

Technical Requirements for NAC Assessment

PART-A

Minimum Configuration for NAC Tests

| Description | Client PC (Test Taking PC) (with a Monitor, Mouse & Keyboard) |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Operating System | Windows® XP SP3+, Vista, or 7 |
| CPU | Pentium® IV and higher |
| RAM | 512 MB RAM and above |
| HDD | At least 500 MB free disk space |
| Web browser: | Internet Explorer 7.0® (or higher) |
| Broadband Internet connection | (T1, DSL, or cable) with a bandwidth of at least 1 Mbps for 25-30 users |
| Sound Card with necessary audio and video drivers | Yes (Should support recording & playback capabilities) |
| Headset with Microphone | - Headset with aa USB headset is strongly recommended - A room is required that is acoustically appropriate for the Speaking test |
| Java Scripts | Enable |
| UPS (assuming that generator will be used during power failure) | 1.5 Hour Battery Backup |
| Generator (may be used for 8 hours or more if needed) | Yes |
| CD-ROM Drive | Yes |
| USB Ports | Yes |
| Antivirus | Yes |
| Screen resolution | 1024 x 768 pixels |

Test Environment – For Speaking & Listening Test

- Network security access to allow Cdtclient.exe application to access <https://www.ordinate.com> (port 443)
- Disable pop-up blocker
- Headphone Features:

| | | |
|---------------------|--------------------|----------------|
| Headphone features | Sound mode | Stereo |
| | Ear piece | Double |
| | Driver Unit Size | 32 mm |
| | Frequency Response | 20 - 20000 Hz |
| | Impedance | 32 ohms |
| Microphone features | Frequency response | 100 - 12000 Hz |
| | Impedance | 3320 |

Candidate Eligibility to do the NAC

1. Final year degree students from any discipline. A minimum of 60% as aggregate in the Pre-Final year is preferred.
2. Fresh graduates with 60% aggregate in the UG program are preferred

PART-B

Speaking & Listening Test: Installing the Computer Delivered Test (CDT) Program

Computer Delivered Test (CDT) program, using patented Ordinate® speech processing technology, enables test administrators to deliver Versant language tests on a test center computer and upload completed tests for scoring.

1. Calculate and Verify Bandwidth for Expected Testing Volumes

The CDT program operates by downloading a test to the local machine and then uploading the responses once the test is complete for scoring. This requires network access to an Internet connection of sufficient bandwidth to accommodate the volume of concurrent testing that you plan to conduct in your test center. (Note: In addition to a real-time mode, CDT also supports an option that allows you to preload tests, complete the tests offline, and then reconnect later to upload results for scoring). To ensure your test center has adequate Internet bandwidth, please consult the document “Bandwidth Considerations for Versant Computer Delivered Testing.”

2. Installing CDT

Before testing can begin, you must download and install the CDT client from Pearson’s website onto all of the computers that you plan to use for Versant testing. The whole process typically only takes a few minutes per computer. Follow these steps for each computer:

1. Go to <http://www.ordinate.com/technology/platforms/cdt/index.jsp>
2. Click to download the **CDT Client** application (approx. 10 MB download).
3. When the dialogue box appears, select **Run** to download and install CDT on the computer.
4. Click **Next** in each of the following dialog boxes until the installation is completed
5. Once installation of the CDT client is complete, an icon will automatically appear on your desktop and in the **Start Menu**.

3. Verifying CDT Operation

After installing CDT onto a computer, you should complete a sample test, making sure to check the headset audio and microphone, so that you can verify CDT is working properly before you arrange for live testing with candidates.

4.1 Launch CDT and Download a Test

1. Ensure your computer is connected to the Internet.
2. Start CDT by double-clicking the **CDT Client** icon on your desktop or from the **Start Menu**.
3. Enter the Test Identification Number for a sample test (your account manager can provide samples for verifying CDT installations).
4. Monitor the test download progress on the screen to determine the typical download speed for your Internet connection.

4.2 Check Audio and Headset

1. Check that your headset and microphone are plugged in, configured properly, and that the sound and volume are turned on and up.
2. Follow the instructions for the audio check to ensure your computer can play the test audio at an acceptable level for completing the test.
3. For Speaking tests, follow the instructions to check that your microphone is functioning properly.

4.3 Complete a Test and Verify Uploading of Responses

1. With your computer connected to the Internet, complete a sample test and click **Finish**.
2. Monitor the test upload in the Administrator menu to determine the typical upload speed for your Internet connection.
3. Check the score on www.VersantTest.com or in your ScoreKeeper account to ensure the test was properly uploaded and scored.

