

# ITIL<sup>®</sup> Service Transition

## David Jones and Roderick Brown

## Abstract

This Quick Reference Guide provides a summary of the Service Design lifecycle for Information Technology Infrastructure Library, more commonly ITIL. The information contained is derived from the Axelos ITIL Foundation Handbook and supplemented from the ITIL Service Strategy Lifecycle publication. The document is based on ITIL 2011.

## Access our free, extensive library at

www.orbussoftware.com/community



## Introducing ITIL Service Transition



## Background

ITIL is the well-known set of practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business.

Figure 1 provides a high level overview of the complete ITIL service lifecycle. This Quick Reference Guide (QRG) is the 3rd or midway point in a series of Quick Reference Guides for ITIL and covers the Service Transition lifecycle phase of ITIL.



Figure 1: ITIL Service lifecycle

Many business innovations are achieved through project initiatives that involve IT. In the end, whether these are minor operational improvements or major transformational events, they all produce change. In the Service Design QRG, we looked at creating and improving services through the design stage of the lifecycle. In this QRG we ensure the knowledge that has been generated (and needed to manage services when in the live environment) is shared across the organization. This is done through Service Transition.



Figure 2: Service Transition overview

ITIL Service Transition moves services and service changes into operational use.

This is achieved by receiving a new or changed Service Design Package from Service Design, then testing it to ensure it meets the identified needs of the business, and finally deploying it in the production environment.





## Purpose and Objectives

The purpose of the service transition lifecycle is to ensure that new, modified or retired services meet the expectations of the business as documented in the service strategy and service design stages of the lifecycle.

The objectives of service transition are to:



- Manage risks relating to new, changed or retired services
- Deploy service releases into appropriate environments
- Set expectations on the performance and use of new or changed services
- Ensure that service changes create the expected business value
- Provide knowledge and information about services and service assets.

ITIL Service Transition includes the development and improvement of capabilities for transitioning new and changed services into supported environments, including release planning, building, testing, evaluation and deployment.



## Service Transition Processes

The processes contained within the ITIL Service Transition lifecycle are:

- Transition Planning and Support
- Change Management
- Service Asset and Configuration Management
- Release and Deployment Management
- Service Validation and Testing
- Change Evaluation
- Knowledge Management

Transition planning and support includes:

- Maintaining policies, standards and models for service transition
- Guiding major changes through service transition processes
- Prioritizing and coordinating resources needed to manage multiple transitions at the same time
- Planning service transition budget and resources
- Reviewing and improving the performance of transition planning and support.

Transition planning and support is not responsible for detailed planning for changes or releases.

## Purpose and Objectives

The purpose of the transition planning and support process is to provide overall planning for service transitions and to coordinate the resources that they require.

The objectives of transition planning and support are to:

- Plan and coordinate service transition resources within IT and across projects, suppliers and service teams where required
- Establish new or changed services within predicted cost, quality and time
- Establish new or modified management information systems and tools, technology and management architectures, service management processes, and measurement methods and metrics to meet agreed requirements
- Provide plans that enable business change projects to align with service transition
- Identify, manage and control risks
- Monitor and improve the performance of the service transition lifecycle stage.



- Defining the overall transition strategy
- Preparing for service transition
- Planning and coordinating service transition
- Providing transition process support.

# Triggers, Inputs and Outputs

#### Triggers

- The trigger for planning a single transition is an authorized change
- Longer-term planning may be triggered by receipt of a change proposal from service portfolio management
- Budgeting for future transition requirements, triggered by the organization's budgetary planning cycle.

#### Inputs

- Change proposal
- Authorized change
- Service Design Package (SDP).

- Transition strategy and budget
- Integrated set of service transition plans.

## Change Management

#### Overview

Change Management covers changes to all Configuration Items (CIs) across the whole service lifecycle, whether these CIs are physical assets such as servers or networks, virtual assets such as virtual servers or virtual storage, or other types of asset such as agreements or contracts.

It also covers any and all changes to any of the five aspects of service design

Service solutions

Management information systems and tools

Technology architectures and management architectures

Processes

Measurement systems, methods and metrics

## Purpose and Objectives

The purpose of change management is to control the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services.

The objectives of change management are to:

- Respond to changing business requirements while maximizing value and reducing incidents, disruption and re-work
- Respond to Request for Changes (RFCs) that will align services with business needs
- Ensure that changes are recorded and evaluated, and that authorized changes are prioritized, planned, tested, implemented, documented and reviewed in a controlled manner
- Optimize overall business risk.

The key activities of change management are:

- Planning, controlling and scheduling changes
- Understanding the impact of change
- Change decision making and change authorization
- Change and release scheduling (working with release and deployment management)
- Communication with stakeholders
- Ensuring that there are remediation plans
- Measurement, control and management reporting
- Continual improvement.

