Change Management

Change Management Process

Change Categories
This procedure categorizes change as: Planned Major; Maintenance and Minor; and Emergency and Unplanned Outage. Of the three change categories, Planned Major Change requires the most rigorous and extensive change process and subsequent procedures.

PLANNED MAJOR CHANGE - Examples of planned major change are:
• Change that results in business interruption during regular business hours
• Change that results in academic interruption while in academic session
• Change that results in business process or operational practice change
• Changes in any system that affect disaster recovery or business continuity
• Introduction or discontinuance of an information technology service

MAINTENANCE AND MINOR CHANGES - Examples of this type of change are:
• Application-based security or business need patches and tax or other updates
• Operating system patches (critical, hotfixes, and service packs)
• Regularly scheduled maintenance in ITS maintenance window (Wednesday, 4-8am)
• Changes that result in business interruption outside of regular business hours
• Changes that result in academic interruption outside of academic session
• Changes that are not likely to cause a service outage

URGENT, EMERGENCY AND UNPLANNED OUTAGE CHANGES - Examples of this type of change are:
• Building is without service
• A severe degradation of service needing immediate action
• A system/application/component failure causing a negative impact on business operations
• A response to a natural disaster
• A response to an emergency business need
• A change requested by emergency responder personnel
• A response to a critical IT security warning
Process for Initiating a Service Change

All mission critical, ITS-supported production systems must comply with the following process:

1. All changes affecting computing environmental facilities (e.g., HVAC, electrical, equipment relocation, plumbing and remodeling) need to be coordinated with the Assistant VP for Information Technology. All changes affecting non-environmental computing need to be coordinated with the Director of Enterprise Applications in ITS.
2. A formal documented change management form must be submitted for all changes that are a planned major or minor change. Emergency changes need to follow this process but can be submitted within one business day after the implementation. This document is an online form which can be found at: https://apps.clarku.edu/change-management/. This change request must be submitted by the person doing the change and must contain, but is not limited to:
   - Project Name
   - ITS Sponsor
   - ITS Implementer
   - Change Name
   - Type of Change (planned major, maintenance/minor, emergency)
   - Person Responsible for Approving the Change
   - Date of Approval
   - Description
   - Effect of Changes
   - Reason for Changes
   - Date of Changes
   - Time of Changes
   - Expected Downtime
   - Testing/Back-out Plan
   - Communication Recommendation
   - Vendor Support Required
   - Comments/Other
3. All change management forms must be submitted in accordance with the change management procedure so that sufficient time is available for authorized reviewers to review the request, assess the level of preparedness, and make the decision to allow or deny the request, unless the change is urgent or an emergency. After hitting the ‘Submit’ button, the online form will be sent to the DL_ITSManagers <DL_ITSManagers@clarku.edu> distribution list for review.
4. Change requests will be reviewed according to type and impact to ensure that planning, testing and communication is being satisfactorily performed.
5. Each change request must receive the appropriate approval from both the Application Custodian as well as the ITS Person Charged with Implementing the Change before proceeding with the change.
a. A change request may be denied for reasons including, but not limited to, inadequate planning, inadequate back-out plans, the requested timing of the change, or if adequate resources cannot be made available.

6. Customer communication must be completed for each change as required by the change management process.
Procedures

All Administrative Systems will be subject to the Change Control Procedures determined by Information Technology Services.

- **Monitoring for patches and upgrades**
  
  - ITS staff, in conjunction with Application Custodians, will monitor vendor bulletins and lists for upgrades (point releases) to ITS managed applications.
  
  - ITS staff, in conjunction with Application Custodians, will assess the critical nature of Banner patches as they become available and determine the urgency and timing based on the assessment and other priorities.
  
  - For non-ITS managed applications, patches and upgrades to specific applications will be done at the request of the application owner. Application Custodians will monitor for upgrades and patches of non-ITS managed applications.

- **Patches/Upgrades/Site Specific Modifications/Development**
  
  - **Testing**
    
    - When an upgrade is approved for movement to a test system, the Application Custodians will agree to a test timeline and tentative date for movement to the production environment.
    
    - Testing must be completed one week prior to moving to production to allow for communication to the user community.
    
    - If a non-production testing system is not available, system administrators and Application Custodians must take a backup first, then take appropriate measures to verify the patch/upgrade/mod/development’s correct functionality after being installed into production.
  
  - **Timing**
    
    - All patches and upgrades will be scheduled during a regular, published, maintenance window (usually Wednesday mornings between 4am – 8am) or at an agreed upon time between the Application Custodian and ITS. Any maintenance deemed critical by ITS staff and/or applied outside the maintenance window and that may have an expected impact on end-user operations will result in notification to the user group(s) that will be affected.
    
    - Change Control forms will be initiated for patches, upgrades, mods, and development work.

**Keeping a Record of the Change**

Keeping a record of the change management process can help determine the history of an information resource, as well as provide proof that the change was approved. The ITS Change Notification public email folder will be the repository for all changes.