

Lab 2.4.1 Establishing Technical Requirements

Objective

- Identify and document the technical requirements.

640-802 CCNA Exam Objectives

This lab contains skills that relate to the following CCNA exam objectives:

- Describe the purpose and functions of various network devices.
- Select the components required to meet a network specification.

Expected Results and Success Criteria

Before starting this lab, read through the tasks that you are expected to perform. What do you expect the result of performing these tasks will be?

What benefits are gained from identifying the technical requirements of a project before it is started?

Why is it important to consider both the technical requirements and the business requirements of a project?

Background / Preparation

FilmCompany is an expanding small advertising company moving into interactive advertising media, including video presentations. This company has just been awarded a large video support contract by the StadiumCompany. With this new contract, FilmCompany expects to see their business grow approximately 70 percent.

To facilitate this growth, the FilmCompany has decided to significantly upgrade its data network. You have the role of network design consultant. Your job is to develop network design and project documents for the FilmCompany that will meet the requirements of this upgrade.

This lab is one of a series of labs that explore the FilmCompany existing network and its upgrade requirements.

A comprehensive network project plan has to include details of technical requirements of the project. In this lab, you will create and prioritize the technical requirements for the network so that it meets the FilmCompany business goals and priorities.

Step 1: Determine the technical requirements

- a. Use word processing software to create a technical requirements document.
- b. From the case study document and checklists developed in previous labs, identify and list the technical requirements that will enable the network upgrade to meet the FilmCompany business goals. The technical requirements document provides direction for the network designer in the following decisions:
 - Selecting network equipment
 - Designing the topology
 - Choosing protocols
 - Selecting network services
- c. Discuss these technical requirements with another student, or in a group. Consider the range of possible technical solutions to meet the business goals of the FilmCompany.

Step 2: Prioritize the technical requirements

The network designer works with the customer to create a prioritized list of technical requirements. This list will be used to define the project scope.

- a. Rank the list of technical requirements in order of priority. Base this ranking on the information in the case study document and discussion with other students.

It is useful to categorize the technical requirements into the following areas:

- Availability and Performance
 - Security
 - Scalability
 - Manageability
- b. List the ranked technical requirements in a table and assign a priority value as a percentage. The total of the percentage values must equal 100.

Category	Prioritized Technical Requirements	Priority
Availability and Performance		
Security		
Scalability		
Manageability		
	TOTAL	100

- c. Discuss your priority values with other students. If there are differences in priorities discuss why this has occurred and attempt to resolve them.

- d. Save your Project Prioritized Technical Requirements Checklist document and retain it for the next stages of this network design case study.

Step 3: Reflection

When discussing technical requirements with the customer, the network designer must consider the technical level of the audience. Technical terms and jargon may not be clearly understood by the customer. Such terms should either be avoided or tailored to the level of detail and complexity that the customer can understand.

Compile a list of networking technical terms and jargon that may need to be expressed or explained to a non-technical business customer. Develop an explanation or definition for each term that a non-technical business customer can understand for the purpose of discussing a network upgrade with them.
