

## Lab 7.2.6 Analyzing Results of Prototype Tests

### Objective

- Analyze a network design and the results of a prototype test to determine if weaknesses exist in the proposed design.

### 640-802 CCNA Exam Objectives

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

- Interpret network diagrams.
- Identify and correct common network problems at Layers 1, 2, 3, and 7 using a layered model approach.

### 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?

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Why do you think it is important to identify any weaknesses or risks contained in a proposed network design?

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### Background / Preparation

Network designs often have weaknesses or areas of risk because the designer must work within constraints applied by the customer. These weaknesses can include obvious risks, such as no firewall or security filtering, or can be harder to identify. Using the results and conclusions of the Test Plan you finished in Lab 7.2.5, determine if there are areas where risk exists in your proposed design.

### Step 1: Identify if weaknesses are present in the design

Is the design able to scale to meet the growth, or do budget constraints limit the types of hardware and infrastructure that can be included?

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Do the IP addressing and VLAN configurations allow for the proposed growth?

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Can the selected hardware be upgraded easily without a major reconfiguration of the network?

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Can new Access Layer modules be integrated into the network without disrupting services to existing users?

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Does the design provide for the smallest possible failure domains?

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Are there multiple paths and redundant devices to protect against losing connectivity to important services?

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## **Step 2: Determine what the risks are of not correcting the weaknesses**

If, in Step 1, you identify weaknesses in the proposed design, what risks do these weaknesses present to FilmCompany?

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## **Step 3: Suggest ways that the design can be improved to reduce the risk**

In what ways could the proposed design be improved to reduce the areas of risk?

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## **Step 4: Document the weaknesses and risks on the test plan**

In the Results and Conclusions section of the test plan, record any weaknesses, risks, and suggested improvements.

**Step 5: Reflection**

Why do you think it is important to identify weaknesses and risks in the proposed design before presenting it to the customer? What are some reasons that weaknesses cannot be corrected?

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