Typical activities in managing individual changes are:

- Create and record the RFC
- Assess and evaluate the change:
- Establish who should be involved in assessment and authorization
- Evaluate the business justification, impact, cost, benefits and risks
- Authorize the change if appropriate
- Communicate the decision to all stakeholders, in particular the initiator of the RFC
- Coordinate change implementation
- Review and close the change, ensuring that lessons have been learned.Service

## Triggers, Inputs and Outputs

#### Triggers

 RFCs can be triggered throughout the service lifecycle and at the interfaces with other organizations, e.g. customers and suppliers. Other stakeholders, such as partners, may be involved with the change management processes, which may result in the submission of a change proposal, an RFC, or some other formal trigger to the change management process.

#### Inputs

- Policy and strategy for change and release
- RFC or change proposal
- Plans change, transition, release, test, evaluation and remediation
- Current change schedule and Projected Service Outage (PSO)
- Test results, test reports, evaluation reports and interim evaluation reports
- Configuration baseline.

- Rejected and cancelled RFCs
- Authorized changes and change proposals
- Change to services or infrastructure resulting from authorized changes
- New, changed or disposed Cls
- Revised change schedule
- Authorized change plans
- Change documents, records and reports.

## Asset and Configuration Management

## Overview

Service assets that need to be managed in order to deliver services are known as Configuration Items (CIs).

Service Asset and Configuration Management (SACM) includes management of the complete lifecycle of every CI.



The purpose of the SACM process is to ensure that the assets required to deliver services are properly controlled, and that accurate and reliable information about those assets is available when and where it is needed. This information includes details of how the assets have been configured and the relationships between assets.

The objectives of SACM are to:

- Ensure that assets are identified, controlled, managed and protected throughout their lifecycle
- Identify, control, record, report, audit and verify services and other CIs, including their attributes and relationships
- Ensure the integrity of CIs and configurations by maintaining accurate configuration information on their historical, planned and current state in a Configuration Management System (CMS)
- Support efficient and effective service management by providing accurate configuration information.



- Deciding on the level of configuration management required for a service or a change project and creating a plan to achieve this.
- Defining CI types, naming conventions etc.
- Ensuring there are adequate control mechanisms over CIs while maintaining a record of changes to CIs, versions, location and ownership.
- Maintaining the status of CIs as they progress through their lifecycle.
  Examples of CI status could be Development, Approved and Withdrawn.
- Checking that the physical CIs exist, that documentation is accurate, and that all CIs are recorded in the CMS.

## Triggers, Inputs and Outputs *Triggers*

- Updates from change management or release and deployment management
- Purchase orders or acquisitions
- Service requests.

#### Inputs

- Designs, plans and configurations from SDPs
- RFCs and work orders from change management
- Configuration information collected by tools and audits
- Information in the organization's fixed asset register.

- New and updated configuration records
- Updated information for use in updating the fixed asset register
- Information about attributes and relationships of CIs
- Configuration snapshots and baselines
- Status reports, audit reports and other consolidated configuration information.

Release and deployment management includes the processes, systems and functions to package, build, test and deploy a release into live use, establish the service specified in the SDP, and formally hand the service over to the service operation functions.

Release and Deployment Management does not include carrying out testing, or authorizing changes, but the process must ensure that these activities have been carried out.

## Purpose and Objectives

The purpose of the Release and Deployment Management process is to plan, schedule and control the build, test and deployment of releases, and to deliver new functionality required by the business while protecting the integrity of existing services.

The objectives of Release and Deployment Management are to:

- Define and agree release and deployment management plans
- Create and test release packages, stored in a Definitive Media Library (DML) and recorded in the CMS
- Deploy release packages from the DML following the agreed plan
- Ensure that organization and stakeholder change are managed
- Ensure that the new or changed service can deliver the agreed utility and warranty
- Ensure that there is knowledge transfer to customers, users and IT.



- Develop the plans for creating and deploying the release
- Build, test and check-in the release package into the DML
- Deploy the release package in the DML to the live environment
- Capture the experience and feedback, performance targets and achievements, plus review and capture the lessons learned.

## Triggers, Inputs and Outputs

#### Triggers

- Release and deployment management starts with receipt of an authorized change to plan, build and test a release package
- Deployment starts with receipt of an authorized change to deploy a release package to a target environment.

#### Inputs

- Authorized change
- SDP including a Service Charter, Service Models and Service Acceptance Criteria (SAC)
- Acquired service assets and components and their documentation
- Environment requirements and specifications
- Release policy and release design
- Release and deployment models
- Exit and entry criteria for each stage of release and deployment.

- New, changed or retired services
- New or changed documentation
- SLA, underpinning Operational Level Agreements (OLAs) and contracts
- Release package checked in to DML and ready for future deployments
- CMS updates
- New or changed service reports
- Updated IT Service Continuity Management (ITSCM) and capacity management plans.

Service validation and testing can be applied throughout the service lifecycle to quality assure any aspect of a service and the service providers' capability, resources and capacity to deliver a service and/or service release successfully.

Testing is equally applicable to in-house or developed services, hardware, software or knowledge-based services. It includes the testing of new or changed services or service components and examines the behavior of these in the target business unit, service unit, deployment group or environment.



## Purpose and Objectives

The purpose of the service validation and testing process is to ensure that a new or changed IT service matches its design specification and meets the needs of the business.

