



# Semester Conclusion

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pschiu

# This Semester

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- DNS
- Web
- Email
- PKI
- Network

# DNS

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- ❑ Not all about yourself
- ❑ BIND
  - Child
  - Slave
- ❑ Domain Name
  - Registrar
  - Root
  - DNSSEC

# Web

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HTTP

HTTPS

- SSL - Certification Authority Issuer

How to Secure

- Avoid data leak

# Email

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## ❑ Service

- Postfix
- Dovecot

## ❑ Function

- SPF
  - DNS
- DKIM
  - DNS
- DMARC
  - DNS
- SASL
  - Authentication Based

# Environment

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- Hardware issue
- Network issue
- Environment issue
- Every issue makes you lose your point



How to make it stronger

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# Something you should be considered

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- ❑ Environment Control
- ❑ DRP
  - Disaster Recovery Planning
- ❑ RBS
  - Remote Backup Site
- ❑ SLB
  - Serve Load-Balancing



# Environment Control

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- Temperature
- Humidity
- Fire Suppression Systems

# Disaster Recovery Planning

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- ❑ Frequently Backup
  - Daily, Monthly, etc.
- ❑ Backup Strategy
  - Fully Backup
  - Incremental Backup
  - Differential Backup
- ❑ Restore from Backup
  - Practice
  - Always fail on this
- ❑ Building Remote Backup Site

# Remote Backup Site

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## Distance

- More than 50km

## Network

## Environment

- Natural disaster
  - Brewing water
  - Debris flow
  - Earthquake zone
- Human Factors
  - Power circuit
  - Power generator
  - Uninterruptible power supply (UPS)
  - Air Conditioner

# Serve Load-Balancing

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## ❑ Traditional SLB

- Hardware Failure
- Software Failure
- Load balancer features

## ❑ Advance SLB

- Geo-location SLB
- Global Content Delivery Network (CDN)

# Load balancer features

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- Asymmetric load
- Priority activation
- SSL Offload and Acceleration
- Distributed Denial of Service
- HTTP compression
- TCP offload
- TCP buffering
- Direct Server Return
- Health checking
- HTTP caching
- Content filtering
- HTTP security
- Priority queuing
- Content-aware switching
- Client authentication
- Programmatic traffic manipulation
- Firewall
- Intrusion prevention system

# Human Errors

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- 豬隊友 XD
- Training
- Alpha Stage
- Release Procedure

Any

# Q & A