

Measures of Academic Progress® (MAP®) Administration Technical Requirements: Client-Server MAP®

The following technical requirements for MAP testing have been created as a guide to ensure that you have a successful testing experience with your students. Please review the following information as you assess your technology and plan for conducting these assessments.

Your technology will need to support these major components:

- The Network Test Environment (NTE) folder
- One or more NTE Administration Workstations
- TestTaker Client Workstation
- Northwest Evaluation Association™ (NWEA™) Reports Site
- Wireless Requirements (Optional)

Network Test Environment (NTE) Folder Server

The NTE Folder is a folder that stores and hosts student and test database information. Students will use the TestTaker application to interact with the NTE folder—TestTaker gets test questions from the NTE, and sends each unique student response back to the NTE for recording along with other measurement data. The NTE Folder is a folder that can exist on any shared network resource accessible to the local user accounts on the testing workstations. Please note: It is strongly recommended that the NTE folder be hosted on server-class hardware in the same physical building and on the same local network as the TestTaker client workstations. The quality of connectivity between the server and the workstations, as well as the specifications of the server hosting the NTE (including the CPU, RAM, and available disk space) all contribute to the overall test-system performance. The minimum system requirements for the NTE Server are:

Minimum NTE Server Requirements		
CPU	Pentium® II (266MHz)	<ol style="list-style-type: none"> 1. These requirements assume the NTE server is dedicated to MAP while testing is in progress. 2. Server hardware should include 256MB RAM per lab or class of 30 TestTaker client workstations. 3. Some tests require audio that can
RAM	256 MB	
Available Disk Space	600 MB (1.5 GB for MPG Audio)	
Operating System*	Novell® 4.0; Mac® OS X® Server 10.4 or	

Minimum NTE Server Requirements

	higher; Windows® 2000 Server; Windows 2000 Advanced Server; Windows Server 2003 Windows Server 2008	<p>be downloaded independently from the test.</p> <p>4. Operating systems should be server-class operating systems. Using desktop systems in a server role can dramatically reduce performance and may limit the number of concurrent connections allowed¹.</p> <p>5. Earlier AppleShare versions do not support enough open shares for MAP system usability.</p>
Network	Windows 2000 Server; Mac using SMB; Mac G3 (with AppleShare® 6.3) Novell 4.0; Mac using AFP	
Anti-Virus	Any anti-virus package must have an exclusion to prevent it from actively scanning any NTE folder during testing.	

* OS X version 10.7.3 or higher is required for NTE data hosted on OS X Lion (10.7) servers

NTE Admin 2 Workstation

The Network Test Environment (NTE) Admin 2 software is a Windows-based application used to perform the download and upload of tests, test results and student data to and from the NTE folder. The NTE Admin 2 workstation must have Internet access, and the local Windows account used to run NTE Admin 2 must have *Read* and *Write* access to all files and subfolders of the NTE folder. Additionally, the NTE Admin 2 software requires the Microsoft® .NET Framework (version 4 or higher) to be installed. If your computer does not already have the .NET Framework, you will be prompted to install it automatically. The minimum system requirements for running NTE Admin 2 are:

NTE Admin 2 Workstation Requirements

CPU	1GHz
RAM	512MB
Operating System	Windows XP SP3 Windows Vista® SP1 or later Windows 7 Windows Server® 2003 SP2 Windows Server 2008 (not supported on Server Core Role) Windows Server 2008 R2 (not supported on Server Core Role) Windows Server 2008 R2 SP1

¹ Non-server versions of Microsoft Windows limit user connections to 10-20.

TestTaker Client Workstation

All NWEA assessments are presented to students using TestTaker. The TestTaker application can be installed locally on testing workstations, or on a Windows-based server. In the case of server-based installations, Windows-based clients can be given a shortcut that points to the TestTaker installation on the server. Macintosh clients must have the TestTaker application locally installed. The table below lists the minimum TestTaker client workstation system requirements for optimal performance. TestTaker may work on other configurations, however, NWEA has not tested all possible configurations and recommends following these guidelines whenever possible. If you are planning on using an untested configuration, NWEA strongly recommends you spend some time evaluating if the software will operate reliably on that configuration.

Minimum TestTaker Client Workstation Requirements	
CPU	Pentium II (266MHz); Mac G4
RAM	256MB
Operating System	Windows 2000; Windows XP; Windows Vista; Windows 7; Mac OS X 10.5 – 10.7
Network	Windows 2000 Server; Novell 4.0; Mac using AFP 2.x-3.x
Available Disk Space	70 MB
Screen Resolution	Preferred: 1024 x 768 Minimum: 800 x 600
Mac Fonts	Mac systems must have Courier and Symbol fonts installed. For the correct display of MAP for Primary Grades tests, font smoothing must be enabled for all Mac systems used as TestTaker client workstations (see www.nwea.org/mpginfo for more information).
Adobe® Flash®	A custom version of Adobe Flash is embedded within TestTaker. Most MAP assessments use this embedded version; therefore, Adobe Flash must not be blocked on the network or client machines.
Sound Card	Required (for MAP for Primary Grades only)
Headphones	Required (for MAP for Primary Grades only)
Permissions	Each client accessing the installation must have full read/write/create permissions set to the NTE.
TestTaker Version	MAP assessments require the use of TestTaker version 8.0 or later.

Wireless Recommendations (Optional)

The following are the minimum recommendations for testing in a wireless environment (LAN only) and assume no other activity on a wireless access point. NWEA requires a persistent connection to the wireless access point, free of interruptions, to successfully run TestTaker. Any outages in the connections, regardless of how brief, may cause errors during testing or require re-testing particular students.

Wireless Requirements	
Wireless Standard	802.11 G (54 mb/s) or higher
# concurrent connections	12-15 connections per wireless access point (20 max)

NWEA™ Reports Site

The NWEA Reports site is a web portal providing access to NWEA assessment tools that includes *Descartes: A Continuum of Learning*®, *Primary Grades Instructional Data*, *Dynamic Reporting Suite (DRS)*, classroom resources, growth reports, and operational reports. The Reports site is not browser specific to view online reports, however for optimal viewing NWEA recommends the following guidelines:

NWEA™ Reports Site Requirements	
Browser	In order to upload files, you must use Internet Explorer® as the upload functionality leverages IE's secure transfer of files. However, the following browsers support browsing the NWEA Reports Site: <ul style="list-style-type: none"> ▪ Internet Explorer ▪ Mozilla Firefox® ▪ Safari®
Crystal Reports	End of Term reports that contain assessment results from the district and school-level can be accessed using the Crystal Reports Viewer. This viewer is designed to run on a Windows OS®, and can be downloaded from the NWEA Reports Site.