

CIS 282 Advanced Network Administration I Notes

1. Introduction to Advanced Network Administration

- **Overview:** Focuses on advanced concepts in managing and optimizing enterprise-level networks.
 - **Key Responsibilities:**
 - Advanced troubleshooting
 - Scalability planning
 - Network security hardening
 - Virtualization and cloud integration
 - High-availability configurations
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2. VLANs (Virtual Local Area Networks)

- **Definition:** Logical segmentation of networks to improve efficiency and security.
- **Benefits:**
 - Reduces broadcast domains
 - Enhances security
 - Simplifies network management
- **Trunking:**
 - Allows VLANs to span multiple switches
 - Common protocol: **802.1Q**
- **Commands** (Cisco example):

```
vlan 10
name HR
exit
interface fa0/1
switchport mode access
switchport access vlan 10
```