

Procedure: Information Technology Services Change Management

Procedure Date: 10/27/2009

1.0 Purpose

The Information Technology Services (ITS) department manages upgrades, replacements, and modifications to hardware and software systems through a documented and managed change process, compliant with the Information Technology Infrastructure Library (ITIL) standards. The formal change management process insures that any changes to hardware, software, or network systems are thoughtfully planned, approved, documented, and publicized prior to implementation. The formal change management process minimizes accidental disruptions to production systems and provides documentation on the changes so that service disruptions can be remediated as quickly as possible. The change management process includes a College governance review so that all stakeholders have the opportunity to provide relevant input prior to implementation of the technology change. This document is intended for all CCBC faculty and staff.

2.0 Procedure

Changes to the technology environment of the College are of two kinds, scheduled and unscheduled. While ITS strives to minimize unscheduled changes, both forms have a change management process.

2.1 Scheduled Change

A scheduled change to the technology environment begins with a Change Request Form, available on the *Daily Post* Forms repository. A Change Request form for scheduled changes must be submitted to the Helpdesk Administrator no later than the Friday preceding regularly scheduled meetings of the Change Management Review Committee. The Change Management Review Committee meets each 1st and 3rd Wednesday of the Month at a time and location published on *Daily Post*. Change requests are made electronically through the Change Request form and SharePoint workflow. The Change request form clearly states

- Requestor and/or Sponsor
- Date of implementation of the requested change
- A clear description of the change
- Goals and benefits of the change
- Services impacted by the change

- Duration of the service impact
- Recovery procedure in the event that the change is unsuccessful or results in a service outage beyond the change window requested

All change requests are stored in the ITS Change Request SharePoint repository, organized by requested change date. The Change Request repository is available for review by the College community. The Helpdesk Administrator will utilize SharePoint workflow to notify College departments, offices, and individuals to scheduled changes that may have a potential significant impact.

The Change Management Review Breeze/conference call meeting is held the 1st and 3rd Wednesday of the month. The meeting is convened by the Helpdesk Administrator to review and approve changes. The Helpdesk Administrator will convene additional meetings as necessary to respond to requests for change. The conference call meeting is available to all College staff and faculty. The Helpdesk Administrator will publish the agenda and Breeze/conference call connect information on the ITS Change Management SharePoint site. The agenda will include a review of the outcomes of previous approved changes and requested future changes. Change requestors and/or sponsors must take part to present and defend all requests for changes. The change management review will look for conflicts between changes, evaluate impact on College services, review conflicts with the College academic calendar, and evaluate input from the College community on requested changes. Each change request on the agenda is approved or rejected.

Only changes reviewed and approved at Change Management Review are included in the weekly Friday night change schedule. Rejected requests will be returned to the requester for clarification or response to questions. Any change requests not approved by the committee must be resubmitted to the committee before they can be implemented.

Technology Change Implementation Steps

1. The Helpdesk administrator publishes the Friday night change schedule of approved changes on the ITS Change Management SharePoint site.
2. The Helpdesk Administrator completes a weekly review of the change schedule with the Helpdesk.
3. The Helpdesk creates Helpdesk tickets and generates Change Event Notifications as necessary to the Helpdesk and Presidium.
4. The Helpdesk Administrator will prepare the College notifications, and these will be made to the College community at least five days in advance of the planned outage. *Daily Post*, College-wide email postings, and College-wide telephone voice mails may be used in the communications strategy to the College, depending on the scope of the planned change and impact on College services.
5. Technology changes are implemented per the published schedule

2.2 Unscheduled Change

2.2.1 Emergency Change

An emergency change is a response to a current or impending service outage. Urgency in action is often required. Examples of emergency changes are error messages from a server or storage device that may indicate that a catastrophic failure is likely unless parts are replaced. An unscheduled change request begins with a Change Request Form, available on the *Daily Post* Forms repository. The use of the form ensures that both the service outage and the remedy are thoroughly reviewed and understood. The Change Management Request must be reviewed and approved by the CIO or designee, before the change is implemented. Approval designees in the absence of the CIO include one of the ITS Directors or the Vice President of Administrative Services. The Change request form clearly states

