

EP2520/FEP3250 Building Networked Systems Security (BNSS)

Initial requirement analysis

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1 Project scope and objectives

1.1 Basics

1. Employees connect to the cooperate network (two servers)
2. Exchange files between employees (SFTP, confidentiality, integrity and authenticity)
3. Mobile devices / untrusted devices: two-factor authentication
4. Laptops: securely work remotely (VPN)(except sensitive operations)
5. Routers: provide wired/wireless connections (laptops and mobile devices)
6. Working hours restrictions

1.2 Securities

1. Authentication: digital identity
2. Secure Connectivity: employees → servers, logging network traffic and requests. Employee ↔ Employee
3. Confidentiality and Anonymity: Information exchange encrypted, authenticated, integrity.
4. Secure Wireless Access: Authorization and Authentication
5. Other: alerting for attacks, preventing clogging DoS, guaranteeing domains cannot be exploited or employees misleading, handling equipment stolen and credentials compromised

2 Action plan

2.1 Phase 1

- Feb. 3 Initial requirement analysis
- Feb. 13 Requirement analysis & design
- Feb. 15 Peer review
- Feb. 17 Finalized analysis & design

2.2 Phase 2

- Mar. 12 Implementation
 - Mobile devices / laptops: Ziyang
 - Routers / switches: Enze
 - Servers: Keyao
 - Security: Zhiyuan
 - Documentation: Enze

2.3 Phase 3

- Mar. 17 Presentation & Demo

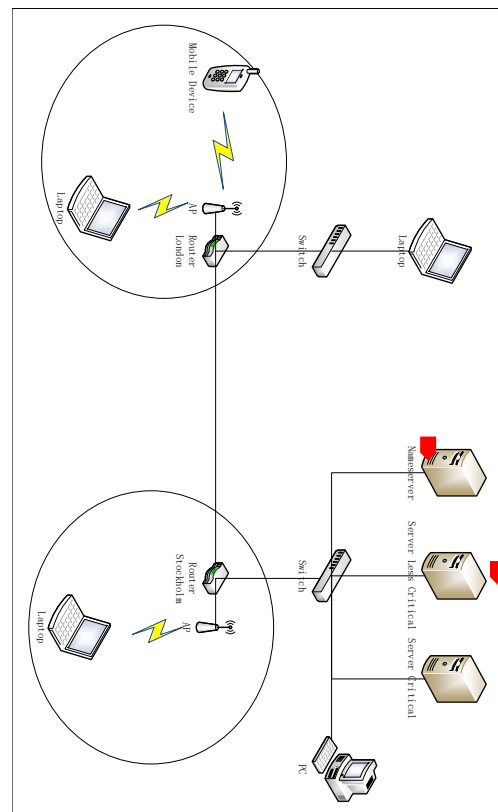


Figure 1: Topology of Network