Change Management Process

University IT Service Management Steering Committee

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Change Management Process Design Participants

- Larry Dillard - Admin Systems
- Matthew Ricks - ITS Facilities
- Marvin Kirkendoll - ITS ITOC
- David Macia - Networking
- Toai Vo - Admin Systems
- Randall Chong - ITS Finance: SoM rep.
- Raj Lalchandani - Admin Systems
- Sourabha Mohapatra - Admin Systems
- Sameer Marella - Admin Systems
- Caroline Alemany - Consulting Services
- Bhavana Tirukovalluri - Admin Systems
- Dean Zanardelli - Client Support Operations

- Chris Lundin - Shared Services
- Thuylynh Nguyen - Shared Services
- Vacilis Kollias - Shared Services
- Vesna Siracevska - Shared Services
- John Crook (Navvia)

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Goals

- Align Change Management Process within University IT to common ITSM practice

- Prepare for Service Now Technical Design

- Define goals, roles, objectives, approvals and the Change Management business process

- Define Scope (and out-of-scope)

- Define Change types and Risk/Impact matrix

- Define Policies

- Identify areas where Stanford deviates from best practice, limit where possible

Output

- University IT Change Management Process Document
- Change Management Executive Summary
- Process Diagram
- Risk/Impact Questions
- Approval Workflows
- Common understanding of Change Management Process

Change Management Definition

Change Management is the process responsible for managing all Changes to the Production Operations environment from inception to completion.

To be successful in managing change the Change Management process must ensure that all changes are recorded and authorized at the appropriate level within IT and the Business without being overly bureaucratic.

Simple (routine, standard) changes would need minimal authorization but should still go through the process to ensure they are correctly recorded and appropriately tested.

Complicated, high impact changes may need to be authorized at the Business Executive level as well as the University IT Executive level before the implementation is initiated.

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Goal of Change Management

The goal of the Change Management process is to conduct a formal, standardized methodology in the handling of all Changes in order to be transparent in our work, prevent change-related incidents, minimize negative impact on delivery of services to our users and clients.

Scope of Change Management

A Change Request is required when there is an addition, modification, or removal of any IT Service, system or component(s) that are part of a Production environment as well as all services with agreements that specifically state service levels and environment up-time, are subject to the Change Management process and policies.*

Key Policy Changes

- **SLA Alignment** : Service Owners must align individual SLA(s) with the Change Management Process.

- **CAB Attendance** : All Change Requests must have the Requested By or their informed designated representative in attendance to have the Change Request considered for authorization. Core CAB members are required to attend or have their designee attend the regular CAB meetings.

- **Post Implementation Review** : Every emergency, unsuccessful and successful selected random changes must be reviewed for success and any identified post-implementation actions will be documented.

- **Unauthorized Changes** : Our culture is a zero tolerance for unauthorized changes.

- **Integration with Processes** : Ensure that the change process is integrated with other service management processes to provide traceability of changes, detect unauthorized changes and identify change related incidents.

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Change Management Roles

- Requested For
- Requested By
- Assessor
- Change Manager
- Change Approver
- Change Advisory Board (CAB)
- Emergency Change Advisory Board (ECAB)
- Informational Change Requestor

- Implementer
- Change Process Owner
- Business Owner

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Change Types

Change Type	User	Approval	Lead Time
Standard	Available	Pre-Approved **	n/a
Normal	Available	Based on CI & Impact/Risk	Based on Impact/Risk
Expedited		Based on CI & Impact/Risk	Does Not Meet Minimum
Emergency	P1 Incident	Post Implementation	None
Informational	Limited	No Approval	n/a
Unauthorized	Limited	No Approval	n/a

** In most cases, design still in process

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Risk/Impact Matrix

Weighted Dimensions

- Ability to back-out change
- Experience of implementing
- Locations or # Users Impacted
- Outage Scope / Complexity
- Business Impact of Change

