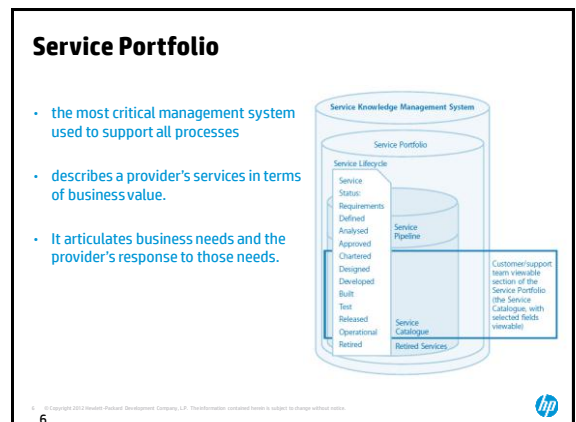


### Service Catalog Management — Objectives

Create and manage an accurate Service Catalog

- A single source of information on all services

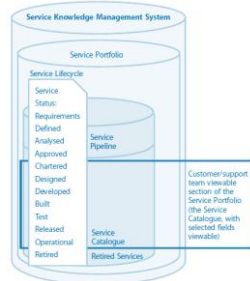
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## Service Catalog Management — Basic concepts

The Service Catalog

- Part of the Service Portfolio
- Details of all operational services and those being prepared for transition
- **Business Service Catalog**
  - Details of all of the IT services delivered to customers
  - Visible to the customers
- **Technical Service Catalog**
  - Details of all supporting services
  - Not usually visible to customers



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## Service Catalog Management — Roles

Service Catalog Manager

- **Produce and maintain the Service Catalog**
- Ensure all operational services and those being prepared for operational running are recorded
- Ensure all information in the Service Catalog is accurate and up to date
- Ensure all information is consistent with the information in the Service Portfolio
- Ensure all information is adequately protected and backed-up



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## Service Level Management

- Objectives
- Scope
- Basic value
- Business concepts
- Activities
- Key metrics
- Roles
- Challenges
- Interfaces



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## Service Level Management — Objectives

- Negotiate, agree and document service levels
- Measure, report and improve service levels
- Communicate with business and customers

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## Service Level Management — Scope

Ensure quality of service matches expectations

- Existing services
- Requirements for new or changed services.
- Expectation and perception of the business, customers and users

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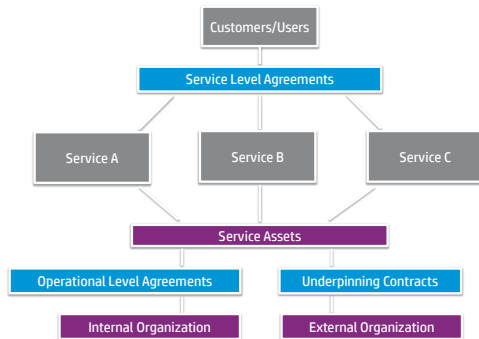
## Service Level Management — Business value

- Consistent interface to the business for all IT service related issues
- Feedback on service failures or breaches & resolution actions taken
- Reliable communications channel and trusted relationship

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## Service Level Management — Basic concepts



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## Service Level Management — Activities

- Design SLA frameworks
- Identify **Service Level Requirements (SLRs)**
- Agree and document Service Level Agreements (SLAs)
- Negotiate and document Operational Level Agreements (OLAs)
- Monitor service performance against SLA
- Measure and improve Customer Satisfaction
- Produce service reports
- Conduct service reviews and instigate improvements
- Review and revise SLAs, OLAs and UCs
- Develop contacts and relationships
- Manage complaints and compliments

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## SLA Frameworks

- **Service-based SLA:** SLA covers one service, for all the customers of that service
- **Customer-based SLA:** an agreement with an individual customer group, covering all the services they use
- **Multi-level SLAs:** SLAs set at different levels to cover different scenarios

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## Service Level Management — Key metrics

Number and % of targets being met  
 Number and severity of service breaches  
 Number and % of up to date SLAs  
 Number of services with timely reports and service reviews  
 Improvements in Customer Satisfaction

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## Service Level Management — Roles

- Service Level Manager
- **Process Owner**
  - Understand Customers
  - Create and Maintain SLAs and OLAs
  - Review and Reporting
  - Ensure that Changes are assessed for impact on service levels

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## Service Level Management — Challenges

- Identifying appropriate customer/business representatives
- Overcoming 'current issues'
- Differing requirements at different levels within the customer community
- Achieving accurate monitoring of service achievements
- Getting SLAs signed at the appropriate level

