

## **ROLES, RESPONSIBILITIES, PROCEDURES**

**Change Submitter:** The person or business requesting or filing the Request For Change (RFC) notice.

**IT Operations Change Manager:** The steward of the Change Management Process. The Change Manager acts as liaison between submitters and approvers (CAB / CMB). The Change Manager is accountable to the CAB and CMB. The roles and responsibilities include:

- Reviews, filters, update, and set's the change calendar. The proposed date and time of the request may change to fit the change schedule.
- Establishment of priority & impact in conjunction with the change submitter
- Review of benefits, justifications, risks & issues.
- Convener of the CAB
- Escalation to the CAB/EC or CMB
- Management reporting, metrics etc.
- Review change(s) after implementation
- Maintenance of the change calendar

**UIT Operations Change Advisory Board (CAB):** The role of the CAB is to review all requested changes, approve or reject changes and authorize for implementation (schedule) changes appropriately. The CAB will have broad representation from UIT and stakeholders. The CAB meets on Monday at 3 PM in conference room 152, Komas 650.

The IT Operations CAB consists of: The Associate Director of Service Management, the Associate Director of Networks, the Associate Director of Enterprise Systems, UIT Help Desk (Campus and Hospital) Manager, Associate Director of UIT Services, Campus Network and Operations Services Manager, UIT Customer Account Manager, Info Security Operations Manager, Field Operations Manager, Data Center Manager, UIT Communications Manager, The Assistant Director UIT Application Systems & Infrastructure, CIS Representative or assigned proxies.

**CAB/ Emergency Change Committee (CAB/EC):** Subset of full CAB.

The UIT Operations CAB/EC is any two out of the five -- The Associate Director of Service Management, the Associate Director of Networks, the Associate Director of Enterprise Systems, the Director of Application Services, The Assistant Director UIT Application Systems & Infrastructure, Associate Director UIT Voice Systems and Business Administration, and

Manager-Service Management Process Support or assigned proxies. The CAB/EC can be convened with short notice to assess an Emergency change.

**Change Management Board (CMB):** The Change Management Board will be the governance authority for policy/procedures approval, metrics review, change appeal approval, conflict resolution, and approval for go-live procedures for major initiatives.

The IT CMB membership consists of the following: Campus CIO, University Hospital & Clinics CIO, Director of IT Infrastructure and Operations, Campus Enterprise Architect. The CMB is chaired by the Director of IT Infrastructure and Operations.

**Change Notification Group:** The affected business unit and IT staff who benefit from knowing what changes are approved and when they are scheduled to be implemented. Change Submitter is responsible to inform the users that they receive notification about any possible service interruption caused by the change in a timely manner.

### **Change (Maintenance) Windows**

- Change Windows are pre-determined time frames in which changes are explicitly declared to be allowed or not allowed. These time frames are generally after business hours, and may be determined by risk or business impact. After-business hours are considered to be: Weekdays from **7 P.M. to 7 A.M.** Weekends from 4 p.m. to 8 a.m. Preventative maintenance changes should be planned and scheduled when most feasible.
  - o Emergency Department Preferred Change Window is 2:00 A.M. to 7:00 A.M. Sunday morning
  - o UMail change window is 7:00 P.M. to 7:00 A.M. the third Thursday, Friday, Saturday and Sunday of the month.
- Change Moratoriums are time frames when changes are not allowed. The CAB will propose Change Moratoriums. Change moratoriums will be approved by the CMB and advertised monthly by the Change Manager. Examples of possible change moratorium windows would be end-of-month (due to data financial processing), major holidays when staffing will be lower than usual, Major Academic Events or time frames surrounding major business events.

### **UIT ACS Change Windows**

The ACS Team has developed a change window schedule with their business partners that will occur from **5:00 A.M. to 7:30 A.M.**

Tuesday: HR, AUX, Kronos, Systems

Wednesday: FS, FAC, UPlanit, Portal

Thursday: Student, DARS, Ad Astra

### **TYPES OF CHANGES**

## **Operational Change:**

These are done on a routine basis, multiple times per day in some cases. Operational changes are extremely low risk and do not require any system downtime. Operational changes can be performed at any time with no CAB approval and minimal communication/coordination effort. A complete list of approved operational changes as well as the operational change processing requirements can be found in the ACS Operational Change Definition Document.

