

Company – Qualified Platform Identification		
NComputing, Inc	L300 / M300 with vSpace Server for Windows version 7.1.3	TestNav 8

## District Technical Information

This document provides guidance for districts and schools that choose to use the qualified product(s) with the TestNav version indicated.

**NComputing, Inc.** completed the TestNav qualification process for the specific products described in the **Qualified Products** table. The technology and setup requirements must be followed and all clients or workstations used to access TestNav must comply in order for the solution to remain in qualified status. In addition, please review all “Additional Recommendations” listed.

## Qualification Standards

TESTNAV QUALIFIED mark and logo are certification marks owned by NCS Pearson, Inc. (the “TESTNAV QUALIFIED Marks”). The TESTNAV QUALIFIED Marks may only be used by entities who have executed Pearson’s TESTNAV QUALIFIED Certification Mark Agreement, and in the manner prescribed in the Pearson Certification Mark Usage Guidelines (the “Usage Guidelines”). Both documents are available online at <http://www.testnavqualified.com>; Vendor Qualification.

The Qualification Standards used to certify this solution are outlined in this document in the “**Appendix**” section of this document.

## Qualified Products & Solutions Table – TestNav 8

Pearson and NComputing, Inc. jointly tested the following solutions for use with TestNav 8.

Performance testing has been completed by running all performance tests on a vSpace for Windows host computer. The host computer was built as a physical vSpace session server. The maximum number of clients is extrapolated based on the standard NComputing host scaling guidelines. The maximum users defined below will have the same experience as a single user on that host.

NComputing L300, M300	
TestNav Version	TestNav 8
Qualified Software Version	vSpace for Windows 7.1.3
Minimum Processor	Core i7 Quad core Ivy Bridge / Sandy Bridge / Haswell processor (equivalent or higher)
Minimum Memory	<b>8 GB for up to 15 stations</b> <b>16 GB for 16-35 stations</b>
Operating System	Windows Server 2008 R2
Minimum Network Speed	1GB
Maximum # of Clients	15-35 per NComputing host
Minimum Encryption	128bit AES encryption
End-point/clients supported	L300, M300

## Requirements

### TestNav 8 Requirements

All TestNav 8 Hardware and Software Requirements need to be followed when using qualified products: [www.pearsononlinetesting.com/TN/8/](http://www.pearsononlinetesting.com/TN/8/).

The standard Pearson process running **SystemCheck** should be followed to confirm final concurrent user counts for implementation purposes.

### NComputing Requirements

Detailed requirements for set up and running vSpace for Windows can be found here:

Please see the NComputing vSpace Server 7 user guide at <http://www.ncomputing.com/support/documentation> for general vSpace installation and usage instructions.

Please see the NComputing host scaling guidelines in the NComputing knowledge base at [http://www.ncomputing.com/kb/Guidelines-for-M-series-and-L-series-Host-Scaling\\_310.html](http://www.ncomputing.com/kb/Guidelines-for-M-series-and-L-series-Host-Scaling_310.html) for information on how to properly scale your vSpace session host.

For purposes of TestNav 8 scaling, please assume a “Medium” workload. As always, scale testing using your actual environment is highly recommended prior to putting the system into production.

- *Proctor Caching*: The vSpace for Windows environment interacts normally with Pearson TestNav proctor caching. All recommended Pearson procedures for configuring and testing Proctor Caching should be followed.
- *Primary Student Response File (SRF)*: should be stored in the student home folder on the vSpace session host. A secondary SRF path can be to a shared folder on the Proctor Caching Server or another designated network share. Use best practices for secondary SRF locations as listed in the Pearson User Guides.
- *TestNav Early Warning System*: TestNav will appropriately shut down if any activity is suspected once a student has logged into an active TestNav window. No additional environment settings are required to increase security processes.

### Additional Recommendations

In addition, the following specifications are recommended:

**No additional recommendations.**

### Support Number(s)

To contact NComputing technical support, please visit the following address <http://www.ncomputing.com/support/tech-support>

To access the NComputing online knowledgebase, please visit the following address <http://www.ncomputing.com/kb/>

## Appendix A - Qualification Standards

The Qualification Standards used to certify this solution are outlined below:

A virtual client machine should provide the same experience as a client machine in a non-virtual environment. A baseline Electronic Practice Test (ePAT) provided by Pearson during the qualification process was used for comparison. The ePAT provided is specific for the TestNav version being qualified.

### Virtualization Setup Requirements

1. Testing environment must be set up using proctor caching
2. All cache must be cleared prior to testing including Java cache. For instructions on clearing java cache, please access the following link: [http://www.java.com/en/download/help/plugin\\_cache.xml](http://www.java.com/en/download/help/plugin_cache.xml).
3. Once setup the testing environment should use the SystemCheck tool successfully

### Virtualization Qualification Standards

Qualified Products must meet all of the following criteria:

#### ***Critical Security Standards for TestNav®***

1. From selection of the test to "submit test" the desktop is secure and the system does not allow access to any application, content, or other service beyond the TestNav test assessment delivery system
2. From selection of the test to "submit test" the system does not allow any screen captures, printing, saving or other electronic replication or duplication of the display screen, source code or content of the test
3. All data is encrypted between client and server for the entirety of the usage period. The data encryption must be AES 128 or higher.

#### ***Critical Performance Standards for TestNav®***

1. While logging in concurrently, no error messages are received
2. The first test item/question of the tests loads fully at the same speed as the baseline amount of less than 45 seconds
3. While interacting with all test items/questions there are no noticeable cursor lags, input lags or delays in tool engagement as compared to the baseline ePAT
4. While interacting with video, audio, and Technology Enhanced Items (TEI) there are no significant lags or delays experienced as compared to baseline ePAT
5. There is no noticeable delay when navigating from test item/question to test item/question
6. All tools work correctly as demonstrated in the baseline ePAT
7. At submit, no error message is received
8. When hitting submit the system acceptance response is at the same speed as the baseline ePAT submit speed, with a maximum of 10 seconds