

## Lab 9.6.2 Identifying Necessary Knowledge, Skills, and Abilities

### Objectives

- Identify the knowledge, skills, and abilities needed to perform the tasks for a specific hands-on lab.

### Background / Preparation

In this lab, you review an existing hands-on lab, which you completed in a previous chapter, and analyze it to identify the types of knowledge, skill, and abilities required to successfully complete the lab.

The following resources are required:

- Lab 5.3.8 Configuring PAT with SDM and Static NAT using Cisco IOS Commands

### Step 1: Review the definitions for KSAs.

The CDC website (<http://www.cdc.gov/hrmo/ksahowto.htm>) describes the importance of KSAs (Knowledge, Skills, and Abilities) in the federal job application process. These concepts are equally applicable to networking job applicants.

- Review the definitions of these terms from the CDC website:

**Knowledge** statements refer to an organized body of information usually of a factual or procedural nature which, if applied, make adequate performance on the job possible. A body of information applied directly to the performance of a function.

**Skill** statements refer to the proficient manual, verbal, or mental manipulation of data or things. Skills can be readily measured by a performance test where quantity and quality of performance are tested, usually within an established time limit. Examples of proficient manipulation of things are skill in typing or skill in operating a vehicle. Examples of proficient manipulation of data are skill in computation using decimals; skill in editing for transposed numbers, etc.

**Ability** statements refer to the power to perform an observable activity at the present time. This means that abilities have been evidenced through activities or behaviors that are similar to those required on the job, e.g., ability to plan and organize work. Abilities are different from aptitudes. Aptitudes are only the potential for performing the activity.

- List at least one example for each term from your own networking or other area of personal experience.

Knowledge examples: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Skill examples: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Ability examples: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Step 2: Review an existing lab.

Locate Lab 5.3.8, “Configuring PAT with SDM and Static NAT using Cisco IOS Commands.” Read through the lab to become familiar with the tasks and steps performed. You may also review a different lab with the approval of the instructor.

### Step 3: Identify the knowledge, skills, and abilities required for the lab.

The tasks and steps from the lab are listed in the following table. Fill in the table with the knowledge, skills, and abilities required to perform each step.

| Task/Step  | Knowledge / Skills / Abilities Required |
|--|---|
| Task 1: Configure basic router settings and PAT                        | N/A                                     |
| Step 1: Build the network and configure host computer IP settings      |   |
| Step 2: Configure CustomerRouter basic settings with the Cisco IOS CLI |   |
| Step 3: Configure the ISP router basic settings with the Cisco IOS CLI |   |
| Step 4: Connect to CustomerRouter using SDM                            |   |
| Step 5: Configure SDM to show Cisco IOS CLI commands.                  |   |
| Step 6: Launch the Basic NAT wizard                                    |   |
| Step 7: Select the WAN interface for NAT                               |   |
| Step 8: Verify NAT functionality                                       |   |
| Task 2: Configure and verify static NAT using the Cisco IOS CLI        | N/A                                     |
| Step 1: Configure a static mapping for the server                      |   |
| Step 2: Test static NAT functionality                                  |   |

|   |  |
|---|--|
| <b>Step 3: Save the router configurations</b> |  |
|---|--|