### *UIT Operational Change:*

1. Is generally not a CI (Configuration Item) that is tracked in the CMDB
2. Does not impact service functionality
3. Does not need communication or downtime notification
4. Does not alter the structure or programming

## **Standard Change**

These changes are well documented, low risk, and proven. Standard changes are done on a regular basis and been implemented successfully multiple time before. The first instance of a standard change needs to be submitted and reviewed by the CAB before implementation. Afterwards, standard changes are considered pre-approved and can be implemented during the next available change window without CAB approval or using required lead times. Coordination activities can be done at the discretion of the Systems Analysts.

### *UIT Standard Change:*

1. Is well defined CI (Configuration Item that we track in the CMDB). This could be a service, server, etc.
2. Documented, tested and proven at least five times in production.
3. The risk is low and well understood, the types of risk are known and the consequences of failure understood and can be mitigate within 15 minutes.
4. Is transparent to the user.
5. Requires no additional funding to implement.
6. Is completed within a declared Change maintenance window for that system or application

## **Minor Change**

A minor change has a low impact either in terms of the number of users affected or the criticality of the service and has a low risk of failure. Minor changes are reviewed by the Change Management team and approved by the Change Manager. Minor changes need to have the required lead time. Coordination activities can be done at the discretion of the Systems Analysts.

### *UIT Minor Change:*

1. Is a new change or unproven change and does not have a track history of success
2. Has been tested
3. Does not need communication
4. Does not have a high impact to end users

### **Major Change**

A major change has significant impact on users or services, a high risk of failure, or is complex and requires multiple teams to implement. This may also include new, high-profile applications that are being used in production for the first time or changes to applications where a high degree of coordination between multiple organizations needs to occur.

#### *UIT Major Change*

1. High risk to end users experience
2. Significant Impact or downtime associated with the change
3. High monetary risk value
4. Needs communication

### **Urgent Change:**

A minor, or major change that needs to be implemented before the normal change window, and does not fall in the normal change lead time of 10 days prior to the change.

#### *UIT Urgent Change*

1. Falls under the change lead time of 10 days.

### **Break Fix Change (Emergency)**

This is a change that needs to be implemented IMMEDIATELY to fix an incident due to severe loss in service capability.

#### *UIT Break Fix or Emergency Change*

1. A change that is needed to be made to restore service.

### **Change Lead Times**

- Major changes will be submitted for approval to the Change Manager a minimum of 10 days prior to the planned change date/time.
  - o Some major changes will require additional lead time to coordinate and communicate the details of the change.

- Minor changes will be submitted to the Change Manager a minimum 10 days prior to the planned change date/time. These changes are pre-approved by default
- Urgent changes will be submitted to the Change Manager for those changes less than 10 days prior to the planned change date/time. And subject to the 'Urgent' Change Approval process. The Urgent process has all the same procedural requirements as routine changes. Urgent changes need only be approved by the CAB/EC.
- Standard changes will be submitted to the Change Manager for approved Standard changes to be completed within the next or future Change Maintenance window for that system.
- All Changes will need to be submitted to the Change Manager by Thursday at 3 PM for consideration in the following CAB meeting.

## **CHANGE CALENDAR**

The Change Calendar contains all scheduled changes (including outages, maintenance etc.) and moratoriums, which will help identify major conflicts in the schedule and provide updated information to stakeholders. The Change Manager is the owner of the Change Calendar. The Change Timeline can be viewed at: <http://rfc.it.utah.edu/timeline/index.html>. The Change Calendar can be accessed at <http://cmsworkflow1.med.utah.edu/RFCviewer/>.

## **CHANGE SCHEDULING**

The CAB will determine when changes will be deployed in conjunction with the Change Submitter. The CAB will consider the urgency and impact of the change, the existence of any dependant changes and resource availability.

Changes that require broad communication or impacts large audiences may be subject to a 30 day lead for coordination, communication and scheduling purposes. Broad audiences include HSC Wide, Hospital Wide, and Community Clinic Wide, Management Council or other large body of users. Generally these messages are approved by the Public Affairs office. The preferred method to

In addition, some systems may have change maintenance windows. The Change Manager and CAB will take these into account when determining a timeframe for a specific Change. Such scheduled maintenance windows will be represented in the Change Calendar.

