REDCap
Research Electronic Data Capture

Validation Test Script

20_Draft Mode

System Setup

REDCap Version	LTS 10.0.5	**Application URL**	https://redcaprsvc.app.vumc.org/
Browser Version	Chrome Version 89.0.4389.82	**OS Version**	Windows 10
Actual Execution Time	40 mins		
Instructions	Reference User Guide for Community User		

Test Summary

Feature Category Description: Data Integrity - *Ensures accuracy and consistency of the data collected in the REDCap database.*

Test Purpose Details: The purpose of this script is to verify that post production actions carried out in a database perform as specified in the Functional Specifications v9.1.3. document.

Functional Requirements:
- Draft Mode
    - 20.2, 20.8 The system shall allow production draft mode changes (Control Center) to be approved automatically under certain conditions. Options are specified as follows:
        - Never (always require an admin to approve changes)
        - Yes, if no existing fields were modified
        - Yes, if project has no records OR if has records and no existing fields were modified
        - Yes, if no critical issues exist
        - Yes, if project has no records OR if has records and no critical issues exist
    - 20.3 The system shall allow the option to add or modify events and arms on the Define My Events page for longitudinal projects while in production status by providing two options:
        - No, only Administrators can add/modify events in production
        - Yes, normal users can add/modify events in production
    - 20.4 - 20.5, 20.10, 20.15 The system shall require changes made to data collection instruments in production status projects to be made only by entering draft mode. Changes in draft mode are not implemented to the project instruments in real time.
    - 20.6, 20.8, 20.10 The system shall provide detailed summary of all drafted changes.
    - 20.6-20.7, 2.10-2.11 The system shall require administrators to review changes made in draft mode if any critical issues exist AND the project contains one or more records.
    - 20.8 The system shall provide the option to require administrators to review any changes made in draft mode
    - 20.9, 20.12-2.13 The system shall allow administrators to commit changes, reject changes, reset and delete the drafted changes.

- ○ 20.10 The system shall flag any changes that may negatively impact data with the following critical warnings:
  - ▪ Possible label mismatch
  - ▪ Possible data loss
  - ▪ Data WILL be lost
- ○ 20.14-20.15 & 20.18 The system shall record all versions of the data dictionary post-production with date time stamp, requestor and approver.
- ○ 20.16 The system shall allow for a confirmation email to be sent to the requestor which is templated but allows for additional information to be entered.
- ○ 20.19-20.21 The system shall provide the option to require administrators to review the addition or modification of events for longitudinal projects while in production

Test Requirements			
Test Users			
ID	User Name	Password	Minimum User's Rights	DAGs and Other Settings
1.	admin1005	Pswd_1103	Administrator	Pre-existing administrator user Tester should enter their own name and email as the administrator for this project (Control Center) to receive the notifications
2.	user1005_1	1005_1Pswd		User has project design, create record rights and delete record rights Tester should enter their own name and email in the user profile to receive notifications

Project Setup	
ID	Description	Instructions
1.	Project: 20_DraftMode_v1005	This project exists and was created from a copy of pre req 7 Note that project includes one record
2.	Project Setup:	Longitudinal model enabled with one arm, two events Two instruments assigned to the first event and only the second instrument assigned to the second event Removed 'required' function from field in Data Types instrument Move project to production status and KEEP all data
3.	Data Import File Name	NA

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4.	Other (Control Center)	1) TO DO list, check Enable email notifications and 2) General Config, Other System Settings, enter tester's email as Email address of admin

Test Steps

Step #	Action Step	Expected Result	Pass / Fail	Comments
Help	*You must perform the actions listed in this column.*	*After performing the actions in the 'Action Step' column, you should see the following.*	*Check 'Pass', if the actual results match the 'Expected Result'; otherwise, check 'Fail'.*	*Include unexpected results, suggestions. etc.*
1.	Log onto REDCap as admin1005 and click on project entitled: 20_DraftMode_v1005	User is able to log onto the REDCap site and into the project	☐ **Pass** **Fail** ☐	
2.	Click "Control Center" tab Click "User Settings" Confirm that the following options are available for "Allow production Draft Mode changes to be approved automatically under certain conditions?" ● Never ● Yes, if no existing fields were modified ● Yes, if project has no records OR if has records and no existing fields were modified ● Yes, if no critical issues exist ● Yes, if project has no records OR if it has records and no critical issues exist Confirm that the last option is selected	User navigates to control center successfully. Dropdown displays as described. Last option selected	☐ **Pass** **Fail** ☐	
3.	Confirm the following options are available for 'Allow normal users to add or modify events and arms on the Define My Events page for longitudinal projects while in production status?': ● 'No, only Administrators can add…'	Dropdown displays as described.	☐ **Pass** **Fail** ☐	

