

THREE TIPS FOR MANAGING NETWORK CHANGES

Every business depends on its network to run efficiently at all times. No one can afford network outages or degradations due to poorly planned infrastructure changes. The following three steps help mitigate risks when managing network change, while also ensuring faster and more cost-effective implementations. If any one step is skipped or done incorrectly, costlier problems can potentially develop later.

The methodology

Discovery and baselining

Network professionals must first know what they're dealing with. Discovery means asking: What kind of equipment exists? What is the traffic today? Who are the users? It should include hardware inventory, applications, router configurations, switch configurations, network cabling and protocol usage. Engineers should evaluate current network performance, including traffic patterns, bandwidth optimization, Internet connectivity, and network vulnerabilities.

Baselining means creating documentation of the current state so there is something to work from to plan changes and measure against to validate them.

Design assistance

The next step is designing the plan for making the changes using the documentation as a guide. What is the end goal and how will you get there? This is the stage at which the IT team makes decisions about reconnecting, the addressing scheme, server location changes, etc., then creates a design to facilitate those decisions.



Fluke Networks DTX-1800 Cable Analyzer

Validation

The third step is validating the design after implementation. Are all the devices configured correctly? Did a user get moved? Did the switch get changed? Network professionals verify that changes were made, then document, report and baseline the network again for future reference.

There is a way to speed up the process without sacrificing precision. A network analyser makes following the process outlined above easier, particularly if the device includes all of the following capabilities:

- Network discovery
- Mapping/documentation
- SNMP polling to baseline switch and router performance
- Wire speed, hardware packet capture and protocol analysis to measure before/after network/application response times
- Traffic monitoring to determine which protocols are on the network
- Host management utilities (telnet/ssh) to view and change infrastructure device configurations