- This is an unscheduled change
- Requestor and/or Sponsor
- Date of implementation of the requested change
- A clear description of the change
- Goals and benefits of the change
- Services impacted by the change
- Duration of the service impact
- Recovery procedure in the event that the change is unsuccessful or results in a service outage beyond the change window requested
- College notification plan – pre and post change event

Requests for unscheduled changes are reviewed critically to ensure that they meet the burden of requirements for change outside of the scheduled change management process. An unscheduled change must satisfy the following requirements

- A service outage is in progress and the failing services cannot be restarted
- A catastrophic service outage is believed to be imminent unless an emergency change is made that would include a service outage.

The approver of the unscheduled change is responsible for the College notification plan. At minimum this will include

- Direct communication to the office of the Vice President of Administrative Services
- Helpdesk ticket and Change Event Notifications to the Helpdesk and Presidium



- College-wide email and/or voice mail describing the emergency event
- Scope and duration of service disruption
- Estimated time of service restoration

Additional notification may include *Daily Post* notification, targeted email lists, individual telephone calls to affected departments and individuals, and other communications strategies appropriate to the nature of the event and proposed action.

At the conclusion of the emergency change, the requestor is responsible for posting an unscheduled change resolution notification. This notification includes results and status to at least the following

- Direct communication to the offices of the CIO and Vice President of Administrative Services
- Service Restoration Event Notification to the Helpdesk and Presidium
- College-wide email and/or voice mail describing the status of the emergency event
- Scope and duration of any additional service disruption
- Estimated time of service restoration if necessary

2.2.2 Response to a Service Outage

Unplanned service outages require an urgent response in order to restore service to the College community as quickly as possible. Critical failures requiring immediate action will not require a change request form to be generated before restoration efforts begin. Examples of critical system outages include power, network, and telephone system failures. Before any change is implemented, approval must be obtained from the CIO or designee. Response for most other unplanned outages, however, will begin with the business process described in 2.2.1 above. This ensures that the outages are thoroughly reviewed and appropriate actions are taken.

A notification plan to the College must be implemented. The approver of the change is responsible for the notification plan to the College. This plan must include the following:

- Notification to the office of the Vice President of Administrative Services
- Helpdesk ticket and Change Event Notifications to the Helpdesk and Presidium
- College-wide email and/or voice mail describing the event and its impact
- Scope and duration of service disruption
- Estimated time of service restoration

Depending upon the nature of the event, other possible notification strategies may include

- *Daily Post* notifications
- Targeted email lists
- Individual telephone calls to affected departments and individuals
- CCBC Web site posting
- Recorded messages on CCBC phone lines

Once service is restored, status updates and resolution notifications are to be made by the change requestor. Resolution notification includes at minimum a Change Event Notification to the Helpdesk and Presidium indicating that the service has been restored and that normal operations have resumed. Additional notification strategies will depend on the nature of the outage and may include

- Notification to the office of the Vice President of Administrative Services
- College-wide email and/or voice mail describing the event and its impact
- *Daily Post* notifications
- Targeted email lists
- Individual telephone calls to affected departments and individuals
- CCBC Web site posting
- Recorded messages on CCBC phone lines

3.0 Definition of Changes Covered by the Change Management Procedures

Changes to the technology environment that are covered by the change management procedure include the following:

- Changes to the College network. The changes include any configuration modifications to switches, firewalls, packet shapers, VPN devices, or other equipment used on the production College network
- Changes to hardware supporting College applications. The changes include configuration changes, parts replacement, unit replacement or other changes to equipment used for College-wide applications.
- Changes to network applications such as email, SharePoint, Active Directory Group Policy, or other applications that are used by all or major segments of the College community.
- Changes to administrative systems. The Administrative Systems User Group is the governance board for administrative systems and must approve changes to administrative systems through the regular meeting structure.