## **CHANGE REQUEST and/or JUSTIFICATION (Reason for Change)**

This is created by Change Submitter. The request simply describes the business or technical effort driving the change and the risk associated with the change.

## **CHANGE RISK ASSESSMENT**

Change Risk Assessments describe the risk to the business if the change is not done; the risks involved with doing the change and include steps that can be taken to mitigate risk associated with the change. Also, considering if the requested change deviates from published or implied technical or operational standards in place at the University of Utah. Describe any service disruptions the change might cause.

## **CHANGE IMPLEMENTATION PLAN**

Implementation plan are created by the Change Submitter. Change implementation plans describe, in detail, how a change is to be successfully done. Change implementation plans will be followed to achieve the desired outcome. The detail and specifics required in the plan are driven by the change's risk level.

## **PEER REVIEW**

The Change Submitter should have someone on their team review the Change Implementation Plan. This will assist the Change Submitter in allowing someone else to go through the steps in the Implementation Plan.

## **OTHER TEAMS ASSISTANCE REQUIRED**

Some Changes require that other teams do some action before/during/after the change. Change Submitters should indicate on the RFC that other teams are required to assist this change. The Change Submitter should indicate which teams are required and what they need to do to assist the change.

## **COMM PLAN**

Changes that have significant impact to business or users need a communications plan. Changes that require broad communication or impacts large audiences may be subject to a 30 day lead for coordination, communication, and scheduling purposes. Broad /Large audiences include HSC Wide, Hospital Wide, and Community Clinic Wide, Management Council or other large body of users. These messages need approval the appropriate body such as, Public Affairs office, CIO's office. The preferred method to communicate is to have targeted communication for the specific audience of the change such as Epic Users, IT Manager, HSC IT Managers, individual clinics or departments. See Communications Policy.

## **CHANGE TEST PLAN**

Test plans are created by the Change Submitter. Testing plans are followed to verify that the change can accomplish the desired outcome. The detail and specifics required in the plan are driven by the change's risk level and complexity.

## **CHANGE BACKOUT PLAN**

Is created by the Change Submitter and describes how a change will be reversed, or the affected system be placed back into original state should a change action fail. The detail and specifics required in the plan are driven by the change's risk level and complexity.

### **POST IMPLEMENTATION TESTING AND VALIDATION REVIEW (PIR)**

All changes must be verified and tested after deployment and noted in the change documentation. The review will note the success/failure of the change. The review will also note how well the actual change action conformed to the original change request in terms of fitting within the Change Window, Implementation steps and Testing steps. The detail and specifics required in the PIR are driven by the change's risk level and complexity.

### **CHANGE APPROVAL or DISAPPROVAL**

All changes submitted and meeting the standards set within this policy will be considered approved pending review of the Change Manager and CAB. If there are questions or issues with any part of the change, the change submitter will be contacted. Otherwise, the change will be allowed to move forward as scheduled.

### **STANDARD CHANGES**

Standard changes are changes used in the current IT which is not required to conform to the change lead time standards.

A Standard Change:

7. Is well defined (CI is a Configuration Item that is part of the system or service) and impacted service(s) are uniquely identified). Documented (there is a procedure in the form of a checklist or step-by-step narrative on how to make the change and how to back-out of the change), tested (the change has been implemented successfully) and proven (the change procedure has been used before successfully) at least three times in production.
8. The risk is low (the risk of failure is low or the impact to services should the change fail is minimal) and well understood (the types of risk are known and the consequences of failure understood and can be mitigate within 15 minutes.
9. Is transparent to the user (users will not notice a difference in the way they interact with services or need to change local system or software settings or configuration.
10. Requires no additional funding to implement.
11. Is completed within a declared Change maintenance window for that system or application

Standard changes are submitted via the RFC to the Change Manager for review and approval by the CAB. Any changes not submitted as Planned changes, or not contained in the Standard list will be considered Unauthorized Changes.

