NCI Connect Cohort Link - v1.0.0

This external module facilitates the link between REDCap project and NCI Connect API system for token/pin generation for the participant(s) and also supports other functional data exchanges.

The current active functionality:

- Participant token/PIN Generation through NCI Connect API
  - Batch Mode with Visual Interface
  - Ad-hoc Mode - On specific instrument for a record create or modified (Using Data Entry Trigger method configuration)
  - REST API Call – to support cron job or autosys job setup

System Level External Module Configuration:

Since it is project level external module, all system level configuration are optional and managed by REDCap admin.

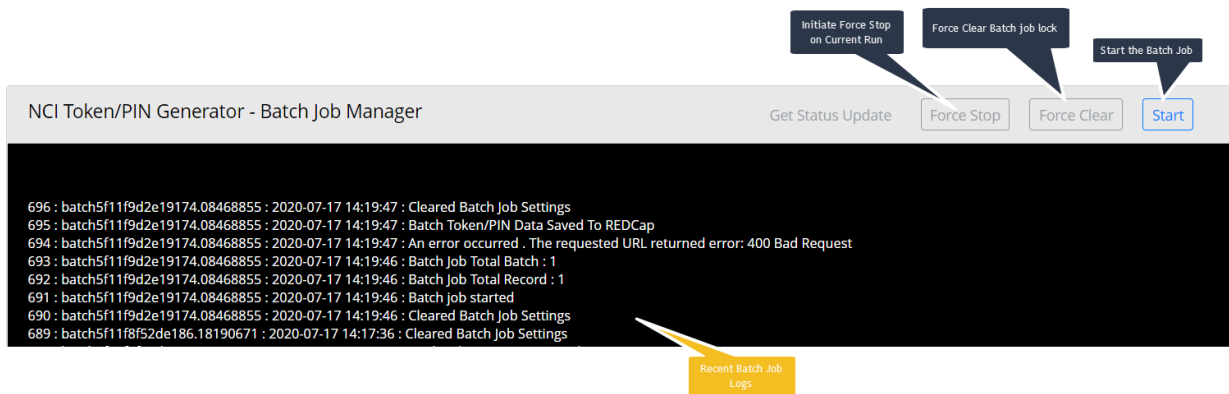**Project Level External Module Configuration:**

For Super User Only:

To identify NCI Connect Server Environment to Connect and Easily Change between DEVELOPMENT and PRODUCTION	
Enter the API key received from NCI Team on specific environment. This will change either DEV-NCIAPIKEY or PROD-NCIAPIKEY based on NCI connect server environment selection	
Enter the API endpoint. This will change either DEV-NCIConnect server or PROD-NCIConnect server based on NCI connect server environment selection	
This help to setup cron job or autosys job with secure REST call service.	

For Project Design User Level:

For general token/PIN generation setting
Input param: select study id field from project data field list.
Output param (values received from NCI) :
    a. NCI token storage data field
    b. NCI PIN storage data field
 	
The record filter logic: to select participant population based on condition. It is similar to branching logic or report builder filter logic
The Batch size: to help to run token/pin generation on larger population on batch. NCI Connect API allows upto 1000 records per request
	The studyId field for generating token and pin:
	* must provide value [study_id - study_id ▼]
	
	Where to store generated NCI token?:
	* must provide value [nci_token - nci_token ▼]
	
	where to store generated NCI PIN? :
	* must provide value [nci_pin - nci_pin ▼]
	
	Enter the record filter logic (similiar to report advanced filter logic) which used to select studyids eligible to send API request:
	* must provide value [([nci_token] = "" OR [nci_pin] = "")]
	
	Enter the batch size - number of records send part of each API request. Maximum value is : 1000:
	* must provide value [1]

For Ad-hoc token/PIN generation This will use all general input param & outparam data field configuration for API exchange except record filter logic and batch size (as it single record at a time). **Select list of instrument for Data Entry Trigger:** This allowed to add trigger point to run token/pin generation on current record when instrument open. **The Record Filter Logic:** This will validate the provided rule on current record before starting token/pin generation process.	1.1. Select the instrument to trigger Token and PIN generation on current record when created or updated: [my_first_instrument ▼] [+] Enter the record filter logic (similiar to report advanced filter logic) which used to select studyid eligible to send API request when the record created or updated - DET Trigger: * must provide value [([nci_token] = "" OR [nci_pin] = "")]
This will help to send email notification to configured email address if any network or programming issue part of data exchange through NCI API.	Enter the from email address for batch job error notification: * must provide value [Vijayakumar.x.thirumalai@healthpartner] 1. Click the '+' button to add more email address for batch job error notification: [+] 1. Enter email address for batch job error notification: [Vijayakumar.x.thirumalai@healthpartner]

Batch Job Manager Interface:

REST API call to start initiate token/PIN generation batch job and Data Entry Trigger Service URL:

NCI Connect Cohort Link API Manager - REST Services Base URL: http://{YOURREDCapServer}/redcap/api/?type=module&prefix=nci_connect_cohort _link&page=apimanager&pid={PROJECTID}&NOAUTH

1. Token and PIN Generation Batch Job Initiation: GET params: **action = start_batch** and **passcode=[Your REST Call Secret]**

example : http://localhost/redcap/api/?type=module&prefix=nci_connect_cohort_link&page= apimanager&pid=16&NOAUTH&action=start_batch&passcode=123456789

2. DET Service URL: GET params: **action = DET** and **passcode=[Your REST Call Secret]**

example : http://localhost/redcap/api/?type=module&prefix=nci_connect_cohort_link&page= apimanager&pid=16&NOAUTH&action=DET&passcode=123456789