwidth over a one week period to determine your available bandwidth.
- CompassLearning will perform a Site Assessment at no charge to help determine the proper implementation model for your situation.

ODYSSEY AND WEB CACHING SERVERS

Web Caching Recommended

To enhance web performance and preserve bandwidth, deployment of Web caching for Odyssey is appropriate for some infrastructures that do not have adequate bandwidth.

Advantages of Web Caching :

- Reduced bandwidth consumption (fewer requests and responses that need to go over the network)
- Reduced server load (fewer requests for the Odyssey server to handle)
- Reduced latency (responses for cached requests are available immediately and closer to the client)
- Increased number of concurrent users for Odyssey and other browser based activities.

WEB CACHE SERVER/APPLIANCE SPECIFICATIONS

Odyssey is designed from the ground as a browser based application. By design 80% of The New Odyssey High School is cacheable. Implementing a web caching strategy in your network infrastructure will speed the delivery of the content to your students, while effectively utilizing the available bandwidth.

- The New Odyssey High School requires 21 GB of web cache hard drive space for efficient operation.
- Industry standard web caching software. Windows Server 2000/2003 with MS ISA, Volera, BorderManager, or other caching engine on an appropriate server that meets or exceeds the system requirements as published by the developer for the total number of internet/intranet users. (Not just Odyssey concurrent users).
- Industry standard web cache appliance sized for the total number of internet/intranet concurrent users. (Not just Odyssey concurrent users).

Odyssey High School Advanced/AP Workstation Requirements

January 2008

PLATFORM	OPERATING SYSTEM	CPU	MEMORY	HARD DISK	DISPLAY	SOUND	NETWORK	WEB BROWSER	PLUG-INS
Windows®	<ul style="list-style-type: none"> Windows XP 	Pentium III or greater	128 MB RAM or greater	100 MB available disk space for browser cache. 2-4GB per course only when content is loaded on and delivered from the workstation hard drive.	<ul style="list-style-type: none"> 800x600 resolution 256 colors or greater 	Windows Certified Sound Card, speakers or headphones	<ul style="list-style-type: none"> LAN 10/100 switched to desktop All management functions are on the Host Site. Internet access \geq 20kbps per concurrent user when the content is local to the workstation or on a network server.¹ Internet access \geq 160 kbps per concurrent user when the content is on the Host site.² 	<ul style="list-style-type: none"> Internet Explorer 6.x Netscape Communicator 7.2, 8.0, 8.1 Firefox 2.0.0.4 	<ul style="list-style-type: none"> Macromedia Flash™ Player 8 & 9 Apple QuickTime® Player 7 or greater Macromedia Shockwave® Player 10 Sun Java Virtual Machine 1.4.2 Javascript 1.2
Mac®	Mac OSX 10.3.4, 10.4	G3 processor or greater, Intel Duo Core processor	256 MB RAM or greater	100 MB available disk space for browser cache. 2-4GB per course only when content is loaded on and delivered from the workstation hard drive.	<ul style="list-style-type: none"> 800x600 resolution 256 colors or greater 	Macintosh sound, speakers or headphones	<ul style="list-style-type: none"> LAN 10/100 switched to desktop All management functions are on the Host Site. Internet access \geq 20kbps per concurrent user when the content is local to the workstation or on a network server.¹ Internet access \geq 160 kbps per concurrent user when the content is on the Host site.² 	<ul style="list-style-type: none"> Netscape Communicator 7.2 Safari 1.2.x (requires OSX10.3) Safari 2.0.1 (requires 10.4) Firefox 2.0.0.4 	<ul style="list-style-type: none"> Macromedia Flash™ Player 8 & 9 Apple QuickTime® Player Macromedia Shockwave® Player 10 Sun Java Virtual Machine 1.4.2 Javascript 1.2

Notes

¹ T-1 = 50-70 concurrent users, dependent upon available bandwidth. Call for consultation or request a site assessment.

² T-1 = 4-9 concurrent users, dependent upon available bandwidth. Call for consultation or request a site assessment. Serving the content from a local source highly recommended.

- Internet connection required. (See requirements listed above and on the next page.)
- All Odyssey Advanced/AP management functions are delivered from the ASP Host. The management system cannot be located on a server within the district.
- Odyssey High School Advanced/AP requires Pop-up blockers be turned off.
- Ports 80 and 443 (SSL Encryption) must be open at the firewall.
- Odyssey Advanced/AP not available in an Enterprise model.
- Serving the content from a local source is highly recommended to enhance local performance and increase the number of concurrent users. See a CompassLearning representative.
- Content can be served from: 1) Local CD-ROM drive 2) Local hard drive 3) Network drive (recommended)
- Content size is dependent upon the number of different courses to be loaded. Approx 2-4 GB per course.

Information in this document is deemed to be accurate, however CompassLearning cannot guarantee its accuracy due to ongoing industry changes. Contact a CompassLearning representative or the Hardware Desk at 1-800-334-9169 for further information.

Odyssey High School Advanced/AP Content and Bandwidth Requirements and Considerations January 2008

BANDWIDTH

- 20 kbps per concurrent user to the host when the content is retrieved from a local source. (Local CD Drive, local hard drive, network server drive.)
- 160 kbps per concurrent user to the internet when the content is retrieved from the host.

ODYSSEY HIGH SCHOOL ADVANCED/AP CONTENT DELIVERY OPTIONS

All Odyssey High School Advanced/AP management functions are delivered from the ASP Host. The management system cannot be located on a server within the district.

Content delivery options include:

- Local CD-ROM drive
- Local workstation hard drive loaded from CD-ROM
- Local network server hard drive (HIGHLY RECOMMENDED)
- ASP Host course management functions – 20 kbps

Advantages of loading the content locally:

- Reduced bandwidth consumption (fewer requests that need to go over the network)
- Reduced latency (Content is located closer to the client)
- Increased number of concurrent users.

Odyssey and Wireless Networks

WIRELESS 802.11a/g NETWORK

- Odyssey operates on properly designed and implemented wireless networks.
- Recommended users to access point ratio = 15:1
- The number of concurrent users is dependent upon the network speed, environment and number of users per access point.

NWEA Data Agent and EAS Client Requirements

January 2008

PLATFORM	OPERATING SYSTEM	CPU	MEMORY	HARD DISK	DISPLAY	SOUND	PERMISSIONS	PHYSICAL ACCESS	ADDITIONAL SUPPORT APPLICATIONS
Windows®	<ul style="list-style-type: none"> ▪ Windows XP Pro ▪ Windows 2003 Server 	Pentium III or greater	512 MB RAM or greater	500 MB available disk space.	Any	Any	Installer must have Administrative rights	Computer should be located in a limited access area and left on at all times.	Web Service Enhancements 3.0 (WSE is included with EAS Installer) Microsoft Dot Net 2.0 Framework (included with EAS installer) Visual J#2.0 Redistributable (Installed on web servers for Enterprise systems only)

Notes

- Ports 80 and 443 (SSL Encryption) must be open at the firewall.
- The Data Agent and EAS client are Windows only applications.
- Macintosh OS is not supported.