IT Services Management
Service Brief

Availability Management

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Introduction

A primary focus of IT Service Management (ITSM) is the application of IT best practices (founded in ITIL) to enable IT to be a more effective service provider across the enterprise to satisfy the organization’s business requirements.

Although managing the IT infrastructure itself is a necessary component of most ITSM solutions, it is not the primary focus. Instead ITSM addresses the need to align the delivery of IT services closely with the needs of the business. This involves a transformation of the traditional Business - IT paradigm into one that is process-oriented, proactive, and enterprise wide. This service provider paradigm encompasses IT best practices using the perspectives of people, process, technology, organization, and integration.

Within this ITSM service provider paradigm there are several focus areas such as business objectives, service level objectives, and technology infrastructure that along with other areas play critical roles in the ITSM methods and best practices.

Availability management can be described as both high availability (minimized unscheduled downtime) and continuous systems operations (maximum reduction of scheduled downtime that approaches or achieves 24x7x365 availability). Together, this is considered to be continuous systems availability and is, in effect, Availability Management. It is both a day-to-day process that maintains normal acceptable and available service with a minimal impact on business and a long-term strategy that proactively plans to eliminate and manage availability outages. Availability management is part of the SolutionMethod™ IT Service Delivery Processes.

SolutionMethod™ - A Roadmap to ITSM

SolutionMethod™ describes a service methodology framework for ITSM that is based on ITIL best practices. The focus of SolutionMethod™ is to enable service, its delivery and management. It is an iterative methodology that has multiple entry points but most typically begins with business end-users/Customer requirements and concludes with a qualification and quantification of services provided to satisfy those requirements both tactically and strategically.

This evolutionary approach enables organizations the ability to adaptively integrate best practices based on their specific maturity level and priorities. SolutionMethod™ employs a phased approach to ITSM that consists of
assessment, architecture and design, planning, implementation, and support. With each phase 5 perspectives of people, process, technology, organization, and integration are evaluated.

The high level goal for ITSM structure encompasses the following:
1) Determine the current, existing IT infrastructure, processes, and services
2) Develop a desired future state of IT and the services it needs to provide
3) Architect a "roadmap" that depicts how to get to the desired state from the current state
4) Determine the steps needed to execute the "roadmap"

The SolutionMethod™ ITSM framework for each of the ITIL Service Delivery and Service Management areas is a 5 phase model:
- **Assessment** - determine the current state and begin to collect and understand the metrics for the future desired state
- **Architect and Design** - develop a mature design for the future state
- **Planning** - develop those plans necessary to achieve the future desired state in a phased evolutionary fashion
• **Implementation** - implement and deploy the plans within IT and across the enterprise to achieve the future desired state

• **Support** - manage, maintain, and improve the future desired state being able to adaptively integrate enhancements as needed or required

Within this framework, **SolutionMethod™** effectively enables managing IT, as an enterprise wide, service oriented entity comprised of 5 separate and distinct perspectives:

- **People** - quantity and quality of expertise and knowledge
- **Process** - IT and organization specific practices, procedures, guidelines, etc. and the level of complexity and sophistication of them
- **Technology** - total logical and physical technology infrastructure that consists of hardware, software, communication networks, applications, DBMS, etc.
- **Organization** - internal and external business factors that affect IT, how IT and the organization interface, what is the organizations "corporate culture", what are the organization's direction and how does that affect IT
- **Integration** - how is IT integrated within the business model, what services does IT provide, how are the services provided, and how are best practices employed within IT

**Scope and Objectives**

The overall goal of this service is to assess and plan for tactical and strategic technology infrastructure in the ITSM availability management areas within the 5 perspectives.

The specific service goals are to create a tactical and strategic IT infrastructure that is highly available with minimized unscheduled downtime and has continuous systems operations. The service objectives are to:

- Design and develop a process to provide for high availability and continuous system operations to maintain or enhance continuous customer service and satisfaction both tactically and strategically.
- Design and develop a high availability IT infrastructure consisting of systems hardware and software, network, applications software, environmental, and operations.
- Design and develop operational processes to provide for continuous system availability.

The final outcome of this service is to assess and plan a customer unique set of best practices for availability management processes that includes high availability and continuous systems operations. This includes the synergy,
dependencies, and linkages of availability management to other processes like incident and problem management, service level management, change management, configuration management, performance management, service continuity, and Service Desk. This will provide the customer with a model to be used for developing a tactical and strategic position and direction for ITSM best practices.

