Pukka-j

Nexus Release Notes

Version 3.05.00

Pukka-j Limited

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Release Date: July 22, 2024

1   Introduction

This release introduces some new features for main the Nexus application and has extended the functionality of some features from the previous release.

2   New Features

There are some new Nexus nodes and better Nexus configuration access control in this release's new features.

2.1   Workflow CSV Submission Over HTTP(s)

The HTTP service has been updated to allow a CSV submission for the workflow service to be uploaded via a third part via http. The service relies on external authentication using JWT.

2.2   PACS Import Service

A new secondary service has been created which will import patient history and retrieve DICOM data based upon an external database update. This service connects to a Pukka-j schema database to monitor changes to the patient level to identify jobs to import a patient history using the patient ID. The service will, through a Nexus proxy, query multiple PACSs to create a complete DICOM record of studies and series that are online for the patient ID. The patient record is added to the patient, study and series level of the database using the regular Pukka-j schema. A second part of the service will monitor the study and series level entries for changes to flags to indicate that those items need to be retrieved and will create jobs to import that data via CMOVE requests to a destination AET.

2.3   Manual Data Purging

The purge service has been updated to allow manual purge requests for patient or exam data. The purge requests options have been added to the reporting dashboard.

3 Improvements

3.1 Reporting Dashboard

The reporting dashboard has been updated to include it's own view on the reporting list, with management options like creating purge jobs and to add notes to the order and to assign the order to a clinical group. The views for the reporting locks and the report message log have been updated to use a table view instead of the list which means the data is now sortable and also the text is selectable for easy export. The query tool has also been generalised to normalise the look and feel. The same tools have been used to provide a new view to display the purge jobs and to allow the status of the jobs to be changed in the UI. The configuration page on the reporting dashboard has had the clinical groups management added to allow new groups to be created and modified and users to be added to the groups via their username. The services were updated to handle the new user requests for the clinical group management.

3.2 Order Management

Some default HL7 mappings for private segments/fields have been added to allow the Order-Management database table to be auto-populated via HL7 messages. The mapping uses a custom "ZOM" segment ID. The fields map via the indexes:

contract code	1
service type	2
urgency	3
intended clinical group	4
alert	5
flags	6

For example, an order can be assigned to a clinical group automatically by setting the ZOM segment field index 4 to the clinical group ID using the HL7 pointer ZOM.0.4=6, where 6 is the ID of the group to which it is being added. This can be done using the integration engine node in a Nexus pipeline.

3.3 Database Timestamps

Added changes to allow database columns that are timestamps to be queried in the UI.

3.4 General UI

Changes have been made to tidy up the UI components in places.

4 Bug Fixes

4.1 Configuration Parsing Error

Issue: It was possible that a pipeline could be incomplete if square brackets were used as part of the configuration. This was from an earlier change to remove html encodings from the configuration to prevent things like spaces appearing as %20.
Resolution: The order in which encodings are converted on the server has been changed to prevent the configuration parsing from terminating early.

4.2 Tooltip

Issue: After improving the UI resolution by taking into account the monitor zoom factor, the tool tip display could leave behind some redraw effects when the display was zoomed by the system rather than the application.
Resolution: The display redraw was updated to take account of the system zoom.

4.3 Anonymisation Record Search

Issue: The search for anonymisation records was failing.
Resolution: There was a malformed URL in the request which has been updated.

4.4 Reporting Cursor

Issue: A key listener had been added to rotate the referral docs when the left or right arrow keys were pressed but this was preventing those keys from moving the cursor on the reporting panel.
Resolution: The listener was removed as the rotate icons will handle the rotation without the key press options.

4.5 Large PDFs

Issue: For some larger PDFs viewed in the referral document viewer in the reporting tool, the PDF would fail to display when selected.
Resolution: The PDF call has been switch to use a file URL rather than the raw bytes as the source which means the display loads quicker and resolves this issue.

5 Known Issues

There are no known issues.

6 Installation Instructions

Before making any changes, the **docs** and **lib** folders in the install directory should be backed up along with the **nexus.jar** in the install root.

The libraries required for this release are:
  nexus.jar   3.05.00
  pjk.jar   1.19.20
  pacsology.jar 1.24.00
  mint.jar   1.27.00

Plugin library versions are:
  anon.jar   1.12.05
  broker.jar 1.12.03
  redact.jar 1.11.03

For Origin users:
  websocket.jar   1.12.02

An update MySQL library is potentially required depending upon the MySQL service.

The UI is updated via the files:
cloe.js.gz
pj.css