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## Service Level Management — Interfaces

- Service Portfolio Management
- Service Catalog Management
- Supplier Management
- Availability Management, Capacity Management and ITSCM
  - To understand risks, options and BIA
- Service Knowledge Management System
- Continual Service Improvement
- All other service management processes
  - To agree and document required customer outcomes

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## Capacity Management

Objectives

Basic concepts

Roles



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## Capacity Management — Objectives

To produce and maintain a Capacity Plan  
 To provide advice and guidance on capacity and performance related issues  
 To ensure services meet or exceed performance targets  
 To assist in diagnosing and resolving capacity related problems and incidents  
 To assess the impact of changes on the Capacity Plan  
 Proactive capacity and performance measures



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## Capacity Management — Basic concepts

Balancing costs against resources needed  
 Balancing supply against demand  
 Should be involved at all stages of the lifecycle  
 Forward looking, regularly updated Capacity Plan

Three levels of concern:

- Business Capacity Management
  - Service Capacity Management
  - Component Capacity Management
- Capacity Management Information System

ensure capacity for the future  
 ensure capacity for current SLAs  
 manage/monitor CI capacity

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## Capacity Management — Subprocesses

### Business Capacity Management

Translates business needs and plans into requirements for service and IT infrastructure, ensuring capacity for future business requirements for IT services are met.

### Service Capacity Management

End-to-end performance and capacity of the live, operational IT services usage and workloads.

### Component Capacity Management

Performance, utilization and capacity of individual IT technology components.

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## Capacity Management — Roles

Capacity Manager

- **Process owner**

- Proactive planning

Business Relationship Manager

- Provides demand patterns for existing, new and potential future customers/services

Service Level Manager

- Negotiates capacity requirements with existing customers
- Technical and Application Management
- Day-to-day capacity management activities
- Reacting to capacity incidents and problems

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## Availability Management

Objectives  
Basic concepts  
Roles



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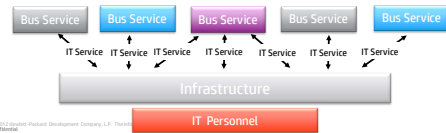


## Availability Management — Objectives

Ensure agreed level of availability is provided  
Continually optimize and improve availability of

- Services
- IT Infrastructure
- Supporting organization

Provide cost effective availability improvements that can deliver business and customer benefits  
Produce and maintain an availability plan



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## Availability Management - Basic concepts (1 of 6)

Availability Management process includes

- Proactive activities
  - Design and planning activities
  - Planning, design and improvement of availability
- Reactive activities
  - Operational activities
  - Monitoring, measuring, analysis and management of all events, incidents and problems involving unavailability

Maximize **RELIABILITY**  
Improve **MAINTAINABILITY**

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## Availability Management - Basic concepts (2 of 6)

**Availability**

- The ability of a service, component or configuration item to perform its agreed function when required
- Often measured and reported as a percentage

$$\text{Availability (\%)} = \frac{(\text{Agreed Service Time (AST)} - \text{Downtime})}{\text{Agreed Service Time (AST)}} \times 100\%$$

- Most important measurements are those that reflect availability from the business and user perspective

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## Availability Management - Basic concepts (3 of 6)

**Reliability**

- Measure of how long a service, component or CI can perform its agreed function without interruption

**Maintainability**

- Measure of how quickly and effectively a service, component or CI can be restored to normal working after a failure

**Serviceability**

- Ability of a third party supplier to meet the terms of their contract

Maximize **RELIABILITY**

$$\text{Reliability (MTBSI in hours)} = \frac{\text{Available time in hours}}{\text{Number of breaks}}$$

$$\text{Reliability (MTBF in hours)} = \frac{\text{Available time in hours} - \text{Total downtime in hours}}{\text{Number of breaks}}$$

Improve **MAINTAINABILITY**

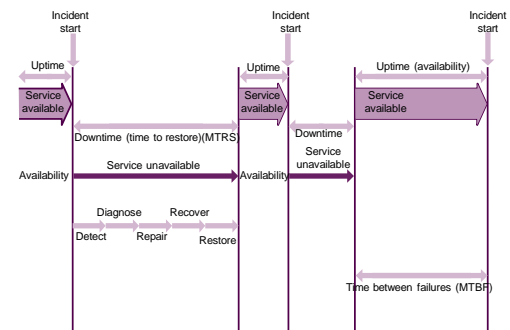
$$\text{Maintainability (MTRS in hours)} = \frac{\text{Total downtime in hours}}{\text{Number of service breaks}}$$