	● 'Yes, normal users can add…' Select the first option to restrict normal users Click button 'Save Changes'	First option selected Option saved		
4.	Log out as admin1005 Log in as user1005_1 **Note**: *Before going forward, make sure you have verified your profile settings….* Select project '20_DraftMode_v1005' Go to 'Online Designer' page Click on 'Text Validation' instrument Close out pop up	Pop up appears stating that modifications can only be done in Draft Mode by clicking the 'Enter Draft Mode' button near the top of the page	☐ **Pass** **Fail** ☐	
5.	Click 'Enter Draft Mode' button	Text appears describing user has successfully entered draft mode and that changes will not occur in real time	☐ **Pass** **Fail** ☐	
	Enter 'Text Validation' Form Delete the 'Name' field Add field 'First name' Add field 'Last name' Enter 'Data Types' Form Navigate to 'Radio Button Manual' field Change raw value associated with 'Choice99' to '1' Save change Review drafted changes at the top of the page	An account of all changes includes the following: - 1 record in project - 2 fields added - 1 field modified - 1 field deleted - 0 potentially critical issues A statement is displayed that changes will occur automatically Table appears listing the specifics of each field. New fields are highlighted in green. The altered field in yellow. The change in the multiple choice menu is determined to be acceptable as the options	☐ **Pass** **Fail** ☐	

		have no data. Current and updated values of the menu are displayed		
	'Return to previous page' 'Submit changes for review' Click 'Submit' on the pop up Close pop up	Changes were made automatically. 'Why were my changes made automatically' explains that there were either no records or the changes did not contain potential critical issues 'Enter Draft Mode' button is available.	<mark>☐ Pass</mark> **Fail ☐**	
	Log out as user 1005_1 Log in as admin1005 From 'User Settings' in the Control Center, change the option for allowing automatic draft mode changes to 'Never (always require…)' Save the change Log out Log in as user1005_1 Navigate to the 'Online Designer' page of project '20_DraftMode_1005' and enter draft mode Enter 'Text Validation' and add a text field: Field label = 'Patient Contact'; Variable name='contact' View the detailed summary of drafted changes Return to previous page and submit changes for review and on pop up	Option is changed and saved 1 project field is to be added No potentially critical issues are noted Text appears at the top of the 'Online Designer' page stating that drafted changes were submitted and are awaiting review and approval by a REDCap administrator An email is sent to you as admin instructing you to click the link below the text message	☐ Pass <mark>Fail ☐</mark>	Email was not sent However changes appeared in To do list

	Log out	to approve changes for '20_DraftMode_1005'		
9.	Log in as admin1005 Click the link in the email sent in Step 8 'Reject' the changes Reject changes Enter Control Center>User Settings and set the option for automated post production draft change approval to the last option 'Yes, if project has no records OR if has records and no critical issues exist' Save changes Log out	admin1005 is taken to the 'Projects Modification Module' page that details the drafted changes, and warnings. Page also contains the 'Administrator Actions' section where the admin can: - compose confirmation email - commit changes - reject changes - remove all drafted changes Pop up appears to confirm the decision to reject changes Changes are rejected and user is notified	☐ **Pass** **Fail ☐**	Changes were rejected however email was not sent to requested user
10	Log in as user1005_1 and navigate to project Create a record Enter first name, last name and email into the 'Text Validation' form Save and go to next form Select 'DDChoice1' for the 'Multiple Choice Dropdown Auto' field Select 'Choice1' for 'Radio Button Auto' Select 'Choice 99' for the 'Radio Button Manual' field Click 'Checkbox1' for the 'Checkbox' field Save and exit the form Navigate to 'Online Designer' Remove the rejected drafted changes created in Step 9			

| | Enter Draft Mode
Enter 'Text Validation' form

Change field label on 'Email' field to 'Primary Contact Email'
Save the change

Enter 'Data Types' form
Delete the 'Multiple Choice Dropdown Auto' field
Edit the 'Radio Button Manual' dropdown menu so 'Choice 99' has a raw value of' 99'
Save the change

Change the 'Choice1' label in the 'Radio Button Auto' field to read 'Choice 10'
Save the change

Change the 'Checkbox' field type to single answer radio button
Save the change

View detailed summary of drafted changes | Record status and an account of all drafted changes requested is detailed as follows:

- 2 records in project
- 4 fields are being modified
- 1 field is being deleted
A statement is displayed that an admin will have to review these changes

Four critical issues are noted:
 - 1 deleted field with data
- 3 potential critical issues in modified fields with data

Table details changes regarding the 4 fields being modified:
- The email field with altered field label is highlighted in yellow without any warning.
 - Radio button auto field change is highlighted with 'dat might be lost...' warning
- Radio button manual field change is highlighted with 'data MIGHT be lost…' warning | <mark>☐ **Pass**</mark>

Fail ☐ | |

		- Checkbox field change is highlighted with 'possible data loss...' warning		
11	'Return to previous page' and 'submit changes for review' Submit the changes Log out	Pop up appears as described in Step 7. Instructional text describing that the changes are awaiting review appears. 'Why weren't my changes made automatically' describes the need for review due to the project having at least one record and changes contain potential critical issues An 'Approve Project Changes' email is sent to you as the administrator designated with rights to approve project changes	☐ **Pass** **Fail** ☐	Email was not send,
12	Log in as admin1005 Access 'Projects Modification Module' in '20_DraftMode_1005' from the 'My Projects' page Select option to remove all drafted changes Remove all drafted changes Log out as admin1005	Pop up appears to confirm action stating all drafted changes will be deleted Changes are removed and user is notified	☐ **Pass** **Fail** ☐	
13	Log in as user1005_1 Navigate to 'Online Designer' page in '20_DraftMode_1005' project Create a record Enter 'Text Validation' form and enter a first name, last name and email Save and go to next form Select 'Choice99' in 'Radio Button Manual' field Save and exit form	Drafted changes have been deleted and system returned to 'Enter Draft Mode' stage	☐ **Pass** **Fail** ☐	

14	Click 'Project Home' Click 'Project Revision History' tab Note date and time of most recent data dictionary Download the current data dictionary Change raw value of 'Choice99' for 'Radio Button Manual' field to '99' Save the change Click 'Data Dictionary' button on 'Project Setup' page	'Enter Draft Mode' button is at top of page and note at bottom of page explains that before you can upload a new data dictionary you must be in draft mode	☐ **Pass** **Fail** ☐	
15.	Enter draft mode Upload revised data dictionary prepared in Step 14 Commit changes	Data Dictionary page describes that the changes were made successfully but that since the project is in Draft Mode changes still must be submitted for review At the top of the page user can either remove drafted changes, view details of the changes and submit the changes for review	☐ **Pass** **Fail** ☐	
16	Submit changes for review Click 'Submit' on confirmation pop up Log out Log in as admin1005 Navigate to the 'Project Modification Module' either through the link in the notification issued via email or from the 'Online Designer' page Click 'Compose confirmation email' and edit text to reflect that the change 'WILL delete existing data…' Send email	admin1005 navigates to 'Project Modification Module' Change to be committed is listed with warning that 'Data might be lost…' Email is sent and received by user	☐ **Pass** **Fail** ☐	Email seemed to have send as per confirmation window but email not delivered
17	Select 'Commit changes' Select 'Commit changes' on pop up Log out	Pop up appears confirming this is the action desired and stating that the changes will be permanent Changes are committed and user is notified	☐ **Pass** **Fail** ☐	

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18	Log in as user1005_1 Navigate to the 'Project Revision History' tab	The list of data dictionary versions has been updated and now includes the newest revision indicated as 'current' with the date and time it was implemented, as well as the person who requested the change(s) and the one who approved the request	☐ **Pass** **Fail** ☐	
19	Navigate to the 'Define my Events' page Log out	A note is present stating that only a REDCap administrator can modify an event in production	☐ **Pass** **Fail** ☐	
20	Log in as admin1005 Navigate to 'Define My Events' for project 20 Change 'Event 2' to read 'Event B' Save the change Assign 'Text Validation' form to 'Event B' Save change Log out	Warning text at top cautions that deleting any events on the page below will result in daa loss and to proceed with caution Changes made	☐ **Pass** **Fail** ☐	
21	Log in as user1005_1 Review events and form designations	Project now shows second event named 'Event B' and both forms are now assigned to that event	☐ **Pass** **Fail** ☐	
	THIS ENDS THE TESTING FOR THIS SCRIPT			

Conclusion		
Did the Actual Results for each test step match the Expected Results listed?	Yes	<mark>No</mark>

Comments/Additional Information: (Indicate the step number of the step you wish to comment on.)
System did not send any email to the user or admin however other expected system control worked as expected.

Completed By	Nidhi Jethoo	Date:	2021-03-13