PART-C

Speaking & Listening Test: Network and Bandwidth Requirements

Computer Delivered Testing (CDT) application can be installed on a computer and used to administer Versant tests by computer. CDT runs as an application on the local machine that accesses the Pearson system external to your organization's IT environment to download and upload tests as required. The CdtClient.exe application (this is the name of the application used for Versant computer tests) needs to be able access <https://www.ordinate.com/>... on port 443 to download and upload tests.

1. Verifying Internal Network Access

The IT environments in many organizations have strict network access and security controls. For CDT, your IT team must ensure that there is sufficient access provided from the computer running CDT through your internal network to the Pearson systems externally. Examples of things that might limit or prevent such access include (but are not limited to) firewalls, unique network routing, VPNs, and security access keys. Please verify that the CdtClient.exe application can access and properly resolve access to <https://www.ordinate.com/>... on port 443 from the internal computer that is running CDT. Note that this access must be available not only to the computer's browser but also to the CdtClient.exe application.

2. Verifying DNS Servers

If you have verified that your internal network is not preventing CDT from accessing the Pearson system but are still getting a "Failure to connect to server" error, then it may be a DNS resolution issue. In other words, it may be that the CDT Client was unable to locate the www.ordinate.com servers. If the browser on the same machine is able to resolve and connect to www.ordinate.com, you will need to review both the client machine and the network. We recommend that your IT or network team do the following:

1. Verify the browser on the client machine does not use a proxy or other special configuration that is not available to other applications on the machine
2. Determine which DNS servers handle DNS lookups for the client machines you are using to run CdtClient.exe.
3. Verify these DNS servers are consistent (they all share the same configuration and data) and verify these DNS servers can resolve www.ordinate.com
4. Trace route www.ordinate.com from the client machine and verify the trace route completes
5. Verify Windows is not blocking DNS resolution of the CDT Client (e.g. verify the Windows firewall settings)

3. Proxy Server, Firewall and Gateway

If your company uses a Proxy server to access Internet, please make sure to allow access of <https://www.ordinate.com> (IP address: 209.133.27.8).

If you still have trouble completing the ping and trace route command to <https://www.ordinate.com>, please add <https://www.ordinate.com> (IP address: 209.133.27.8) to your external firewall and network gateway to allow direct access.

4. Troubleshooting

To assist in your troubleshooting, Pearson has put together a simple application that checks several settings on the client machine. The program is almost identical to CDT Client in structure and behavior so it should provide some insight into what is happening on the client machine. You can download the installer for this application using this URL: <http://www.ordinate.com/technology/platforms/cdt/SystemProfiler.exe>

Once downloaded, please install and launch program. There will be two buttons at the top of the application screen: Start and Save. Click "Start" and the application will run through several checks to verify screen resolution, DNS, connectivity to the CDT Service, etc. If you would like to save the results, you may click "Save" to store the results into a text file. Please let us know if this helps identify the issue or if there is anything else we can do to assist.

5. Bandwidth Considerations

If you are considering using CDT as your preferred testing method, you have the option to download tests before or during testing sessions. Factors such as how many test stations are used, your Internet connection speed, and when you download tests could affect how long it takes for data to be transmitted to Pearson's scoring system. The charts below outline the required bandwidth to test centers where CDT tests are to be given.

| No pre-loading | | # test stations | # test stations | # test stations | # test stations | # test stations | # test stations | # test stations | # test stations |
|----------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| connection | kbytes/sec | 1 | 5 | 10 | 20 | 30 | 40 | 50 | 100 |
| CableModem | 37 | | | | | | | | |
| DSL | 122 | | | | | | | | |
| T1 | 183 | | | | | | | | |
| T2 | 771 | | | | | | | | |
| T3/DS3 | 5493 | | | | | | | | |

Table 1. If tests are *not* pre-loaded, the green configurations in this table will work. The red configurations will likely experience download and upload times that are problematic.

| With pre-loading | | # test stations | # test stations | # test stations | # test stations | # test stations | # test stations | # test stations | # test stations |
|------------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| connection | kbytes/sec | 1 | 5 | 10 | 20 | 30 | 40 | 50 | 100 |
| CableModem | 37 | | | | | | | | |
| DSL | 122 | | | | | | | | |
| T1 | 183 | | | | | | | | |
| T2 | 771 | | | | | | | | |
| T3/DS3 | 5493 | | | | | | | | |

Table 2. If tests are pre-loaded, the green configurations in this table will work. The red configurations will likely experience download and upload times that are problematic.