

Title: UCF IT Change Management Policy & Procedure	Effective: 09/01/2016
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Approved By: Bob Yanckello, Chief Technology Officer	Page 1 of 12

Revision History			
Revision (Rev)	Date of Rev	Owner	Summary of Changes
Section VI; ECAB SOP	10/10/2016	Scott Baron	Added reference to ECAB Operating Procedures doc

I. OBJECTIVES

This document is intended to define and describe a consistent Change Management process for all changes implemented into IT production systems. The goal of this document is to ensure standardized methods and procedures are used for efficient and prompt handling of all Changes. The Change Management process will work in conjunction with other related ITIL processes such as Incident, Request Fulfillment and Problem Management.

The objectives of Change Management are to:

1. Introduce planned, tested, and authorized changes into production systems to ensure minimal disruption to IT services.
2. Improve Change Success Rate (CSR) by proactively minimizing the risks/impact of potential or harmful incidents and problems resulting from deploying changes.
3. Ensure most effective and efficient utilization of IT resources via adoption of a consistent change deployment procedure to prevent uncontrolled, unauthorized changes being implemented.
4. Ensure that ALL changes are recorded in the IT Service Management (ITSM) application which is ServiceNow.

II. DEFINITIONS

Change: The addition, modification or removal of anything that COULD have an effect on IT services. The scope should include changes to production IT services and related configuration items.

Change Management: The process responsible for controlling the lifecycle of all changes, enabling beneficial changes to be made with minimal disruption to IT services.

Change Record: A record within the ITSM application (ServiceNow) containing the details of a change. A change record is created for every request for change (RFC) that is approved by the Change Manager. Change records should reference the configuration item(s) that are affected by the change.

Request for Change (RFC): A RFC is a submitted request within the ITSM application (ServiceNow) for a proposed change to be made.

Change Window: An agreed upon time when changes may be implemented with minimal impact on IT services.

Change Types:

1. **Standard change (pre-approved):** A Standard change is a change that is pre-approved by the Change Advisory Board (CAB). A Standard change is low risk, has a low failure probability, is relatively common and follows a procedure (Standard Operating Procedure (SOP)) or work instruction. Standard changes when introduced, are validated to have no impact on the delivery of IT services.

The elements of a Standard change are:

- Has been pre-approved by the CAB to be executed at a time identified by the Change Owner or on a regular change schedule
 - The activities/tasks are well known, procedures for configuration and install are documented, often with check-lists, and proven to be repeatable
 - The risk to the availability of IT services is very low
 - Standard changes are required to be documented via a change record prior to the installation of the change
2. **Normal change:** A Normal change refers to changes that must follow the complete change management process. A Normal change does not need to be introduced immediately.

Normal changes are often categorized according to risk and impact to the organization/business. A Normal change may be a major change with high risk and high impact, or a minor change with low risk and low impact.

3. **Emergency change:** An Emergency change is a change that must be introduced as soon as possible – for example to resolve a major incident.

All Emergency changes must have an associated incident record. This is to ensure that the change has a full description and history log which can be reviewed by the Change Advisory Board (CAB). For Emergency changes, the process will follow the ECAB process (Section VI).

Change Advisory Board (CAB): The Change Advisory Board (CAB) is made up of senior leaders that are responsible for the assessment, prioritization, approval and scheduling of changes. The CAB will approve or reject all proposed changes considering all known risks vs. benefits of implementing the change. The CAB also reviews and pre-approves all changes identified as Standard changes.

Quorum: Minimum $\geq 50\%$ of voting CAB Members.

Unanimous Vote: All CAB Members vote affirmative for the change to be approved.

Emergency CAB (ECAB): A subgroup of the CAB that makes decisions about Emergency changes. This is an ad-hoc gathering of at least two members of the CAB and the Change Owner to review and then approve or reject the Emergency change. An Emergency change CANNOT be a Normal change that needs to be expedited because it was not submitted in time for CAB review.

Successful Change*: A change is deemed successful if it has met the stated business and IT objectives validated by the end user, was implemented without deviation to the documented change plan, was completed within the change window and has not resulted in incidents and problems.

*** A change is ALSO deemed successful if it qualifies under this one exception.**

- Meets all of the criteria for a Successful Change as stated, however the change implemented was for an emergency incident/problem resolution and was recorded after the change was implemented (retro change record).

Successful with issues Change - A change is deemed successful with issues if it has met the stated business and IT objectives validated by the end user, was implemented with deviation to the documented change plan, was completed within the change window and has not resulted in incidents and problems.

