# **Five Steps to Network+ Certification Success**

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**NOTE**: This report is not aimed at teaching you the subject knowledge to pass the exam. This is a paper about exam structure, pass scores, question structure and type, as well as what you can expect from succeeding at the Network+ exam.



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## How the exam is made and why you should care

Industry representatives from the leading computer vendors set the Exam Objectives. This means that, based on, their day to day needs, they define which skills the exam should address. In this phase of the exam definition the industry representatives also decide what areas to prioritize over others. They do that by assigning different weights to the different Exam Objectives (more on this later). Once these areas of expertise have been established by the industry representatives the next step is to write exam questions within those areas of expertise. This is done by Subject Matter Experts – SMEs. These are experts in the various computer fields that know which questions will help find out if a candidate knows the topics covered by the Exam Objectives. There are a few more steps but I am not going to bore you with the details. Here's your take home from this though; the exam objectives are subject to interpretation. Why? Because when the exam objectives are handed over by the industry representatives the SMEs read in to these what *they* see. Now, most of the time it's what you and I would expect. However there will be cases where there is a difference of views. This means that you have to read the objectives very carefully and make sure you understand each of them. Don't interpret them too narrowly since the process does leave the SMEs with room for interpretation.

## How the exam is configured

To become Network+ Certified you need to pass Exam N10-006. This credential has the following recommended prerequisites: CompTIA A+ certification (though this is not a requirement) and you should have at least 9 months of work experience in IT networking or equivalent training, again none of this is required. You can arguably show up at the exam without any of this and no one will stop you.

The Network+ Certification, like all CompTIA exams, is organized around its list of Exam Objectives that are published on their website. These Exam Objectives consist of a handful of "Main Domains" (the high level topic definition) and under each of the Main Domains, "Sub-Objectives" that narrow down to the specifics of what you should know in preparation of the exam. Here are the Exam main domains with their relative weights:

#### Network+ Exam N10-006

Domain	Percentage of Examination
1.0 Network architecture	22%
2.0 Network operations	20%
3.0 Network security	18%
4.0 Troubleshooting	24%
5.0 Industry standards, practices, and network theory	16%
Total	100%

This table shows the main Exam Objectives (Domains) and how much weight they each should have on the exam. Why do the relative weights matter? Because they give a good indication of how many questions each domain will present at your exam.

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## How many questions are there and how are they distributed?

The exam consists of 90 questions and you have an hour and a half to answer them so on average a little under one minute per question. This is in line with certification best practices for multiple choice based tests but it will require you to get organized and focused to not run out of time. Thankfully there are methods and tools available to you to make sure you don't get overwhelmed by the quantity of questions. For that see our article "Test Taking Strategies for IT Certification"

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#### Network+ Exam N10-006

Domain	Approximate# of questions
1.0 Network architecture	20
2.0 Network operations	18
3.0 Network security	16
4.0 Troubleshooting	22
5.0 Industry standards, practices, and network theory	14
Total	90 questions

On CompTIA's Exam Objectives document you can read:

\*\*Note: The lists of examples provided in bulleted format below each objective are not exhaustive lists. Other examples of technologies, processes or tasks pertaining to each objective may also be included on the exam although not listed or covered in this objectives document.

This is the kind of statement you want to take seriously. It will require you not only to master the terms on the various lists but what they can do and different ways they can do it. This can be tricky but should impact how you study for the exam.

#### What is the passing score in plain English?

The grading scale is a bit funky as you are evaluated on a scale from 100 to 900. The passing score on the CompTIA Network+ N10-006 exam is 720. What this works out to in terms of percentages is a score of about 77%. This means that with a total of 100 questions per exam you will need at least 77 correct answers. Because the objectives are so wide ranging and unless you have a lot of professional experience, it will take a fair amount of work to prepare for this exam. If you doubt this just take a look the Network+ objectives as published by CompTIA: You are looking at 24 pages mainly of lists of items you could get a question on...

#### The question types you will see on the exam

By and large the most common question type is the multiple choice type of questions. The basic four alternatives – three detractors and one correct choice is the most common question type on the exam. Typically these questions will include one correct answer, one detractor that is very similar to the correct answer and a different detractor that is still wrong and finally the nonsense detractors. The nonsense detractor is the one a candidate with no idea about the topic at hand could pick. In some of these you will be facing more than one alternative that you will feel is correct, in those situations you

are expected to pick the "best" answer. By that CompTIA means the alternative that is the more direct and clearly related to the question as asked. Here is an example:

A customer wants games from their child's Windows XP computer removed. Which of the following is the BEST way to accomplish this task?

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- a) Control Panel > Game Controller > Select controller > click Remove
- b) Control Panel > Administrative Tools > Computer Management◊
- c) Control Panel > Add/Remove programs > Add/Remove Windows Components > select Accessories and Utilities > uncheck Games
- d) Programs menu > Right click Games > select Properties > select the Hidden check box

Answer c) "Control Panel > Add/Remove programs > Add/Remove Windows Components > select Accessories and Utilities > uncheck Games" is the best way to accomplish the task. The user wants the games removed and since we are expected to take the question literally it is the only choice that will actually remove the games. So from the top, a) game controllers will only impact the devices used for gaming, not the games themselves. b) Computer Management has no capabilities in this area. The last choice is the most tempting in terms of practicality it will only *hide* the Games from the menus not remove them. A crafty child will still be able to find them since they haven't been removed.

When you are facing the four alternatives – three detractors and one correct choice, you will see that the clickable area is a radio button. When you see a question that has check boxes instead of radio buttons, that will be a multiple choice – multiple answer type question. With these questions you can expect that five alternatives will contain two correct answers and six alternatives will contain three correct answers.

In addition to the multiple choice questions you will see two more question formats: Scenario based and Performance based questions.

