CHAPTER 2

DOCUMENTING NETWORK ANALYSIS & DESIGN

Expected Outcomes
Able to analyse the network requirements and respond to a Customer's RFC
Able to generate the contents of network design document
Documenting Your Design

• If you are given a request for proposal (RFP), respond to the request in the exact format that the RFP specifies

• If no RFP, you should still write a design document
  • Describe your customer’s requirements and how your design meets those requirements
  • Document the budget for the project
  • Explain plans for implementing the design
Typical RFP Response Topics

- A network topology for the new design
- Information on the protocols, technologies, and products that form the design
- An implementation plan
- A training plan
- Support and service information
- Prices and payment options
- Qualifications of the responding vendor or supplier
- Recommendations from other customers
- Legal contractual terms and conditions
Contents of a Network Design Document

- Executive summary
- Project goal
- Project scope
- Design requirements
- Current state of the network
- New logical and physical design
- Results of network design testing
- Implementation plan
- Project budget
Design Requirements

• Business goals explain the role the network design will play in helping an organization succeed
• Technical goals include scalability, performance, security, manageability, usability, adaptability, and affordability
Logical and Physical Design

• Logical design
  • Topology
  • Models for addressing and naming
  • Switching and routing protocols
  • Security strategies
  • Network management strategies

• Physical design
  • Actual technologies and devices
Implementation Plan

- Recommendations for deploying the network design
- Project schedule
  - Including any dates and times for service provider installations
- Any plans for outsourcing
- Training
- Risks
- A fallback plan if the implementation should fail
- A plan for evolving the design as new requirements arise
Possible Appendixes

- Detailed topology maps
- Device configurations
- Addressing and naming details
- Network design testing results
- Contact information
- Pricing and payment options
- More information about the company that is presenting the design
  - Annual reports, product catalogs, press releases
- Legal contractual terms and conditions
Summary

• When a customer provides an RFP, make sure to follow the prescribed format
• When not bound by an RFP, develop a design document that describes requirements, the existing network, the logical and physical design, an implementation plan, and the budget
• Be sure to include an executive summary
• In some cases, you should also include appendixes with detailed information
Review Questions

• Why is it important to document your network design?
• What are the major topics in a design document?
• What are some possible appendixes for a design document?
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Possible Appendices

• Detailed topology maps
• Device configurations
• Addressing and naming details
• Network design testing results
• Contact information
• Pricing and payment options