- Changes to the major academic applications and services including WebCT, Tegrity, the classroom environment, and other services used by a significant population of the academic community. The IT Council is the governance board for academic systems and must approve changes to academic systems through the regular meeting structure.
- All other changes that have or may have a pervasive impact on a large population of the College community

Changes to the technology environment that are not covered by this change management procedure

- Small scale and routine work completed as an ongoing part of application development. This includes such tasks as new and updated reports
- Minor alterations to Banner such as updates to validation tables
- Implementation and updates to application development projects that do not have a pervasive impact on the technology environment of the College. An example is a required update to W2 processing.

4.0 Maintenance Windows

In order to minimize disruption to the College, scheduled changes will be made during the regularly scheduled IT maintenance windows whenever possible. This window is currently defined as Friday evenings from 11:00 p.m. until 6:00 a.m. Saturday morning. Scheduled changes occurring at other times or for longer duration are reviewed and approved in the Change Management Review process. The Helpdesk administrator will include additional notification to the College community as appropriate to the proposed change and schedule.

5.0 Blackout Periods

As there are periods during the academic calendar where changes would pose potential risks to operations of the College, agreed upon blackout periods will be defined and documented on SharePoint. No changes will be scheduled during these blackout periods. Emergency changes during these periods must be reviewed and approved by the Vice President of Administration using the unscheduled change process.

6.0 Change Management Committee

The Change Management Review group will consist of both technical and administrative staff from Applications, Networks and Infrastructure, Instructional Technology, and the Support Center, and will include the CIO of Information Technology Services. The Helpdesk Administrator will facilitate the meeting. The CIO or designee will chair the meeting. The Directors of each area may designate representatives from their group to attend the bi-weekly meetings. Attendees will have skills appropriate to

the areas of proposed change. Submitters of change requests will also attend the meeting, either in person or via electronic technology.

Change Management Review Committee meeting schedules will be posted on the Change Management SharePoint. Change Management committee meetings with agenda will be posted on *Daily Post*. A conference call number and Breeze session will be included in the *Daily Post* entry so that Breeze/conference call attendance can be extended to all members of the College.

The Change Management Review Committee will meet on the 1st and 3rd Wednesday of each month to review the status of the prior approved changes and to discuss issues or problems associated with the changes. The committee members will then review all new requests submitted and approve or reject. Rejected requests will be returned to the requester for clarification or response to questions. Any change requests not approved by the committee will need to be resubmitted to the committee before the requested change can be implemented.

7.0 Notification of Scheduled Changes

Notification of approved changes scheduled for the next week's maintenance window will be submitted by the Friday following the change management meeting for posting on the *Daily Post* the next Monday. This provides a minimum five days public notice from the time the scheduled change is posted until implementation of the change. Posting will provide a link to the SharePoint log located in the change management document library listed on the ITS landing page.

8.0 Roles and Responsibilities

Change Requester: The Change Requester is responsible for explaining the need for change and submitting a change request. The Change Requester will attend the Change Management Review meeting (in person or electronically) and respond to questions.

Helpdesk Administrator: The Helpdesk Administrator will log the requests, prepare the agenda and manage the Change Management Review meeting. He or she will also update the log with approval or rejection, furnish the log to the Helpdesk, and draft the College Notification for scheduled changes.

CIO: The CIO serves as the Change Management Review Chair: The Change Management Review Chair will be responsible for chairing the review and bringing resolution to each change request.

The Helpdesk: The Helpdesk will enter the change management tickets and Change Event Notifications to the Helpdesk and Presidium for scheduled changes.

Approver of Unscheduled Change: The Approver of Unscheduled Changes will be responsible for the notification plan to the College community

Change Management Review Team:

- Review requests
- Approve or reject requests
- Review prior changes

8.0 Related Policies

Emergency escalation policy