Service Level Agreements (SLAs)

- Contractual document between a service provider and a service consumer
  - Customer and cloud service provider (CSP)
  - Customer and Internet service provider (ISP)
  - Sales department and usage of internal IT resources
- Each cloud service has its own SLA

Service Level Agreements (SLAs)

- Definitions
- Service credits
- SLA exclusions

Service Level Agreements (SLAs)

- Performance and reliability
- Percentage of uptime within a calendar month or year
  - E.g. 99.99%
- < 99.99% = 3 day service credit
- < 95.00% = 7 day service credit

Change Management

Control risk

Minimize disruptions

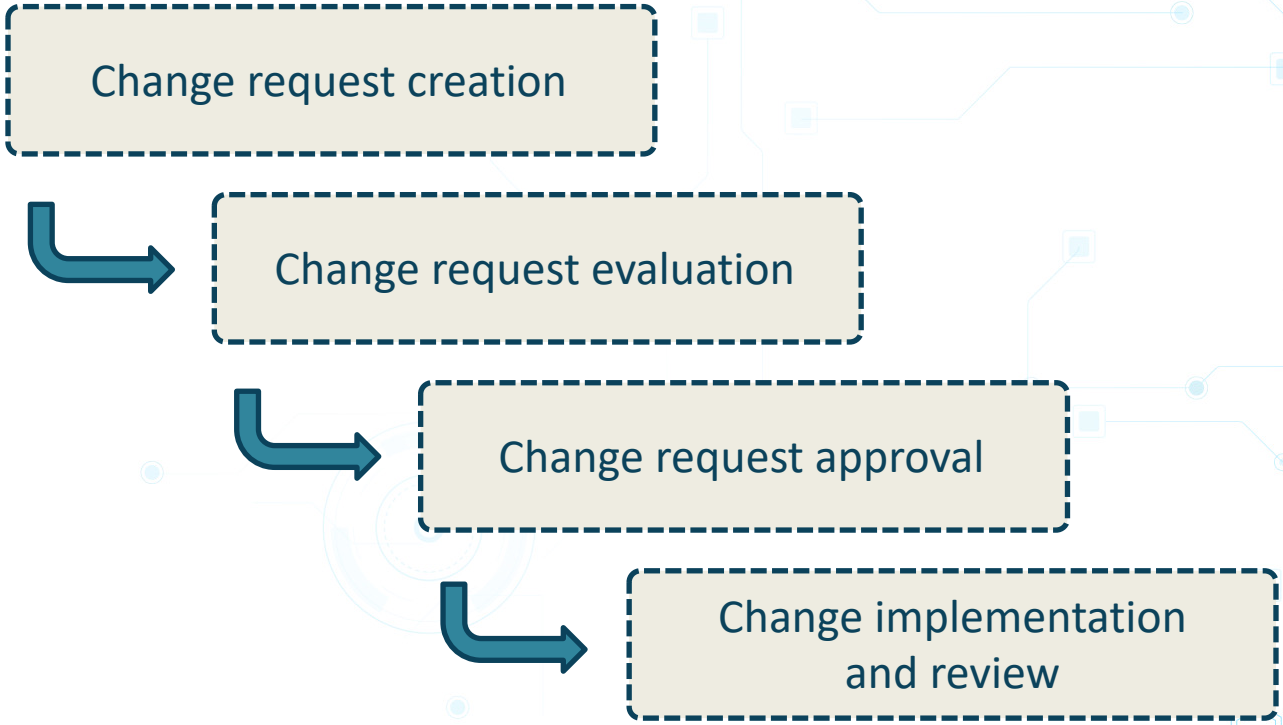
Change Management

- Enact standard procedures for implementing change
  - Reduced risk related to IT changes
  - Increased efficiency
  - Compliance (laws and regulations)
  - Reduced IT-related downtime
- The focus is on the process to implement change

Types of IT Changes

- Hardware
- Software
- Procedural
- Network

Change Management Event Flow



Configuration Management

"A machine is made up of components or parts. Each part is arranged in a specific configuration to make the machine whole.

*In simple terms, **configuration** means arrangement of the parts while **change** means modification of the parts or the whole machine."*

-Praveen Malik, certified Project Management Professional

Configuration Management Components

Configuration Management System (CMS)

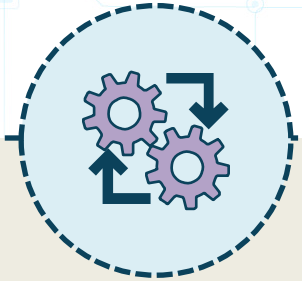
Configuration Management Database (CMDB)

Configuration Items (CIs)

Configuration Management

- Defined responsibilities for configuration management tasks
- Verification of configuration item validity
- Documentation of configuration changes implementation

Vulnerability Management



- IT or process weakness identification and mitigation
  - Reduced cost, legal liability, and improved compliance
- Auditors must consider internal and external threat actors
  - Risk-based approach
  - Which vulnerabilities should be addressed first?

Vulnerability Examples

- Software patches out of date
- No encryption for sensitive data at rest
- Failure to disable user accounts upon termination
- Default configurations
- Unneeded running network services

Vulnerability Management

- History of attacks
  - Overall in the industry
  - Within the specific organization
  - How much downtime was experienced?
- Organizational security policies
- User awareness and training

Vulnerability Management Program

- Continuous monitoring
- Alerting
- Secure coding practices
- Apply patches and use WAFs

In this exercise, you will

- Explain the purpose of a Service Level Agreement (SLA)
- Establish a performance baseline on Windows Server 2016
- Enable Microsoft Group Policy GPO link delegation
- Use SCCM to centrally deploy a web link to an Intranet site

Service Level Agreement (SLA)

- Contractual document between a service provider and a service consumer
- Uptime
- Service credits