Unsuccessful Change: A change is deemed unsuccessful if it does not meet all of the criteria for success as stated in the Successful Change and Successful with issues Change definitions within this policy.

Canceled Change: A change is considered “canceled” if a decision is made by the CAB or the Change Manager to recall/cease (reject) the planned change implementation.

IT Service Management (ITSM) application: This is the application (ServiceNow) used by IT to record incidents, problems, requests, and changes.

Change Success Rate (CSR): Percentage of changes deemed “Successful” / (Total number of changes submitted minus number of changes canceled prior to implementation).

Standard Operating Procedures: Document required to be completed for all Standard changes.

Back out Plan: A plan used in the event that a change moved into production causes unwanted results and the system must be returned to a previous functional version to restore business operations.

Skype meeting: A Skype meeting is for three or more callers who want to conference together by telephone to conduct a meeting. This conference line setup is the recommended action to be followed for the Emergency change review and approval process.

III. ROLES AND RESPONSIBILITIES

1. CAB Members:

- Director of Enterprise Systems & Operations (Voting Member)
- Director of Network & Telecommunications (Voting Member)
- Director of Enterprise Application Development (Voting Member)
- Director of Program Management & Planning (Voting Member)
- Director of Technology Sales, Service & Support (Voting Member)
- Director of Information Security (Voting Member)
- Enterprise Architect/Consultant (Voting Member)
- Manager of ITSM – CAB Administrator (Non-Voting Member)

IT operations managers or other guests may be invited to attend a meeting of the CAB by invitation of a single CAB member. These individuals will be Non-Voting members.

2. CAB Administrator – Responsible for running the CAB meeting and other administrative CAB functions (such as agenda preparation and note taking).
3. Change Manager – Department manager responsible to review and approve all proposed changes (Normal or Emergency) before CAB & ECAB review.
4. Change Requester – The customer (internal or external) who initiates the request for change (RFC).
5. Change Owner – The IT resource responsible for coordinating/monitoring the execution of the change and documenting the change within the ITSM application (ServiceNow).
6. Manager of ITSM – Accountable for the quality of the process and for the routine procedural audit.

IV. SCOPE OF CHANGE MANAGEMENT

All changes (whether Normal or Emergency) to the production systems fall under the purview of this Change Management policy. NO changes are authorized to be implemented without going through the Change Management process. All change details, supporting documentation and implementation plans shall be logged and tracked in the ITSM application (ServiceNow) throughout the change life cycle.

NOTE: Standard changes are currently NOT within scope of Change Management.

A request for change (RFC) can be driven by:

- An incident that after investigation and troubleshooting deems a change is required to resolve the incident.
 - The incident recorded within the ITSM application (ServiceNow) will drive the change to be proposed.

