

113-SIG-3010
Resolve Faults on a Network
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the US Army Signal School and FG foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without restrictions.

Condition: Your network is very small and you discover that it is not working correctly. Some of the devices cannot access each other and some cannot access the router which connects to the ISP. You have 3 Cisco Routers (With Cisco IOS release 15.2(4)M3 universal image or comparable), 2 Cisco Switches (With Cisco IOS release 15.0(Z) lanbaseK9 image or comparable), 2 PCs (Windows 7, Vista, or XP with terminal emulation software), 1 console cable, 4 ethernet straight-thru cables, 2 serial DCE/DTE cables

Standard: Corrects all faults on the network so that all equipment is communicating.

Special Condition: None

Safety Risk: Low

MOPP 4:

Task Statements

Cue: None

DANGER
None

WARNING
None

CAUTION
None

Remarks: None

Notes: All required references and technical manuals will be provided by the local Command via Cisco Networking Academy at www.netacad.com.

Performance Steps

1. Gather symptoms.
 - a. Gather information.
 - b. Determine ownership.
 - c. Narrow the scope.
 - d. Gather and symptoms from suspect devices.
 - e. Document symptoms.

2. Isolate the problem using the following commands.
 - a. Ping, Traceroute, Telnet, and Show Interface.
 - b. Show IP interface brief or show IPv6 interface brief.
 - c. Show ip route or show IPv6 route.
 - d. Show running-config, protocols and vlan.

3. Implement corrective action.
 - a. Problem still exists, undo corrective action and return to gathering and isolating symptoms.
 - b. Problem resolved, document solution and save changes.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all steps are passed (P). Score the Soldier NO GO if any step is failed (F). If the Soldier fails any step, show what was done wrong and how to do it correctly.

Evaluation Preparation: Ensure that the equipment is available, serviceable, and ready for use. Use the reference and evaluation guide to score the Soldier's performance. Brief Soldier: Tell the Soldier what is required IAW the task condition and standards.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Gathered symptoms.			
2. Isolated the problem using the following commands.			
3. Implemented corrective action.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	ISBN: 9781587058820	Implementing Cisco IP Routing (ROUTE) Foundation Learning Guide: Foundation learning for the ROUTE 642-902 Exam (Foundation Learning Guides)	No	No

TADSS : None

Equipment Items (LIN): None

Materiel Items (NSN) :

Step ID	NSN	LIN	Title	Qty
	7025-01-581-2387	05004N	Cisco Integrated Router Gen 2: CISCO 2901/K9	3
	5895-01-539-4546	FA9516	Catalyst 2960 24 PT	2

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks :

Task Number	Title	Proponent	Status
11-5-7140(Step: 3.)	Install Network Management (NM) Suite	11 - Signal (Collective)	Approved

ICTL Data :

ICTL Title	Personnel Type	MOS Data
MOS 25U Signal Support Systems Specialist Skill Levels 1, 2, 3, and 4	Enlisted	MOS: 25U
MOS 25Q Multichannel Transmission Systems Operator-Maintainer Skill Levels 1, 2, and 3	Enlisted	MOS: 25Q
MOS 25C Radio Operator-Maintainer Skill Levels 1, 2, and 3	Enlisted	MOS: 25C

MOS 25N Nodal Network Systems Operator-Maintainer Skill Levels 1, 2, and 3	Enlisted	MOS: 25N
MOS 25B Information Technology Specialist Skill Levels 1, 2, 3, 4 and 5	Enlisted	MOS: 25B
MOS 25L Cable Systems Installer-Maintainer Skill Levels 1, 2, and 3	Enlisted	MOS: 25L