The objectives of service validation and testing are to:

- Provide confidence that a release will create a new or changed service that delivers the expected outcomes and value for the customers within the projected costs, capacity and constraints
- Validate that a service is 'fit for purpose' it will deliver the required utility
- Provide assurance that a service is 'fit for use' it will deliver the agreed warranty
- Confirm that customer and stakeholder requirements are correctly defined
- Identify, assess and address issues, errors and risks throughout service transition.

- Validation and Test Management, which manages the overall flow of the other activities
- Plan and Design Tests
- Verify Test Plans and Test Designs
- Prepare Test Environment
- Perform Tests
- Evaluate Exit Criteria and Report
- Test Clean-up and Closure

# Triggers, Inputs and Outputs

### Triggers

• The trigger for testing is a scheduled activity on a release plan, test plan or quality assurance plan.

#### Inputs

- An authorized change
- An SDP, including the SAC.

- Test report
- Updated data, information and knowledge to be added to the Service Knowledge Management System (SKMS)
- Test incidents, problems and error records
- Entries in the Continual Service Improvement (CSI) register to address potential improvements.

## Change Evaluation

## Overview

Every change must be authorized at various points in its lifecycle; for example before build and test, before it is checked in to the DML and before it is deployed to the live environment. Evaluation is required before each of these authorizations, to provide the change authority with advice and guidance.

The change evaluation process describes a formal evaluation that is suitable for use when significant changes are being evaluated.

## Purpose and Objectives

The purpose of change evaluation is to provide a consistent and standardized means of determining the performance of a service change in the context of likely impacts on business outcomes, and on existing and proposed services and IT infrastructure. The actual performance of a change is assessed against its predicted performance. Risks and issues related to the change are identified and managed.

The objectives of change evaluation are to:

- Set stakeholder expectations correctly
- Evaluate the intended effects of a service change and as much of the unintended effects as is reasonably practical
- Provide good-quality outputs so that change management can expedite an effective decision about whether or not a service change is to be authorized.



- Plan the Evaluation
- Evaluate Predicted Performance
- Evaluate Actual Performance
- Wait for next Change Authorization Point

# Triggers, Inputs and Outputs

### Triggers

• The trigger for change evaluation is receipt of a request for evaluation from change management.

#### Inputs

- SDP, including Service Charter and SAC
- Change Proposal, RFC, Change Record and detailed Change Documentation
- Discussions with Stakeholders
- Test results and report.

- Interim evaluation report(s) for change management
- Evaluation report for change management.

Knowledge management is a lifecycle-wide process that is relevant to all lifecycle stages and hence is referenced throughout ITIL.



## Purpose and Objectives

The purpose of the knowledge management process is to:

- Share perspectives, ideas, experience and information
- Ensure that these are available in the right place at the right time to enable informed decisions
- Improve efficiency by reducing the need to rediscover knowledge.

The objectives of knowledge management are to:

- Improve management decision-making by ensuring that reliable and secure knowledge, information and data are available
- Enable the service provider to be more efficient and improve quality of service, increase satisfaction and reduce the cost of service
- Maintain an SKMS that provides controlled access to appropriate knowledge, information and data
- Gather, analyze, store, share, use and maintain knowledge, information and data throughout the service provider organization.



- Define knowledge management strategy
- Knowledge transfer
- Evaluation and improvement.

## Triggers, Inputs and Outputs

### Triggers

• Knowledge management has many triggers, relating to every requirement for storing, maintaining or using knowledge, information or data within the organization.

#### Inputs

 Inputs to knowledge management include all knowledge, information and data used by the service provider, as well as relevant business data.

### Outputs

• The key output of knowledge management is the knowledge required to make decisions and to manage the IT services, maintained within an SKMS.

#### David Jones and Roderick Brown

David Jones is a Senior Consultant with Enterprise Architects in Australia, specializing in Enterprise Architecture, particularly Business Architecture. He is also an experienced practitioner in business process improvement and simplification. David has worked with many sector clients, undertaking assignments in Financial Services, Telecommunications and Power Utilities.

Roderick Brown is a freelance Consultant working in Melbourne, Australia, specializing in Business Architecture, particularly in Process Architecture. He is also an experienced practitioner in business process improvement and simplification. Roderick has worked with many sector clients, undertaking assignments in Banking, Investment Management and Wealth Management.

David and Roderick are passionate about helping organizations understand and document their own business processes, using frameworks such as APQC's Process Classification Framework and standards such as BPMN as well as applying simple approaches to improve and simplify these business processes.

#### © Copyright 2016 Orbus Software. All rights reserved.

No part of this publication may be reproduced, resold, stored in a retrieval system, or distributed in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the copyright owner.

Such requests for permission or any other comments relating to the material contained in this document may be submitted to: marketing@orbussoftware.com

#### **Orbus Software**

3rd Floor 111 Buckingham Palace Road London SW1W 0SR United Kingdom

+44 (0) 870 991 1851 enquiries@orbussoftware.com www.orbussoftware.com