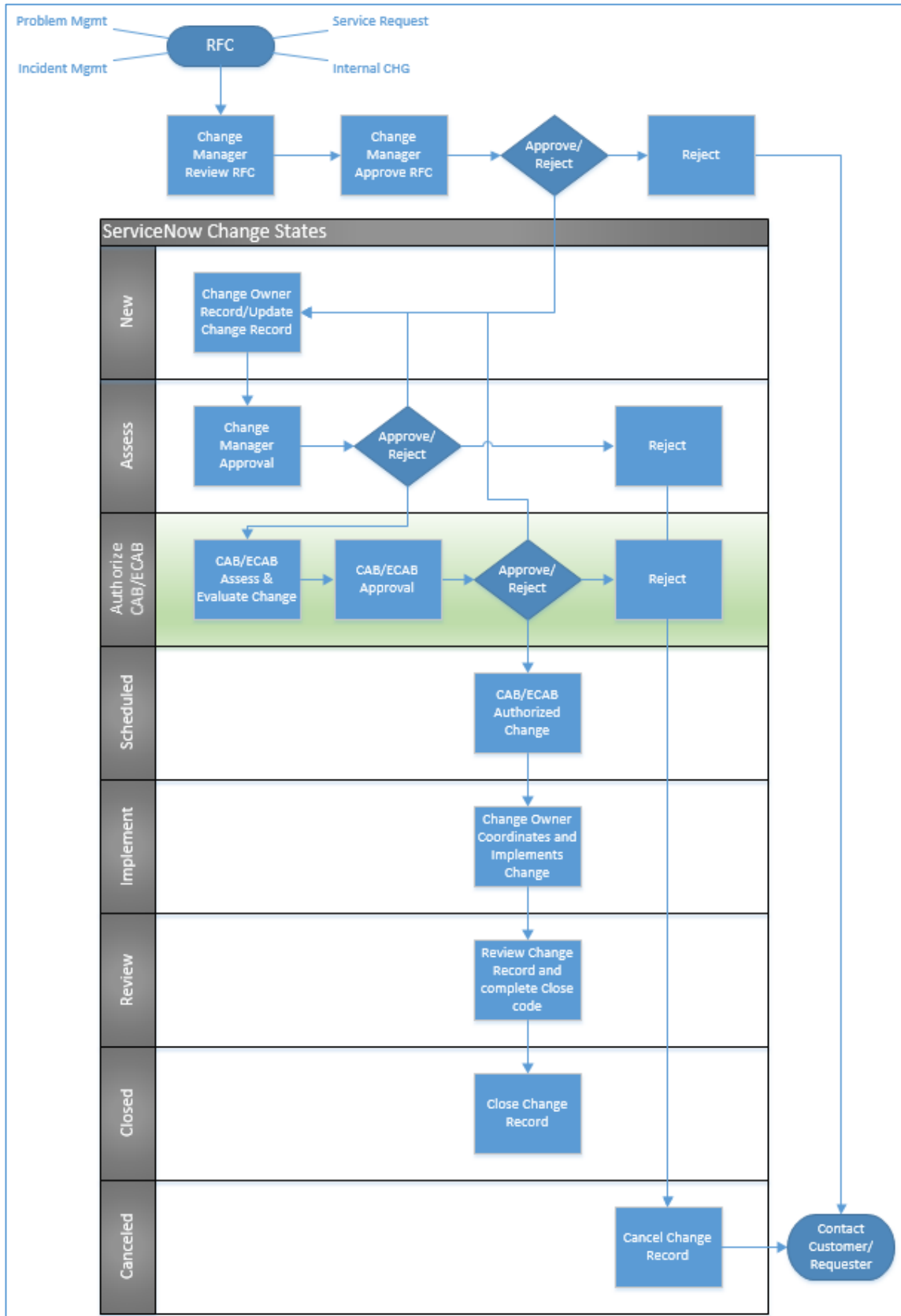
- A problem that after investigation and troubleshooting deems a change is required to resolve the problem.
 - The problem recorded within the ITSM application (ServiceNow) will drive the change to be proposed.
- Staff member (external or internal customers) requests for application/infrastructure changes
 - If an external customer request, the service request recorded within the ITSM application (ServiceNow) will drive the change to be proposed.

V. LIFE CYCLE OF A CHANGE

Steps in the change process are:

- Reference Figure 1.1 for the Change Management Life Cycle Workflow
1. Change Requester submits a request for change (RFC) as a record within ITSM application (ServiceNow)
 - a. Incident/Problem driven, customer service request or internal IT driven
 2. Change Manager reviews RFC and either accepts or rejects change proposal
 3. If accepted, the assigned Change Owner records change details
 4. Change Manager reviews planned change recorded by Change Owner and approves/rejects before proposing change to CAB
 - a. If Emergency change, follow ECAB process (reference Section VI)
 5. CAB assesses and evaluates change type, risks, proposed dates, communication plans, back-out plans, etc.
 6. CAB Voting Members approve/reject if appropriate and/or adjust change type if required
 7. Change Owner coordinates and implements the change
 8. Review and close the change record as Successful, Successful with issues or Unsuccessful change

Figure 1.1



Step 1: Request for Change (RFC):

Any staff member within IT can submit a production change request on their own or on behalf of the business requestor outside of UCF IT, including vendors. All changes need to be recorded in the ITSM application (ServiceNow).

Every request for change that enters the Change Management process must be evaluated. The potential impact of unsuccessful changes to services, service assets (and their configuration) must be considered. The following provide generic questions (The ITIL “Seven R’s” of Change Management) that are a good starting point for the evaluation of a request for change.

- Who **raised** the change?
- What is the **reason** for the change?
- What is the **return** required from this change?
- What are the **risks** involved in the change?
- What **resources** are required to deliver the change?
- Who is **responsible** for the build, test and implementation of the change?
- What is the **relationship** between this change and other changes?

a) Who **RAISED** the change?

Where did the change come from? Is it an operational, tactical or strategic change? Typically, it is a business sponsor or IT addressing an incident or problem. All changes need to be pre-approved by the Change Manager.

b) What is the **REASON** for the change?

Avoid changes that introduce risk without offering business benefits. This should decide the appropriate prioritization required.

c) What is the **RETURN** required from this change?

What is the desired outcome to be generated by the change? Is the input a solution to a problem or an innovation? Can we measure the value of the intended impact of the change?

d) What are the **RISKS** involved in the change?

