PROJECT PROPOSAL: NET FUSION

Team Members:

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INTRODUCTION

- This project aims to design and implement an integrated, scalable, and flexible enterprise network using Huawei Datacom technologies. The proposal outlines the project's motivation, objectives, methodology, and expected outcomes.

PROBLEM STATEMENT

- Modern organizations require robust, scalable, and secure network infrastructures that support daily operations, security, and future expansion. Many networks fail due to poor planning, limited scalability, lack of documentation, faulty of devices and cables, and poor security.

OBJECTIVES

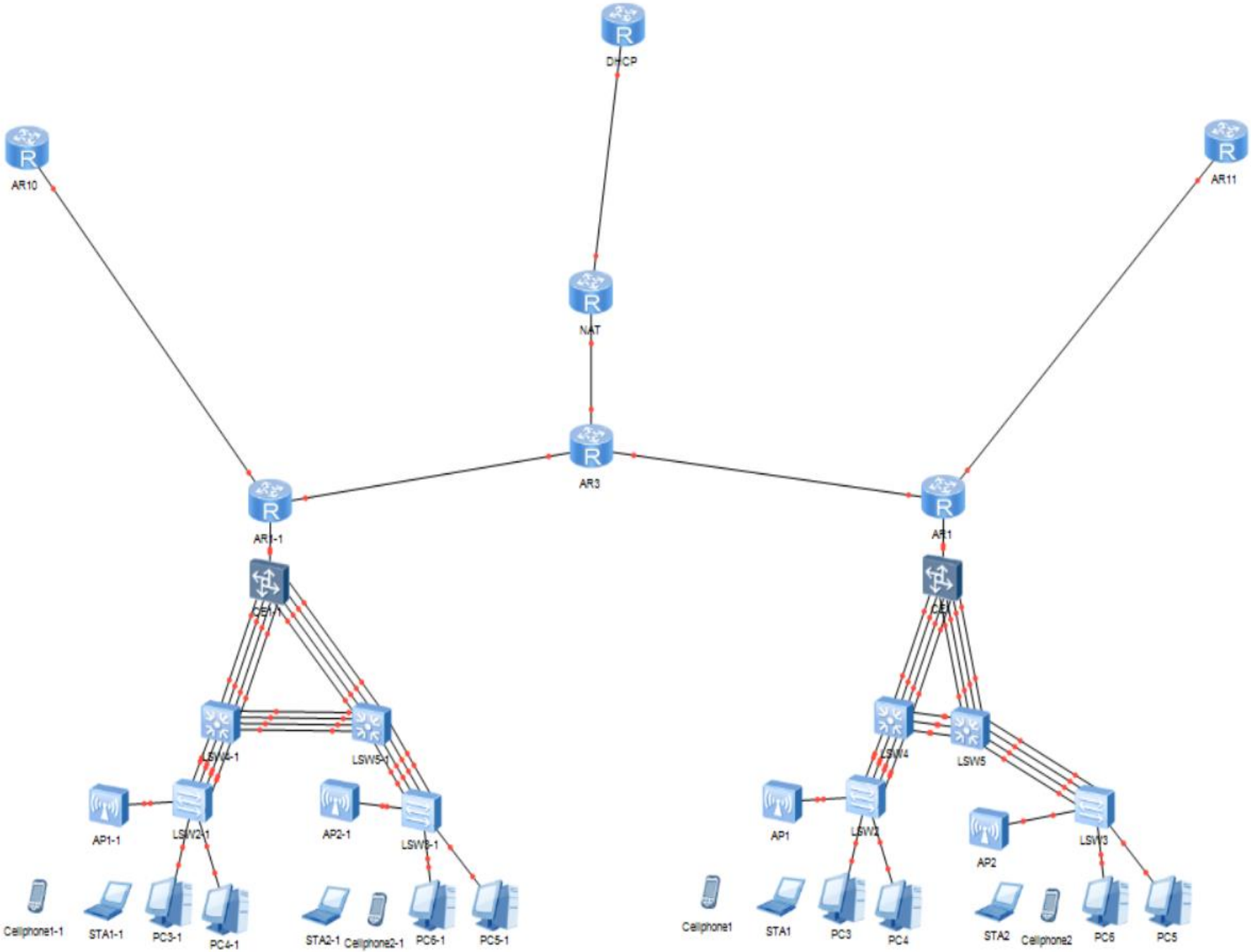
- Gain comprehensive practical experience
- Build a complete, organized, and scalable network
- Understand corporate network structure (Access, Aggregation, Core layers)
- Enable integration of new technologies after deployment
- Develop planning, documentation, and security skills
- Implement enterprise-grade services (DHCP and Telnet)

SCOPE OF WORK

- Layer 2: Switching (Core, Aggregation and Access switches, STP protocol, Link Aggregation, VLAN, INTER-VLAN)
- Layer 3: Routing (Routers, OSPF, NAT)
- security techniques: ACLs, AAA
- Network Services: DHCP, Telnet
- LAN, WAN & WLAN implementation

METHODOLOGY

- Planning & Design: Topologies, Devices selection
- Implementation: Configure switches and routers, and Implementing all necessary protocols, security requirements and services.
- Testing & Verification: Connectivity, redundancy, security, performance
- Documentation: Configurations, Topologies, guidelines


DHCP
AR10
AR11
NAT
AR3
AR1-1
AR1
CE1-1
CE1
LSW4-1
LSW5-1
LSW4
LSW5
AP1-1
LSW2-1
AP2-1
LSW3-1
AP1
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Cellphone1-1
STA1-1
PC3-1
PC4-1
STA2-1
Cellphone2-1
PC6-1
PC5-1
Cellphone1
STA1
PC3
PC4
STA2
Cellphone2
PC6
PC5

PROJECT ROLES

EXPECTED OUTCOMES

- Fully functioning enterprise-level network using Huawei Datacom
- Enhanced understanding of network planning and implementation
- Practical experience with security, routing, and switching
- Scalable design that supports future technologies

TIMELINE

- Planning & Design: Week 1 → Network diagrams and Topologies, requirements
- Implementation: Week 2 → Configured network devices
- Testing: Week 3 → Validation reports
- Documentation: Week 4 → Final project report

RESOURCES REQUIRED

- Huawei Datacom devices and tools (Switches, Routers, PCs, ACs and Cables)
- Network simulation tools (eNSP)
- Documentation software (Word, PowerPoint)

CONCLUSION

- This project will provide hands-on experience in enterprise networking with Huawei Datacom, equipping the team with practical knowledge in planning, implementation, and security while ensuring scalability for future growth.


Thank
You
Merci
Merci
Kiitos
Welalin
Matondo
Maake
Vinaka
Asante
Obrigado
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Spasiba
Merci
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Dank Je