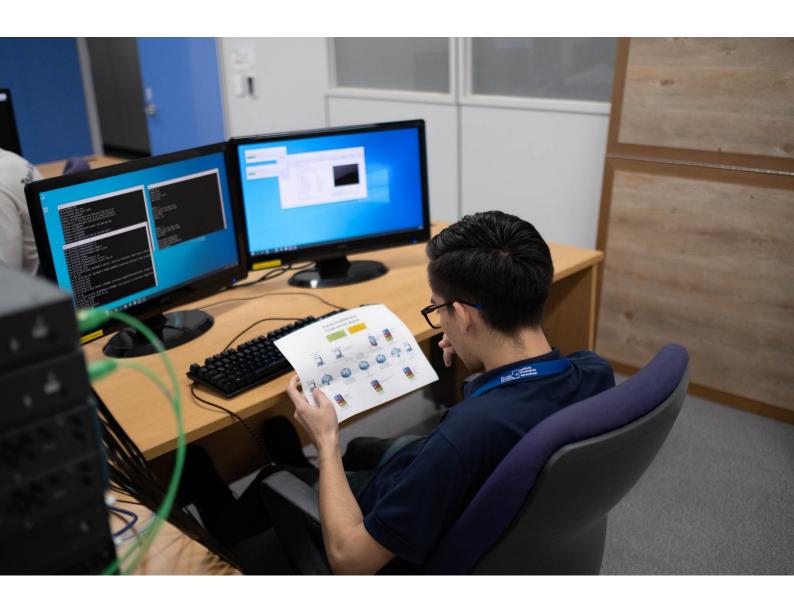
LOMBA KOMPETENSI SISWA SEKOLAH MENENGAH KEJURUAN

TINGKAT PROVINSI JAWA TENGAH TAHUN 2025



KISI-KISI IT NETWORK SYSTEMS ADMINISTRATION

INFORMASI UMUM

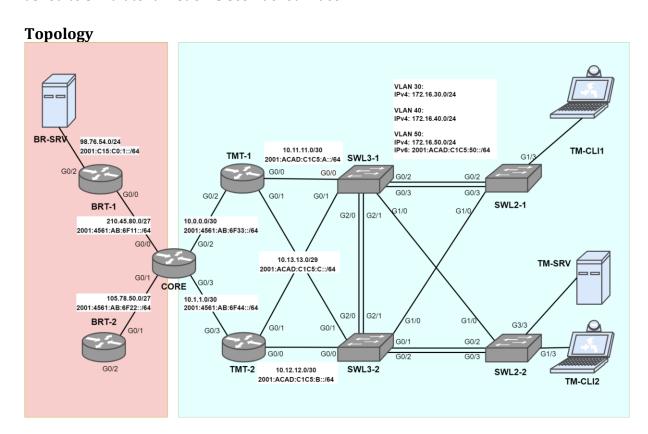
Lomba Kompetensi Siswa (LKS) tingkat Provinsi Jawa Tengah tahun 2025 bidang lomba IT Network Systems Administration (ITNSA) menggunakan Test Project yang mengacu kepada Test Project LKS Tingkat Nasional 2024. Berkaitan dengan hal tersebut, maka Test Project Actual yang akan digunakan pada pelaksanaan LKS Tingkat Provinsi tahun 2025 akan dibuka pada saat kompetisi dengan memberikan perubahan dari kisi-kisi LKS Provinsi Jawa Tengah 2025 yang sudah dipublikasikan. Perubahan tersebut meliputi topology, IP Address, nama host dan domain serta termasuk perubahan perintah spesifik yang diberikan.

MODULE A

NETWORK SYSTEMS – CISCO PACKET TRACER

Description

You work as a Network Engineer at ITNSA.ID Corp. The company is currently rebuilding its network services from scratch. As a company that has branches in various regions, your job is to ensure that network access from one branch to another can run properly. You must ensure that the routing and switching services on each device are in accordance with the previously created design. Before you implement it on a real device, you are asked to simulate it first on Cisco Packet Tracer.



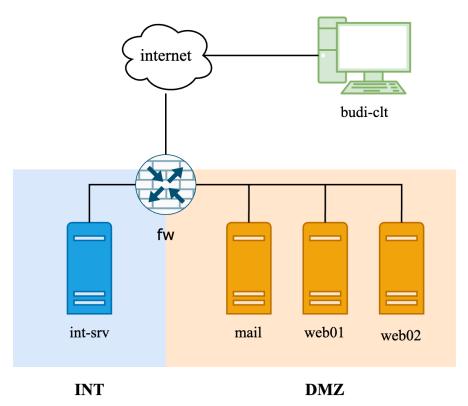
Task Summary

- Basic Configuration
- L2 Switching
 - VLAN & Inter-VLAN Routing
 - EtherChannel
 - o VTP
- L3 Routing
 - Static Routing
 - o EIGRP
 - o OSPF
- Services: NAT; FHRP; DHCP; SNMP; NTP
- Security
 - o SSH
 - Port Security

MODULE B LINUX ENVIRONMENT

This project presents a Linux-based network environment aimed at providing secure and efficient infrastructure management. The provided topology consists of distinct zones: Internal (INT) and Demilitarized Zone (DMZ), separated by a firewall to enforce security and access control policies. Key servers, such as internal services (int-srv), mail, and web servers (mail, web01, and web02), are strategically positioned based on their function and exposure level.

Logical Topology



Task Summary

- DNS
- WEB
- HA Proxy
- LDAP
- CA
- SAMBA
- MAIL
- Virtual IP
- VPN
- FIREWALL
- ANSIBLE

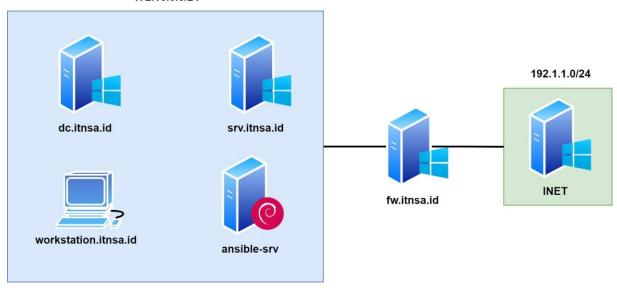
MODULE C WINDOWS ENVIRONMENT

Description

You are working as a system administrator for itnsa.id organization. This organization utilizes products from Microsoft for providing resources and services. Meanwhile, Ansible is used as the open-source solutions for automation purposes. As a good system administrator, you must be able to complete all of these tasks within fixed time.

Topology

172.16.0.0/24



Task Summary

- Active Directory
- Certificate Authority
- DHCP
- DNS
- File Service
- IIS Web Service
- RAID
- Routing & Remote Access
- Ansible
- Powershell scripting