Every change involves risk. Has the risk been correctly identified? Has the probability of the impact to the infrastructure been assessed? What is the risk of ‘not’ implementing the change? Ensure these factors have been thoroughly reviewed and a regression strategy is in place should the worse happen.

e) What **RESOURCES** are required to deliver the change?

Both people and the IT assets are required. Are the correct technical skills in place? Are the people/teams with those skills available and allocated? What are the infrastructure assets required to implement the change? Are they available?

f) Who is **RESPONSIBLE** for the build, test and implementation of the change?

These three functions should have the responsibility appropriately segregated. This is important for compliance and auditing as well. It should be traceable, enforceable and actionable across the whole change cycle.

g) What is the **RELATIONSHIP** between this change and other changes?

With so many changes occurring in a complex IT environment we must ensure there are no conflicts of interest.

Step 2: Change Manager reviews RFC

Upon review of the RFC, the Change Manager will accept/reject the change to be recorded as a Normal or Emergency change.

If the change is accepted OR rejected, the Change Manager is responsible to communicate the decision to the Change Owner who in turn will communicate with all stakeholders, in particular the initiator of the request for change (Change Requester).

Step 3: Record RFC

If the Change Manager approves the RFC, the Change Owner will be responsible to plan out the change.

Reference the *UCF IT Change Management - Change Record Procedure* document to ensure a change is properly recorded with all the required information.

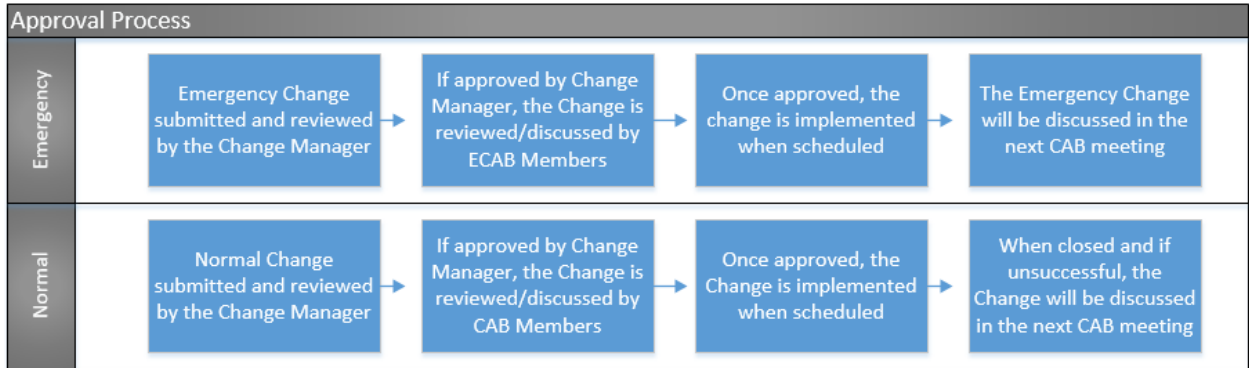
Step 4: Change Manager reviews proposed changes

The Change Owner reviews the proposed change with the Change Manager **BEFORE** CAB. The Change Manager is responsible to approve/reject the proposed change. The approval process for current change types is referenced in Figure 1.2 below.

- If an Emergency change, follow ECAB process (reference section VI)

Once the Change Manager approves, the Normal change is ready to be presented to CAB.

Figure 1.2



Step 5: CAB assesses and evaluates change type

The CAB meets once a week on Wednesdays at 9:00AM. For a CAB meeting to be called to order, a quorum of $\geq 50\%$ of CAB Voting Members must attend.

Change Manager approved RFCs to be considered at CAB must be submitted before CAB meets.

The CAB is the Change Management senior leader decision making authority for IT services for Normal and Standard changes (Standard changes currently not in scope). The primary responsibilities of CAB are to review and approve/reject (CAB Voting Member ONLY) all Normal and Standard change requests, review all Unsuccessful changes, review all Successful with issues changes and review all Emergency changes post their implementation. See Appendix A: for the current CAB Agenda Template.

Step 6: CAB Members approve/reject if appropriate and/or adjust change type if required

CAB Members (excluding the Manager of ITSM - CAB Administrator) have the authority to approve, reject or postpone the proposed change. CAB Members can also adjust change types if required (i.e. if a Standard change is a routine failure then it should become a Normal change).

For a change to be approved, all CAB Members must have a unanimous vote in the affirmative. If any CAB Member votes opposed, the change will not be approved and the change will need to be escalated to the Chief Technology Officer (CTO). The CTO will review and determine final approval or rejection of the proposed change.

