

# Lab Report for Mission 5 and Mission 6

Version 1.0

You should consider this report as a technical document to your peers and sub-ordinates; and a progress report to your supervisor.

In this document, you should

1. Describe the procedures, set up configurations, and debugging methods/procedures of the following services in your network
  - internal DNS servers
  - mail relay server for your sale and marketing department
  - transparent proxy servers for your clients in the internal private network
  - NTP service
  - MRTG traffic monitoring
  - NTOP traffic monitoring
  - NETFLOW IP accounting
  - TACACS+ authentication and accounting
  - Reverse proxy and/or NAT for internal web servers
2. Describe what you have been adjusted in your router access lists and firewall filter rules so as to support the above services and at the same time protect your network as much as possible. Explain why this adjustment is necessary and state your justification.
3. Explain, with diagram, how the internal and external DNS servers work for the mail relay and reverse proxy services.
4. Explain, with diagram, how the NAT at your firewall works for the transparent proxy services and port redirect, says your NTOP web page port redirect
5. Describe how NETFLOW can help us to do IP accounting and Network Monitoring
6. Describe how MRTG make use of SNMP to monitor our network devices
7. Describe what solution (reverse proxy and/or NAT) you had chosen for internal web servers' access. Sate your justification.

8. Write an executive summary, not more than half page, to report what you have done so far to your supervisor: what you have achieved so far and any difficulties you encountered.

For points 2 to 7, you may quote some references to support your explanations.