## **PROCESS OWNERSHIP:**

The IT Operations Change Management Process Owner (CMPO) is the Associate Director of Service Management. The CMPO owns the process and the supporting documentation for the process. The CMPO provides process leadership to the IT organization by overseeing the process and ensuring it is followed. When the process isn't being followed or working well, the CMPO is responsible for identifying why and ensuring actions are taken to correct the situation. In addition, the CMPO is responsible for all changes to the process, and development of process improvement plans.

### ***Change Management Policy - Quick Reference Guide***

The following statements define the Change Management Policy:

1. All Planned RFC's, regardless of urgency, impact and type are subject to the Change Management policy. This includes any RFC that is being implemented by a third party vendor or contractor.

2. For a change to be considered by the CAB, the required documentation, such as technical specifications, implementation plan, test plan, a back-out plan and risk assessment must be attached to the change. The quantity of documentation required will be dependent on the type of change as well as the risk and complexity associated with the change.

For example, each Planned RFC should have the following headings with supporting descriptions and/or documentation:

-Service / Equipment being changed

-Brief Description of the change (Include Service and what is being changed) this needs to be clear and concise and in basic terms

-Reason for the change

-Change Plan Details

Start Date/Time – End Date/Time

-Describe any service disruptions this change might cause

-Impact if not implemented

-Back out plan should the change be unsuccessful

-Worker notes



-Communication

-Display on Help Desk sites for (Select none, Hospital, Campus, both)

-This field is displayed on the support website. Please type in a user friendly description of the impact

-Peer Review (Did you have a peer review this change, which peer)

-Other team's assistance (Do you need the assistance from other teams, which teams, what do they need to do so you can make this change)

-Urgency (Low, Medium, and High) How urgent is it for this change to go into production?

-Impact (<25 users, 25-250, 251-1000) How many users could this affect?

Risk of Failure (Low, Medium, and High) what is the risk of failure for this change?

Category (Minor, Major, Urgent, Break Fix or Emergency, and Standard if selected from approved list of standard changes).

Change Types:

- Submitter to present to Cab
- Reviewed at CAB meeting
- Minor
  - Minor system or impact
  - 10 day lead time
  - Pre-approved
- Standard
  - Minor change (minor system or impact)
  - Next established Change Window (No 10 day lead time)
  - Transparent to users
  - Documented procedure
  - Requires no additional funding

- Testing and validation of success

3. The CAB meets regularly to review all RFC's and approve or reject them and schedule them appropriately. Change Submitters that have Major or Urgent RFCs are encouraged to attend this meeting in case there are any questions from the CAB.

- All Changes to be reviewed in the next CAB meeting need to be submitted to the Change Manager by Thursday at 3 PM.

4. The CAB/EC can be convened with short notice to assess an Emergency change.

5. A RFC can be rejected by the CAB for a number of reasons, such as (but not limited to):

- a. Resources are unavailable to execute the change
- b. Insufficient planning and documentation

- c. Insufficient testing authorization and documentation
  - d. Scheduling considerations
  - e. Risk too high
6. Users will receive notification from the change submitter about any possible service interruption caused by the change in a timely manner.
7. As part of the implementation procedure, all changes must follow the test plan, be fully tested with test sign-offs and documentation complete.
8. All changes must be verified after deployment and the verification is included in the change documentation.
9. The submitter must complete the RFC when the change is completed.
- Changing status to completed.
  - Enter the completed Date/Time
  - Enter the completed Status (Successful, Partial, or Failure)
    - If the change is Partial or Failure, then the explanation needs to be emailed to the Change Manager.
10. The Change Manager will maintain the Change Calendar and make it available to the institution. Necessary notifications will be delivered via the Service Desk.

## **2. UNAUTHORIZED CHANGES**

A. Changes deployed to the production environment that do not follow this change management policy may lead to disciplinary action up to, and including, termination.

## **3. ENFORCEMENT**

The Change Management Board is responsible for monitoring and enforcement of this policy and approved procedures. A violation of this policy may lead to disciplinary action up to, and including, termination. CAB will suggest sanctions for unauthorized changes to Change Management Board to decide. Possible Sanctions include:

- Manager to explain to CAB why this happened
- Manager to attend CAB for 30 days
- Use Above/Below the Bar for Un-Authorized Changes in ITSM Meeting
- Any “Urgent” team RFCs must be printed, manager must have hand signatures from approvers for 30-90 days
- Present to CAB all team RFCs for 30-90 days

