





Standard Operating Procedure: REDCap Software Upgrade

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Department/System:	Digital Solutions – Data Management /REDCap

DOCUMENT HISTORY

Version Number:	Summary of Changes Made:	Effective Date
1	New Document	December 16, 2020
2	Revision- update Security patches 6.1.3	March 8, 2021

APPROVALS

Approver Name	Approver Signature	Date
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1. PURPOSE

- 1.1. To define the procedure used for upgrading the UBC Faculty of Medicine (FoM) REDCap application.



2. SCOPE

- 2.1. This procedure applies to the FoM Research Data Management (DM) Team and the Digital Solutions (DS) Team responsible for the upgrade of FoM Research REDCap software.
- 2.2. The FoM Research REDCap instance uses the long-term support (LTS) release, which is a major release supported with patches only (i.e. new features are not added) for an extended period of 6 months.
- 2.3. REDCap Consortium maintains an active development cycle, releasing patches and bug fixes according to a weekly cycle, which is minor release.
- 2.4. The FoM Research DM team performs REDCap software upgrades by applying patches as necessary.

3. RESPONSIBILITIES

- 3.1. FoM Research DM Team is responsible for overseeing the upgrade of the FoM Research REDCap application.
- 3.2. FoM Research DM Team is responsible for notifying active users through communication channels (email or banner post on the REDCap Home page).
- 3.3. FoM Research DM Team are responsible to submit a change Log in serviceNow for minor releases (includes bug/security fixes only).
- 3.4. FoM Research DM Team are responsible to submit for CAB (Change Approval Board) approval in serviceNow for major releases (includes new features).

4. RELATED SOPS/DOCUMENTS

- 4.1. UBC IT Change Management Process
- 4.2. FoM REDCap Core Features Checklist
- 4.3. FoM Research DM SOP 113 REDCap Validation

5. DEFINITIONS

- 5.1. **Research/Project Team:** Research/project assistants, nurses, data entry and other personnel involved with and granted access to the REDCap project. The Team members report to the QI/Project Lead but are generally directly supervised by the PA.



- 5.2. **FoM Research Data Management (DM) Team:** Team Lead, Scientific Analyst and other FoM DM individuals responsible for managing projects in REDCap and assisting Research/Project Teams in conducting research studies or projects.
- 5.3. **Digital Solutions (DS) Systems Team:** Team responsible for the configuration, operation and maintenance of the FoM servers and underlying platforms.
- 5.4. **REDCap Long Term Support (LTS) Branch:** Long Term Support is a major release by REDCap consortium and is supported with patches only (i.e. new features are not added) for an extended period of 6 months.
- 5.5. **Digital Solutions Change Approval Board (CAB):** A fixed group of managers to oversee and approve/deny changes on the software application.

6. PROCEDURE

- 6.1. FoM Research DM Team discuss with Associate Director, Research & Digital Technologies the upgrade plan whenever there is a new change in the REDCap Consortium Long Term Support (LTS) version, including minor patch updates of current LTS versions or newly released LTS branch.
 - 6.1.1. Development/Test Instance is used for initial testing of patches, software updates and other changes to the system. FoM Scientific Analyst completes the upgrade the development machine to check the functionality of the application.
 - 6.1.2. FoM Research DM Team along with DS Systems Team decides on date and time for the scheduled maintenance of the FoM Research REDCap application
 - 6.1.3. For Security patch updates, FoM Scientific Analyst submits a change Log in ServiceNow, which is auto-approved.
 - 6.1.3.1. Major security patches applied with in 72 hours.
 - 6.1.3.2. Medium/Minor security patches applied with in 30 days.
 - 6.1.4. Major LTS upgrades occur 6-8 weeks after a new LTS Branch is released by the REDCap consortium, to allow time for platform validation (see FoM Research DM SOP 113 REDCap Validation).
 - 6.1.4.1. FoM Scientific Analyst submits a change request (Type Standard) to UBC IT CAB in Service Now.
- 6.2. The FoM Research DM Team notifies active users through communication channels such as the REDCap Software Update page on the UBC MedNET Data Management space. A banner with relevant information is also posted to the REDCap Login page and emails are sent to users for Major LTS upgrades.



- 6.3. The FoM Research DM Team performs the upgrade action with DS Systems Team/UBC IT Database Administration on scheduled maintenance day. During the upgrade, the system is taken offline and a message with upgrade information is provided to users during this time-frame. The software is upgraded following REDCap Consortium Upgrade Guidelines.
- 6.4. Configuration and Core Functionality are tested after the upgrade to confirm that various functions of REDCap are working as expected (*See FoM Research REDCap Core Features Checklist*).
- 6.5. After the successful completion of the upgrade of the FoM Research REDCap, the FoM Research DM Team notifies all necessary team members and documents all results internally on the Data Management REDCap space.
- 6.6. After successful completion of the upgrade, the system is made available to users.

7. REFERENCES

- 7.1. UBC IT Change Management Procedure
<https://shareit.it.ubc.ca/itservicemanagement/change-management/Pages/default.aspx>
- 7.2. Network of Networks (N2) resources - Network of Networks (N2) Standard Operating Procedures, Version 8. Effective May 2019.
- 7.3. REDCap Software Installation & Technical Requirements -
<https://projectredcap.org/software/requirements/>