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## Availability Management - Basic concepts (4 of 6)



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## Availability Management - Basic concepts (5 of 6)

### Vital Business Function (VBF)

- A function of a business process which is critical to the success of the business

### High Availability

- Minimizing or hiding the effects of a component failure

### Fault Tolerance

- Ability of an IT service, component or CI to operate correctly after component failure

3



## Availability Management - Basic concepts (6 of 6)

### Continuous Operation

- Approach or design to **eliminate planned downtime** of a service

### Continuous Availability

- Approach or design to **achieve 100% availability**

- An IT service that has no planned or unplanned downtime

3



## Availability Management — Roles

### Availability Manager

- **Process owner**

- Ensuring services deliver agreed levels of availability
- Creation and maintenance of an availability plan
- Assessing changes
- Monitoring and reporting availability
- Proactive improvement of service availability and optimization of the IT infrastructure to optimize costs
- Assisting with investigation and diagnosis of incidents and problems which cause availability issues

3



## IT Service Continuity Management (ITSCM)

### Objectives

### Basic concepts

### Roles

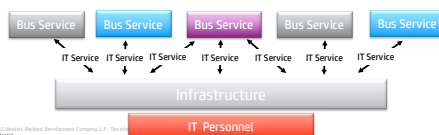


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## ITSCM — Objectives

- To maintain Service Continuity and IT Recovery plans that support the Business Continuity plans
- To complete regular Business Impact Analysis exercises to ensure that plans are current and relevant
- To conduct regular risk assessment and management activities
- To provide advice and guidance on issues related to Service Continuity
- To implement measures to meet or exceed Business Continuity targets
- To check the impact of changes on existing plans
- To negotiate necessary contracts with suppliers



3



## ITSCM — Basic concepts (1 of 2)

### ITSCM should be based on Business Continuity

- Appropriate protection and recovery measures
- Written recovery plans

### Lifecycle approach

- **Initiation, Requirements & Strategy, Implementation, Operation**

- Regular Business Impact Analysis (BIA), Risk Assessment and Risk Management to ensure plans remain valid
- Regular testing of plans

- Negotiate with suppliers as necessary

- Assess changes for impact on ITSCM

3



## ITSCM — Basic concepts (2 of 2)

Common Recovery Options include

- Manual workarounds
- Reciprocal Arrangements
- Gradual Recovery (Cold Standby)
- Intermediate Recovery (Warm Standby)
- Fast Recovery (Hot Standby)
- Immediate Recovery (Hot Standby)

room  
room, equipment  
room, equipment, data  
room, equipment, data, service

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## ITSCM — Roles

Service Continuity Manager

- Process Owner for ITSCM
- Responsible for producing, testing and maintaining service continuity plans
- Part of overall Business Continuity Team

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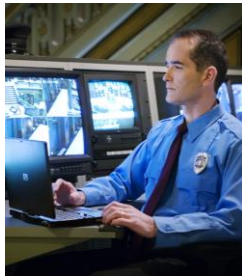
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## Information Security Management

Objectives

Basic concepts

Roles



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## Information Security Management — Objectives

To protect the interests of those relying on information

To protect the systems and communications that deliver the information

Specifically related to harm resulting from failures of:

- Confidentiality
- Integrity
- Availability



The ability to do business with other organizations safely

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## Information Security Management — Basic concepts

Information Security Policy. The ISP includes:

- An access control policy
- A password control policy
- An internet policy
- An anti-virus policy
- Many other policies

Information Security Management System (ISMS)

- Framework for designing, implementing and enforcing ISP

Risk analysis and risk management

Security controls

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## Information Security Management System (ISMS)

**MAINTAIN**  
Learn  
Improve  
Plan  
Implement

**EVALUATE**  
Internal audits  
External audits  
Self assessments  
Security incidents

**CONTROL**  
Organize  
Establish framework  
Allocate responsibilities

**PLAN**  
Service Level Agreements  
Underpinning Contracts  
Operational Level Agreements  
Policy Statements

**IMPLEMENT**  
Create awareness  
Classification and registration  
Personal Security  
Physical Security  
Security Incident Procedure

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## Service Level Management

The following are responsibilities of Service Level Management except for?

- a. Negotiating and agreeing Operational Level Agreements
- b. Ensuring all operational services are recorded in the Service Catalog
- c. Negotiating and agreeing Service Level Agreements
- d. Assisting with the production and maintenance of an accurate Service Catalog

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