

Getting Connected to ISU: Technical Requirements

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Agenda

📌 Introduction

- 📌 Typical Site Configuration

📌 Physical Connectivity

📌 IP-level Connectivity

- 📌 Routing
- 📌 IP addresses
- 📌 Domain names resolution

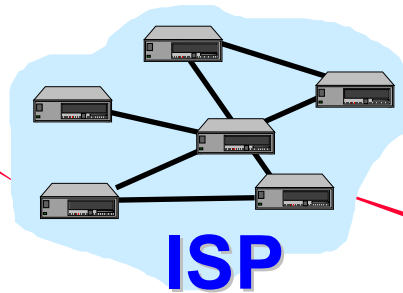
📌 Applications and services

- 📌 Domain name registration
- 📌 Email
- 📌 Proxy

📌 Summary

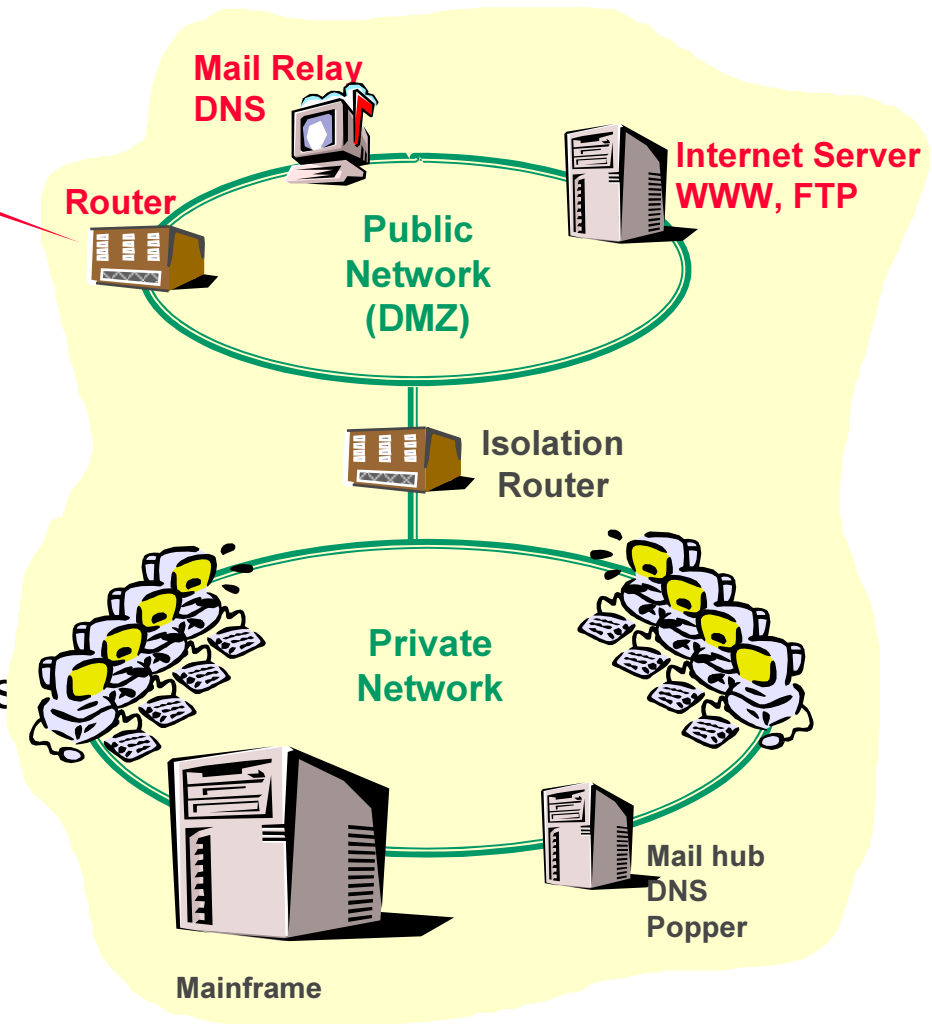


Introduction: Typical Site Configuration



Typical Services

- Email
- Domain name services
- Web services
- FTP services
- Internet access to local users





Physical Connectivity

STC is responsible for all details concerning the physical connection between YOUR Site and ISU.

Questions to STC:

- How these sites are going to be connected to ISU?
 - Point-to-point DDN or ATM?
 - Link capacity?
- What equipment are needed at Your site and ISU?
 - MidiNode?
 - Router Interface?



IP-Level Connectivity: Routing

- ❦ **Static routing will be used**
- ❦ **Your IP address space should be known to ISU so that it can be announced to the world.**



IP-Level Connectivity: IP addresses

☛ must be:

- ☞ disclosed to ISU.
- ☞ routable, and
- ☞ BGP advertisable.

☛ can be obtained via ISU

- ☞ ISU provides “Provider Aggregatable Address Space”, i.e.,

IP addresses assigned to an entity by ISU can be kept as long as that entity routes its traffic through ISU.