The scenario based questions are essentially multiple choice questions just with a longer question text. Instead of asking you (basic multiple choice):

Which of the following network devices allows for full-duplex communication?

- a) Hub
- b) Bridge
- c) Switch
- d) Firewall

...the scenario based question sets up a situation that you are expected to respond to by choosing one of the alternatives. Here is an example of that:

A technician just finished removing spyware from a computer and now they are not able to connect to any websites. Which of the following is the MOST likely cause?

- a) Automatic configuration
- b) Network card driver is damaged
- c) Proxy settings
- d) The Internet is not functioning

Because these are CompTIA exams the scenario is a "scenario of few words"... CompTIA is known for its short and terse questions.

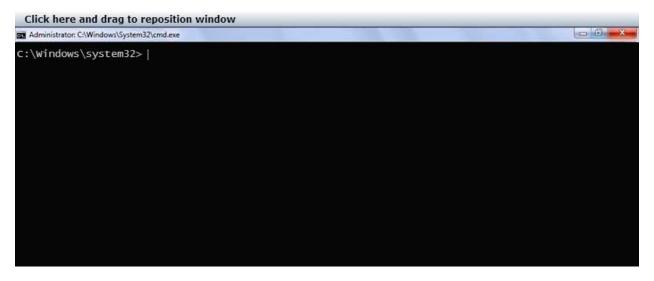
So what is the answer? The most likely answer here would be c) Proxy Settings. Malware often reconfigures proxy settings, or in some cases initiates them, to enable their programs to operate optimally. Often this could go unnoticed by the user and the program will run indefinitely undetected. Proxy settings is the MOST likely answer because you are told in the question that "A technician just finished removing spyware". Although in b) a damaged network card driver would cause inability to connect to the network it is not induced by malware removers and so does not qualify for the MOST likely cause. a) Automatic configuration will not disable internet connectivity by design as it is non-routable. Finally, d) if the Internet was not functioning in the workplace it's safe to assume yours would not be the only complaint!

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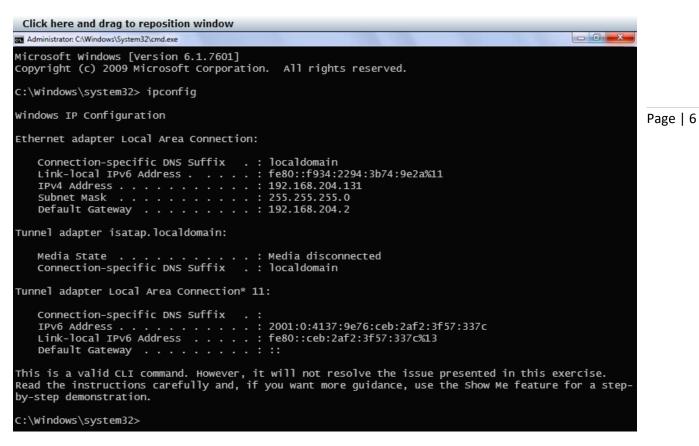
**IMPORTANT NOTE ON SCENARIO BASED QUESTIONS:** There is a potential for fair amount of scenario based questions in Exam N10-006. You get that from studying the CompTIA Exam Objectives documents. The exam objectives for Exam N10-006 lists 11 objectives starting with "Given a scenario..." This is significant and no Main Domain (the high level objectives) is free from these. To get the CompTIA Exam Objectives documents click on Network+ Exam Objectives.

The performance based questions are exercise based. You complete a task in a Windows simulator or a command line interface simulator and you come to the correct answer through entering the right command or navigating correctly in the Windows menu. Here is an example of a performance based question:

#### What is the IPv4 address on this machine?



This question is testing your knowledge of the TCP/IP utilities and the associated commands. For you to answer this question you have to know that IPCONFIG is the command that will reveal the IP address.



After entering ipconfig you can see that the IPv4 address is: 192.168.204.131.



## **BONUS SECTION**

#### What can Network+ Certification do for you?

There are two major things Network+ can do for you: 1) Get you a job, and 2) get you better pay. If you are new to the industry, point one is by far the most critical.

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Additionally there are employers that will require Network+ certification for any warranty work, making recruitment of Network+ certified individuals inevitable.

The second point is increased compensation. One of the largest salary surveys in our industry is the Robert Half Technology annual salary survey. In their 2014 Salary Guide for Technology Professional they list the 2013 income range for PC Technicians at \$31,250-\$46,000. Contrast that to the average CompTIA Network+ certified tech salary at \$50,364 (Source CompTIA 2013 at comptia.org). There is bump for being certified.

#### What's so special about Network+ Certification?

Network+ Certification was the first vendor neutral network certification to gain any traction in the market place. This is important and, till this day still relevant, as it ensures that if you pass, you get a credential that is recognized and wanted by the whole computing industry - not just one vendor. Network+ is also a "gateway certification". It is a great stepping stone to further certification such as Security+ or towards the new MCSA and MCSE certifications.

Being one of the leading IT certifications for network engineers, with over 100,000 certified individuals Network+ sets the standard for both the profession and other certification developers.

The bottom line is that Network+ has credibility and that's all you really want and need from a credential.

#### Must know for Network+

Although we said this is NOT a paper about subject matter knowledge, we had to share below pointers we keep getting from people taking the exam. So here are your musts:

- ✓ SOHO's.
- ✓ You must commit to memory the ports and protocols.
- ✓ Command line tools ie : netstat -r and how to add routes (this add a default gateway: route add -r 0.0.0.0 mask 0.0.0.0 192.168.104.19), ipconfig, ping
  All the wireless 802x numbers and what they do needs to be second nature.
- ✓ The OSI layers and what each does, what devices belong in each and which ports belong in each
- ✓ Fiber

#### Good luck!