The goal of the final approval authorization is not to reject or postpone the proposed changes, but to mitigate the inherent risks associated with a poor or lack of business review process, inadequate or non-existent testing and remediation, implementation, communication and back out readiness procedures.

Changes that are rejected will follow these two scenarios.

1. Change to have gaps identified for remediation, and brought back through the CAB approval process. Delays associated with remediation WILL NOT be considered for Emergency change approvals.
2. Change rejected in full (change to be canceled/change record closed) and the Change Manager is responsible to communicate the decision to the Change Owner who in turn will communicate with all stakeholders, in particular the initiator of the request for change (Change Requester).

Step 7: Change Owner coordinates and implements the change

The Change Owner is responsible to ensure the change is completed within the change window, ensures all assigned tasks are completed within the change window and is responsible to ensure the approved change does not get altered after approval and prior to the implementation.

Any changes that need a deviation to the approved implementation plan during the change window will need to be halted immediately and proper escalation procedures invoked immediately. The Change Owner should notify the Change Manager for further direction. A decision needs to be made by the Change Manager to either invoke the documented back out plan, deviate from the implementation plan considering all known facts and continue forward with the change implementation, or engage ECAB members for additional guidance.

Step 8: Review and close the change record as Successful, Successful with issues or Unsuccessful change

Once the change is implemented, all change tasks are closed and the change is closed, verify if the change met the criteria of a Successful change (see definition of a Successful and Successful with issues Change).

If the change is Successful with issues or Unsuccessful, document the reasons within the change record based on the Successful change criteria.

VI. ECAB PROCESS

An Emergency change is a change that must be introduced as soon as possible. If the change is not implemented as soon as possible, the discovered issue will leave the University of Central Florida to significant financial, regulatory or security risk.

NOTE: An Emergency change IS NOT a change that needs to be implemented because it missed CAB review.

All Emergency changes will need to be approved by the Emergency CAB (ECAB). The purpose of ECAB is to be able to quickly assess impact, risk, resource and urgency for every Emergency change in a short span of time. ECAB is a subgroup of the CAB that makes decisions about Emergency changes. This is an ad-hoc gathering of at least two members of the CAB Members plus the Change Owner. It is mandatory the Change Owner follows the UCF IT ECAB Operating Procedures if an Emergency change is submitted for ECAB review.

All Emergency changes must have an associated incident record. This is to ensure that the change has a full description and history log which can be reviewed by the Change Advisory Board (CAB).

NOTE: The first priority of an Emergency change is to restore IT services to the impacted customer(s) as soon as possible. A change record CAN BE recorded retro if the Emergency change needed is imminent. The goal of an unplanned Emergency change is to restore services first and then record the change post implementation. If the Emergency change is planned, then the change record should be recorded first and reviewed and approved by ECAB.

If the planned Emergency change needed is during normal business hours, the Change Owner will need to follow procedure and standup a Skype meeting for ECAB members to call into for change review and approval.

If during off hours, the Manager on Duty (MOD) has the authorization to solely approve the planned Emergency change if comfortable. If needed, the MOD can involve regular members of the ECAB for additional guidance.


For all unplanned and planned Emergency change scenarios, the recommended action of the Change Owner is to have a Skype meeting setup to discuss the change details before the change is implemented.

VII. ADDITIONAL CONSIDERATIONS

- Any exceptions/challenges to an Unsuccessful change must be brought forth to CAB. CAB Members will make the final decision if the change should be marked Successful.
- All existing and new staff members of IT are expected to be familiar with the intent and the contents of the change management policy and procedure. It is the responsibility of the staff member to review and guide vendors to comply with the University change management policy and procedure.
- All violations to the change policy will be monitored, staff members of IT will be coached by the respective management and repeat offences could lead to additional disciplinary action.

VIII. APPENDIX

Appendix A: CAB Agenda Template

 UCF IT CAB Meeting Agenda University of Central Florida Information Technology	
Name	UCF IT CAB Meeting
Date	
Time	
Location	

Time	Agenda Topic	Discussion Points
	Roll Call	
	<i>New Business</i>	
	Review of Normal Changes	Normal Changes for CAB Approval:
	Review of Unsuccessful Changes	Unsuccessful Changes for CAB Review:
	Review of Successful with issues Changes	Review of Successful with issues Changes:
	Review of Emergency Changes	Emergency Changes for CAB Review:
	Adjournment: Next Meeting:	

Roll Call		
UCF IT CAB Members	Present	Absent
Director of Enterprise Systems & Operations		
Director of Network & Telecommunications		
Director of Enterprise Application Development		
Director of Program Management & Planning		
Director of Technology Sales, Service & Support		
Director of Information Security		
Enterprise Architect/Consultant		