

Packet Tracer Lab 5

New Workstation Deployment Issue

Incident ID: INC-1005

Difficulty

Beginner

Estimated Time

15-30 Minutes

Skills Covered

- Access Port Verification
- Switch Interface Troubleshooting
- End Device Connectivity Testing
- MAC Address Table Verification
- Basic Layer 2 Troubleshooting
- Structured Troubleshooting Methodology

Scenario

The IT team recently deployed a new workstation for an employee in the Operations department.

Shortly after deployment, the user reported being unable to access internal resources, including shared network services and business applications used by their team.

Initial investigation confirms the workstation is physically connected to the network; however, the user is still unable to communicate with internal systems that other Operation department employees can access successfully.

No other users have reported similar issues, indicating the problem is isolated to the newly deployed workstation.

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You have been assigned as the technician responsible for identifying the root cause, restoring connectivity, and validating that normal operations have been restored.

Customer Report

Reported By: Operations Department

Users Affected: Operations Department (Single User)

Business Impact: A newly deployed workstation is unable to access internal resources or business applications required for daily work.

Issue Started: Immediately following workstation deployment.

Priority: Medium

Initial Observations:

- Only one user has reported the issue.
- Other department workstations appear to be functioning normally.
- Root cause is currently unknown.
- Investigation is required.

Goal

- Identify the root cause of the workstation connectivity issue
- Restore access to required network resources
- Validate communication with departmental systems
- Document your findings

Environment

- Operations Department Workstation (Affected Device)
- Operations Department Workstations (Known Good Devices)
- Layer 2 Access Switch
- Branch Router
- Internal Application Server

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Troubleshooting Mindset

During troubleshooting, think through the following questions:

- Has the workstation successfully obtained an IP address?
- Can the workstation communicate with its default gateway?
- Is the workstation connected to the expected switch interface?
- Is the switch interface operational?
- Are other devices within the same department functioning normally?
- What differences exist between the affected workstation and working systems?
- Have any recent deployment changes impacted connectivity?

Focus on comparing the affected workstation against known-good devices and isolate the issue step-by-step.

Expected Outcome

By the end of this lab, the workstation should successfully communicate with departmental resources and internal services.

Users should also be able to explain the troubleshooting process used to identify and resolve the issue.

Optional BridgeOpsOne Workflow

This section is optional but recommended for users who want a more realistic operations-center experience.

1. Create an Initial Update

Create an initial customer-safe incident update describing the issue.

Example topics:

- Newly deployed workstation experiencing connectivity issues

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- User unable to access internal resources
- Investigation in progress

Use the Generate feature if needed to clean and professionalize your update.

2. Save Timeline Updates

During troubleshooting, provide 2–3 operational updates describing:

- What you are investigating
- What has been ruled out
- Progress toward resolution

Add these updates to your incident timeline within the Command Center.

Focus on keeping updates:

- Professional
- Concise
- Customer safe

3. Create a Final Resolution Statement

Once connectivity has been restored, create a final resolution update summarizing:

- What caused the issue
- Actions taken
- Current environment status
- Monitoring and validation steps

Real-World Relevance

This issue simulates realistic troubleshooting commonly encountered in:

- Help Desk Environments

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- NOC Environments
- Enterprise IT
- Desktop Support Roles
- Network Operations
- Junior Network Administrator Roles

Deliverables

At the conclusion of this lab, users should be able to:

- Explain the issue
- Describe the troubleshooting process
- Demonstrate the fix
- Validate successful workstation connectivity
- Restore access to required resources
- Communicate findings clearly

Hints

- Verify physical and Layer 2 connectivity before investigating higher-layer network services.
- Compare the affected workstation against a known-good workstation.
- Use: ipconfig
to review workstation network settings.
- Use: ping
to test communication with the default gateway and internal resources.
- Verify switch interface status.
- Consider whether the workstation has been placed into the correct network segment.
- Follow a structured troubleshooting process and avoid making assumptions too early.

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