**Approach**

The SolutionMethod™ approach depicted below is used for this Availability Management service.

![SolutionMethod™ Assessment Approach](image)

The following is a high-level list of tasks for this service:

1) Assemble a project team that includes the appropriate skill sets necessary to complete a successful project engagement
2) Conduct a project kick-off meeting between the consulting team and a comparable organization team. At this meeting an initial project plan
will be developed and refined. This plan will be used to document, plan, and track the activities and results of the engagement.

3) Gather and assemble all appropriate information about the customer’s current availability management processes, their inter-relationship and dependencies. This includes the environment, the objectives, requirements, and expectations for a desired future state. This information is supplied from existing documentation, interviews with the required organization personnel, and observation.

4) Analyze the information gathered as it relates to findings in the areas of IT service management and the processes that support it. This analysis will focus on organization’s people, processes, technology, organization, and integration perspectives both in a tactical and strategic perspective. It will specifically focus on satisfying tactical requirements and strategic positioning to include full ITSM positioning.

5) Analyze the current Availability Management process that includes but is not limited to:

- The operational procedures that define the steps used in day-to-day and proactive availability management. This includes but is not limited to the following areas:
  - How availability management interfaces between IT and end users
  - What procedures does the Service (Help) Desk follow when outages occur
  - How availability outage procedures are initiated, monitored, tracked, and reported
  - How outages are historically logged
  - The identification of ownership that includes the appropriate support personnel that are assigned to an outage until a satisfactory resolution is met, regardless of where the outage resolution has been routed
- The objectives of what availability management needs to accomplish based on service level requirements
- Review of the current Service Level Agreements (SLA's) that pertain to availability and current service level performance to ensure that availability (including the effect of both scheduled and unscheduled downtimes) is being measured to see what level of availability is required.
- Review of "outage" history for trends, weaknesses, etc. and recapped by cause (basic system components). Major outages are reviewed for duration, scope of scheduled and unscheduled downtime, and how they are reported.
• Assess the following basic system components to determine how continuous systems availability is being handled:
  ➢ Systems Hardware
  ➢ Systems Software
  ➢ Network
  ➢ Applications Software
  ➢ Environmental
  ➢ Operations

• A Component Failure Impact Analysis (CFIA) is performed
• Assess Availability Management synergies and dependencies in the following related ITSM areas:
  ➢ Incident and Problem Management
  ➢ Configuration and Change Management
  ➢ Service Level Management
  ➢ Performance Management and Availability Reporting
  ➢ Service Continuity (Disaster Recovery Planning)
  ➢ Service Desk and Automated Operations

6) Develop a list that includes prioritized tactical recommendations for availability management in areas of IT Infrastructure and the processes that support it. This includes hardware and software technology, applications, operations policies, practices, procedures, standards, and guidelines. In addition, it references other related ITSM process areas.

7) Develop a solution model that focuses on strategic IT infrastructure and processes based on an alignment with tactical recommendations, ITSM requirements, and strategic organizational goals.

8) Assess the organization training requirements for availability management areas.

9) Develop a training plan for the organization team.

10) Develop an analysis report and associated customer management presentation that includes prioritized tactical recommendations for technology infrastructure and the ITSM processes that support it. These processes will be customer unique best practices for availability management. This report will be non-vendor technology specific rather it will outlines the capabilities that the hardware and software technologies must have in order to satisfy customer availability requirements.

11) Develop an outline for recommended strategic IT infrastructure plan that includes “next steps” to meet the organization’s full ITSM requirements. This includes a size and scope for the effort and anticipated deliverables.
Deliverables

1) A report documenting the availability management analysis findings within the customer’s IT Infrastructure at an appropriately high level that includes:
   • The organization’s current availability management
   • The organization’s requirements and expectations for a desired future state
   • A gap analysis of the current state and the desired future state
   • The alternatives for achieving the desired state
   • A list of tactical recommendations, in customer specified priority order, for the steps to position the current state of the IT infrastructure to meet strategic ITSM requirements. This will encompass the perspectives of people, process, technology, organization, and integration

2) An initial IT infrastructure strategic plan for availability management to achieve the desired state that encompasses the perspectives of people, process, technology, organization, and integration

3) A senior management level presentation summarizing findings, expectations, recommendations, and future ITSM direction.