- ☞ Submit an IP Address Space Request Form to ISU

– <http://www.saudinic.net.sa/ip-allocation>

- ☞ if request is large: ISU may request support documents (e.g., Maps of the network)



IP-Level Connectivity

Domain name resolution

- ❦ **This services is essential to your users**
- ❦ **It will convert domain names (e.g.,
www.cnn.com) to its corresponding IP address
before establishing the connection.**
- ❦ **Each site is required to provide domain name
resolution for its users.**



Applications and services: Domain name registration

☛ **Each site must setup at least a primary DNS server for its domain:**

☞ <site>.gov.sa

☞ <site>.org.sa

☞ <site>.edu.sa

☛ **Register with SaudiNIC**

☞ Submit a Letter to SaudiNIC

☞ Fill a SaudiNIC domain name registration form

– <http://www.saudinic.net.sa/domain>

☛ **Do not forget to set up a primary DNS server for your reverse-lookup domains (x.x.x.in-addr.arpa)**



Applications and services:

Email

☛ If email service is needed (e.g., `user@site.edu.sa`):

☛ It is recommended that the e-mail relay software:

- kept well configured
- recent bug-free version
- configured to block third-party relaying

☛ discourage spamming by offering to track down and close accounts



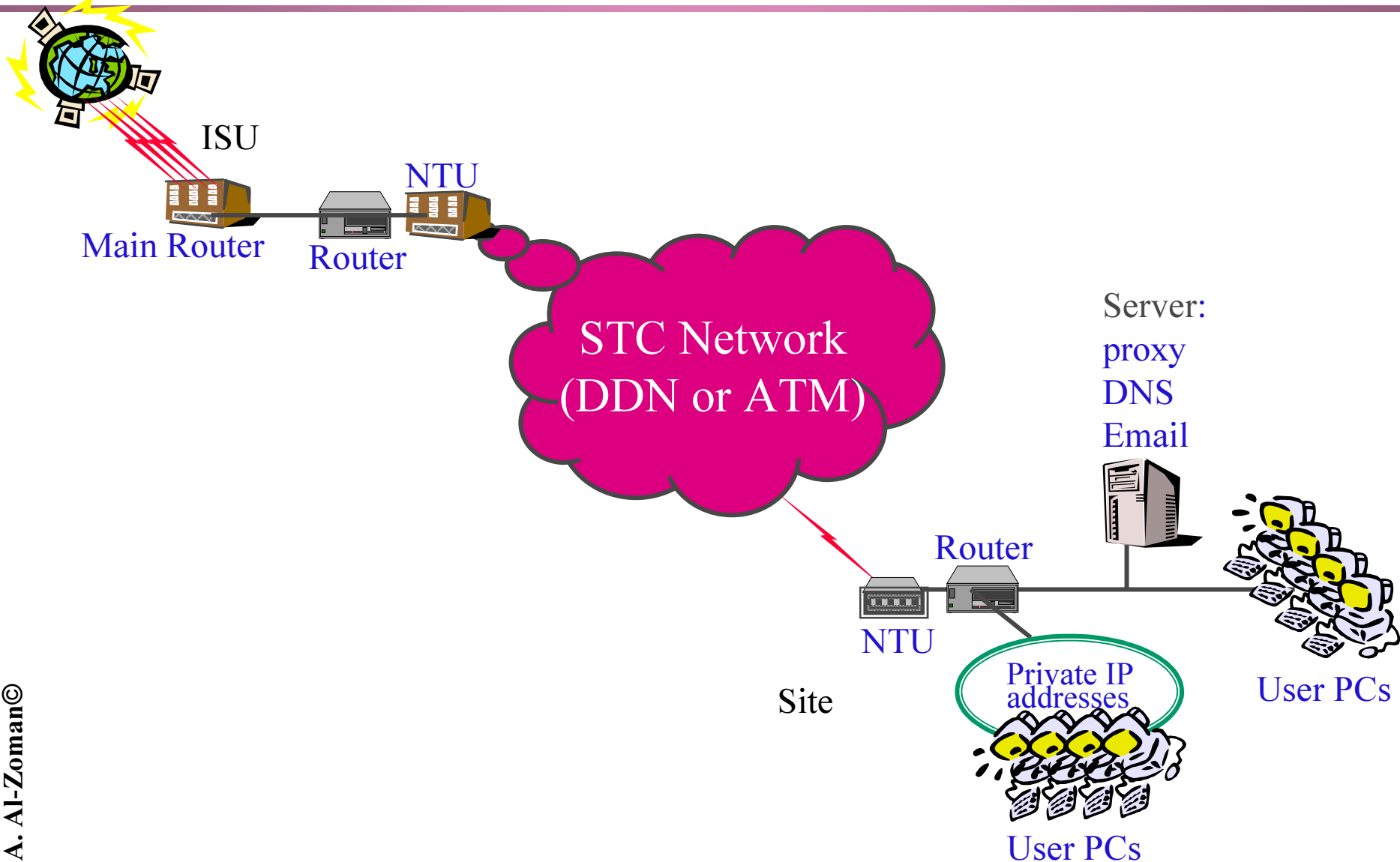
Applications and services:

Proxy

- ✦ **Each site must install web proxy server(s) to be able to access the web.**
 - ☞ Inform ISU about the IP addresses of these servers.
- ✦ **Each site may use private IP addresses for the internal network but will not be routed over the Internet.**
 - ☞ Access to internet will be through proxy or using NAT
- ✦ **Each site may install its own firewall to protect its networks**



Summary: Connection setup





Summary

Minimum Requirements

- **Communication link**
- **Communication equipment**
- **Router (CISCO 25xx or higher)**

- **Local Area Network**

- Ethernet (10/100)
- Switch or hub (16 ~ 32 ports)
- UTP cables - CAT 5

- **Domain name registration**
- **IP addresses**

- **Internet server (DNS, proxy, email, ...)**

- Intel-based
 - Large RAM and HD
 - Microsoft NT
 - Linux (free)!
- UNIX (IBM, Sun, HP, DEC,...)

- **Workstations**

- PCs
- Windows 95,98, NT

- **Technical staff**

- System/network administrator
- Technician
- User support group

Good Luck!

I'm ready to answer your questions



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