

## REDCap Change Management Guide

Rebecca Tucker - 2025-03-21 - Research Systems

### **REDCap Change Management Guide**

Guiding Definitions: [IT Analyst ITSM Client Reference Guide](#)

#### **In Scope**

- REDCap software version upgrades
- System-level changes
- External module installations/upgrades
- Firewall/network changes

#### **Out of Scope**

- Project-level changes
- Database or supporting system changes that do not require changes to the REDCap configuration

#### **System of Record**

[RamsCentral](#) - VCU IT Service Desk Analyst role

#### **Types of changes**

- Preapproved Changes (using a pre-approved template)
- Planned Changes (changes outside the maintenance window, but non-emergency)
  - Typically Risk Level 2
  - Requires manager approval
- Emergency Changes (atypical)
  - Entered after the change has occurred
  - DOES NOT require manager approval prior to submitting
  - DOES require manager review, once executed in RamsCentral

## **Maintenance Window**

Fridays from 6:00AM - 8:00AM

### **Communication plan:**

- Typically not beyond listing in the Change Management system (RamsCentral)
- Use REDCap email feature to notify users of changes outside our maintenance window which are expected to be disruptive and last more than 5 minutes, or during the change end up extending beyond the planned timeframe.

### **Change Process:**

- Determine need for change
  - REDCap core software upgrades
    - Monitor REDCap's [software release listing](#)
    - Log details in VCU's [REDCap Infrastructure Version Log](#) with evaluation of need
  - REDCap Community software upgrades
    - Monitor REDCap's [software release listing](#)
    - Log details in VCU's [REDCap Infrastructure Version Log](#) with evaluation of need
  - REDCap external module upgrades
    - Monitor REDCap EM version upgrade notices on [Control Center main page](#)
    - Follow the Change Management process to upgrade to new version
- Discuss in weekly REDCap team meeting
- Update VCU's [REDCap Infrastructure Version Log](#) with details of the upgrade
- (Manager) Approve change request
- Perform change
  - Notify manager real-time of any issues encountered
- Close out change request
- If any issues were encountered, review at next team meeting

## **Standard entries for RamsCentral fields**

### ***Details tab***

Summary: REDCap Maintenance

Owner:

Team: SOMTech Research Systems

Type: Emergency; Planned; Preapproved\*

\*select Preapproved template from drop-down

Change Approver: Brian Bush

Category: Application (most changes)

Start Date:

End Date:

Outage Possible: No

Checkboxes: Visible In Portal/Calendar

Public Description:

Preapproved: REDCap will be under maintenance. This maintenance will include updates to the application and/or external modules. Users should not be impacted by this update.

Emergency: dependent on purpose of ticket

Planned: dependent on purpose of ticket

Implementation Plan:

Use the upgrade wizard, download, extract.

Testing Plan:

Prior to maintenance, processes are tested on test.redcap.vcu.edu

Closure Notes: to be entered once the change has been completed

Technical Description:

REDCap application will be updated with new features, security patches, and bug fixes.

Communication Plan:

Preapproved & Planned: Maintenance window is posted on VCU REDCap community page.

Emergency: Utilize the REDCap email feature to notify all users.

Recovery Plan:

Revert to previous version as documented on VCU REDCap wiki

Cancellation Reason: dependent on purpose of ticket

***Risk Details tab***

*\*Note: Specific to Preapproved change; Planned and Emergency may differ.*

How many steps will the change require?

< 5 steps

How many times has the implementation team performed changes similar to this?

> 10 times

Are any other units involved in making this change or are there any related changes involving different activities?

No

What is the profile of the system undergoing this change or maintenance?

Multi-school / multi-dept

When will this change occur? (\*Peak dates include registration periods, start and end of the semester, parking permit sales, grant submission and deadlines, etc.)

Non-business hours on non-peak dates

Was this change tested on a test system?

Yes

How long will there be a service disruption?

< 5 minutes

Can this change potentially affect the availability, integrity and security of other IT systems?

No

Does this change reduce the security posture of the system, keeping in mind transmission, storage and access to category 1 or 2 data?

No

Is this change occurring during a scheduled maintenance window?

Yes

In the worst case scenario, how long would it take to back out of the change and

restore the affected systems to previous settings if the change is not successful?

< 1 hour

When all fields have been satisfied, click the link to send the ticket for approval.

 [Pending Approval - Change Approver](#)

**\*Notes:**

1. The Risk Level is determined by the system based on the information supplied.
  1. Risk Level 1-2: 24-hour advance notice required
  2. Risk Level 3: 5-days advance notice required
2. If changes/updates are required after the ticket has been submitted for approval, the Change Approver must “Deny” the ticket, returning it to the creator. Updates should be made and then saved. After saving, the ticket may be resubmitted for approval.
3. Team members will ensure Pre-approved Change Requests are submitted for approval by Wednesday for the Friday Maintenance Window.
  1. Changes NOT submitted/approved prior to Wednesday will be moved to the following week’s scheduled upgrades, unless a true emergency situation arises (critical patches, etc).
  2. In the instance the Pre-approved CR was not submitted/approved, but changes are required, the Pre-approved ticket will be cancelled and a new Emergency Change should be created.