Level

- Very High 10 Business days CAB
- High   5 Business days CAB
- Moderate   1 Business days
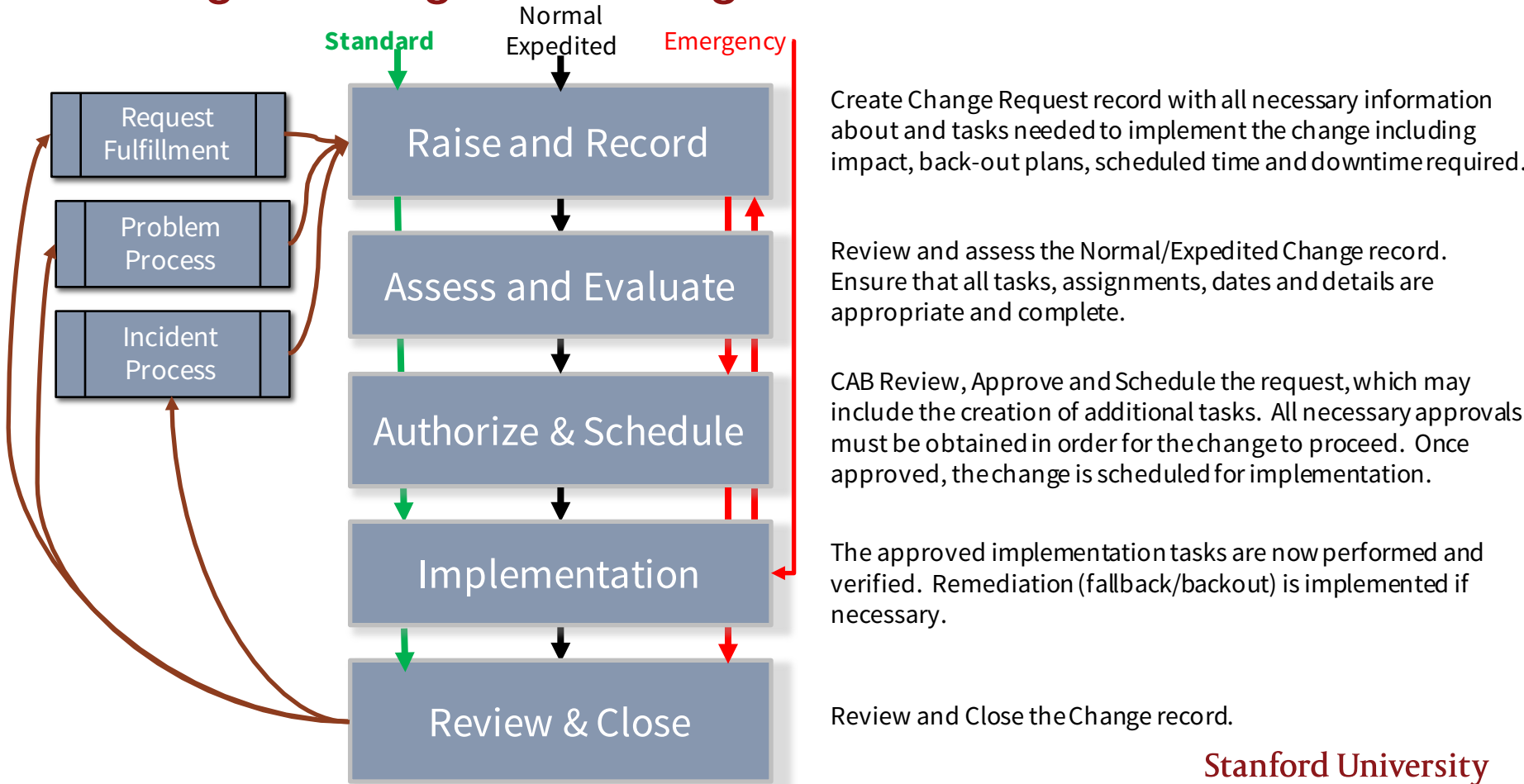- Low   0 Days
- None   0 Days

Change Record :
Process States

- Draft
- Assessment
- Open
- Work In Progress
- Completed
- Closed Successful
- Closed Unsuccessful
- Closed Canceled
- Post Implementation Review

Approval States

- Not Yet Requested
- Requested
- Approved
- Rejected

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Change Management : High Level Process

Standard   Normal
Expedited   Emergency

Request Fulfillment

Problem Process

Incident Process

Raise and Record

Create Change Request record with all necessary information about and tasks needed to implement the change including impact, back-out plans, scheduled time and downtime required.

Assess and Evaluate

Review and assess the Normal/Expedited Change record. Ensure that all tasks, assignments, dates and details are appropriate and complete.

Authorize & Schedule

CAB Review, Approve and Schedule the request, which may include the creation of additional tasks. All necessary approvals must be obtained in order for the change to proceed. Once approved, the change is scheduled for implementation.

Implementation

The approved implementation tasks are now performed and verified. Remediation (fallback/backout) is implemented if necessary.

Review & Close

Review and Close the Change record.

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Change Management Other Processes

- Periodic Process Review & Improvements
- Handle Informational Change
- Handle Unauthorized Change
- Post Implementation Review

Change Management Process Metrics

- Backlog of Change Requests
- Accuracy of Predictions for Change Implementation
- Stakeholder Satisfaction
- Disruptions caused by Changes
- Percentage of Emergency Changes
- Successful Changes
- # of Change Remediation
- Incidents Attributed to Changes
- Incomplete Change Specs
- Incomplete Impact Assessments

- Failed Changes
- Unauthorized Changes
- Changes by Type
- Changes by Service
- Changes by Support Group

Benefits

- Standardization of Change management process within University IT
- Centralized repository of all changes with linkage to other modules
- Minimized impact to users and business
- Minimized conflicts between changes
- Calendar of Forward Changes
- Alignment with ITSM best practices
- Role and procedural definitions
- Clarifying process interaction and interdependence

Work Left to be Done : Out-of-Scope for Change Request

The process design group noted that there are changes which :
- are not currently managed through the Change Management process
- do not have CRQ created when work is done
- they have had no issues with making the change(s) in the past

The group thought that there should be a list of these changes which will remain "Out-of-Scope" of being tracked in the Change Management system until such time that an issue arises at which time, they will be evaluated to be moved off this list and back into scope. During our discussion, examples included:
- adding a rack or racking a server in a production facility
- running a new fiber circuit
- UPS Battery replacement for break/fix (annual refresh remain in scope)

What do you want the approval process to be for those items to be included on the list of changes which do not need to go through Change Management.

Work Left to be Done: The rest

- Validation of process

- Design procedures to fit Stanford's organization

- Communicate policy & process changes

- Assigning named individuals to Change Management roles

- Technical design
  - Including Business Approval model based on Risk

- Map existing processes to new process

- Go-live work

- Extending Change Management to others?

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Questions:

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