



Basic Connectivity Test Plan

	Start Date	End Date
Network Build (Setup)		
Testing Date		

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Attendees

Name	Company	Position

Introduction

An introduction to the testing explaining briefly what the purpose of the test is, and what should be observed. Include a brief description of testing goals. List all tests you intend to run.

For example:

The purpose of this test plan is to demonstrate that the basic connectivity and routing protocol are configured correctly. This prototype network is used to test various aspects of the proposed design.

- Test 1: Baseline Connectivity Test
 - Verify physical and IP connectivity between devices on the prototype network.
 - Collect operational baselines.
 - Demonstrate IP connectivity between devices on the same VLANs.
 - Demonstrate the routing protocol operates correctly and that the web server is accessible through the network.

Equipment

List all of the equipment needed to perform the tests. Be sure to include cables, optional connectors or components, and software.

Qty. Req	Model	Any additional options or software required	Substitute	IOS Software Rev.
2	2960 Layer 2 switch	none	Any 2950 or 2960 model switch	12.2 or above
2	1841 ISR routers with 2 FastEthernet ports and 2 Serial ports	none	Any multilayer switch or router with minimum 2 FastEthernet ports and one serial port.	12.2 or above
2	Personal Computer end-devices	FastEthernet NIC	At least one PC and any other IP end-device (camera, printer, etc.)	Windows, MAC or Linux operating system.
1	Personal Computer Server	FastEthernet NIC	Any PC with web server software loaded	Windows, MAC, or Linux operating system
6	Cat 5 or above straight-through patch cables.	none	none	n/a
2	Cat 5 or above cross-over patch cables	none	none	n/a
2	V.35 DTE Serial Cables	None	None	n/a
2	V.35 DCE Serial Cables	None	None	n/a

Design and Topology Diagram

Place a copy of the prototype network topology in this section. This is the network as it should be built to be able to perform the required tests. If this topology duplicates a section of the actual network, include a reference topology showing the location within the existing or planned network. Initial configurations for each device must be included in the Appendix.

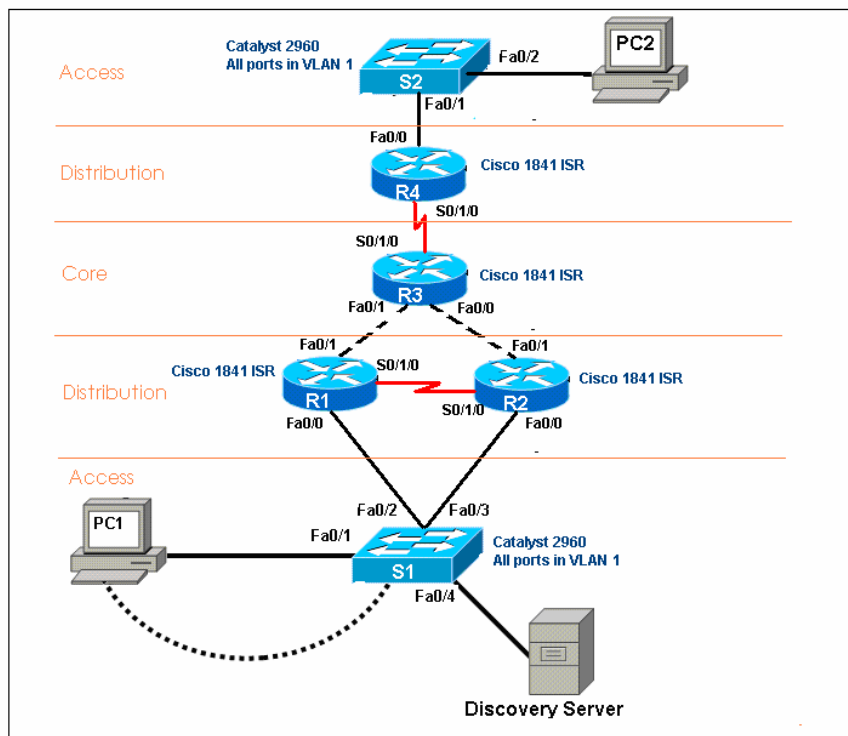


Figure 1: Topology - Prototype test topology.

Add a description about this design here that is essential to provide a better understanding of the testing or to emphasize any aspect of the test network to the reader.

For each test to be performed state the goals of the test, the data to record during the test, and the estimated time to perform the test.

Test 1. Description: Baseline Connectivity Test

Goals of Test:

The goal of the baseline is to verify that the topology is up and running with the proper protocols and features.

Data to Record:

Configurations
Routing Tables
CPU & Memory
Ping Test Output

Estimated Time:

120 minutes

Test 1. Procedures:

Itemize the procedures to follow to perform the test.

1. Connect and configure the prototype network according to the Installation Checklist.
2. Console into one of the devices in the topology and ping all of the other devices in the topology. Record any anomalies.
3. Examine the `"show running-config"` and `"show ip route"` output. Copy and paste the results into a document for later use.
4. Telnet to all of the other devices and get the same information.
5. Use the `"traceroute"` commands to verify that the traffic is taking the correct routes through the network.
6. Test IP connectivity between host devices on the same VLAN.
7. Verify EIGRP configuration using `"show ip route"` and `"show ip protocols"`, and `"show ip eigrp topology"` or `"show ip eigrp interfaces"`.

Test 1. Expected Results and Success Criteria:

List all of the expected results. Specific criteria that must be met for the test to be considered a success should be listed. An example of specific criteria is: "A requirement that ping response times cannot exceed 100 ms."

1. All networking devices are connected and accessible through Telnet.
2. Hosts on a VLAN can ping successfully to other hosts on the same VLAN.
3. EIGRP routes are advertised correctly and are installed into the routing tables on all of the routers.
4. Web pages stored on the Discovery Server are available to both PCs.

5.

Test 1. Results and Conclusions

Record the results of the tests and the conclusions that can be drawn from the results.

Appendix

Record the starting configurations, any modifications, log file or command output, and any other relevant documentation.