Pacific Northwest
NATIONAL LABORATORY

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Watchmen 3.1.0 Release Notes

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1 Changes since version 3.0.0

1.1 New Features

- The sample that is currently being viewed is now highlighted in the search filmstrip
- Added a moving range chart to the Ad Hoc Query Tool
- Added a dropdown on sample pages to switch to a custom calibration. The ROIs, Indicators, Isotopes, Trend Panel, and Calibration Panel update when switching to a custom calibration.
- Restore the World page that displays where stations are located (set via the Stations' page) around the world along with approximate locations of nuclear and medical facilities that may emit radiation.
- The thumbnail of the measurement being viewed is highlighted

1.2 Changes

- Performance Monitoring tools improvements, to include:
    - Toggle-able Cs-137 decay correction
    - Weekly averages
    - Performance report will be rendered using the data set, as seen on the view (e.g. if viewing with decay correction, plots on report will be decay corrected)
    - Analyst can set the expected target channels for beta and gamma intercepts (else will use expected defaults)
- Custom calibrations improvements, to include:
    - Clone original calibration
    - View all attributes of calibration
    - Improved labeling and panel layout
- Station/detector trend results on a per calibration basis
    - While on the station's page, if multiple have custom calibrations with the same name, they'll be included in a single plot when selected from drop down list.
- Modernized the code for sample pages. Improved the interface with new buttons and tabs and improved alignment and spacing. Data queries across the page now only run once rather than multiple times. For example, the query only runs once to load the data when switching between normal and history in the 'All Spectra' panel. This results in much faster switching between charts.

1.3 Fixes

- Fixed the CSV export for the Ad Hoc Query Tool
- Fixed issue where multiple scrollbars could appear on sample pages

1.4 Known Issues

- User must trigger re-calculation of measurements for previous data to take advantage of the performance monitoring features for already analyzed measurements
- Calibration valid start and stop dates are displayed in local time, not UTC
- Automatic Radionuclide Report (ARR) and Reviewed Radionuclide Report (RRR) using the current IMS formats and protocols cannot be parsed
- Xecon Report will return a report with default values
- ARR and RRR views are not currently accessible
- Search does not automatically scroll thumbnails to the measurement being viewed
- The Collection Start trend graph on the Sample page may display data from January 1, 1970. This may be caused by the presence of a sample taken during detector setup which has a collection time of zero because no collection was taken. (See Figure 1.)

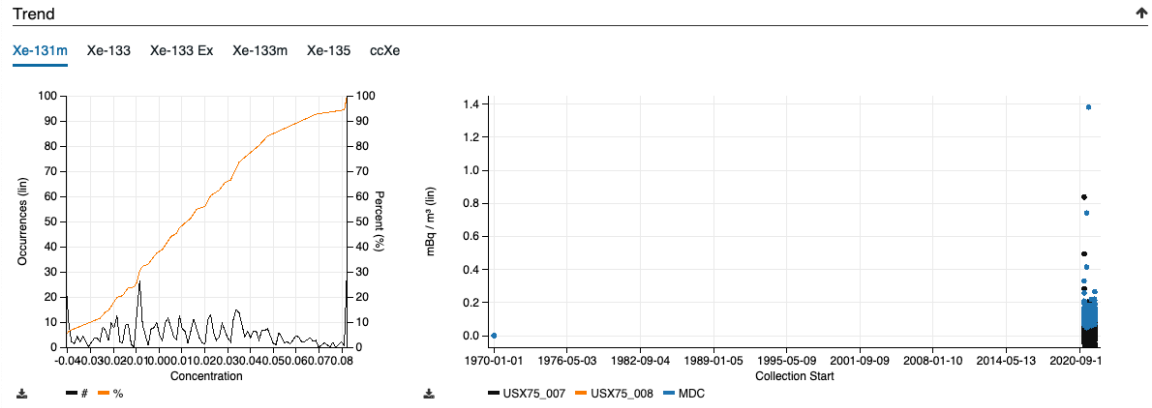


Figure 1: Trend chart displaying collection start time of January 1, 1970

1.5 Removed

- Removed the RN Data Quality tool as it has been replaced by the Ad Hoc Query Tool

2 Upgrade

There are three parts to this upgrade, these upgrades need to be performed in order, without skipping any steps, or erroneous behavior may result.

2.1 Database Upgrade

Perform the database upgrade, connecting with the SQL client of choice and run the following scripts.

Note: The script does not specify the Schema Name, so ensure you connect appropriately to avoid altering the wrong schema.

- SQLUpgrade3.1.0.sql

Note: If you have already run the above scripts, there is no need to run them again.

To clean up the database we've created a standalone jar that can be run from the command line. This will consolidate the calibration tables that are repeated from previous versions that didn't check if a calibration was part of a sample file.
Create a folder and place the files "purge_sql-1.0-SNAPSHOT.jar", "context.xml" and "copyCalibrationTables.sql" in there (they must all be co-located). In the "context.xml" file, set the appropriate URL, username and password for the target database.
To run:

```
java -Xms4g –Xmx20g –jar purge_sql-1.0-SNAPSHOT.jar
```

Then with the SQL client run the cleanUpCalibrationTables.sql.

Once satisfied the calibration tables have been cleaned you can drop any table with _old and _orig.

Note: The –Xmx20g should be replaced with how much ram you are willing to use.

Note: it's recommended to run each section in the cleanUpCalibrationTables.sql individually to minimize errors that could occur.

2.2 Executable Upgrade

The upgrade is completed by deploying the new WAR files and updating the Analysis Tools executable.

2.2.1 Stop the old mothman.war and webviewer2.war

Using the Tomcat Manager app, stop the existing mothman and webviewer2 applications.

For more instructions on how to do this, consult the Installing section of the System Administrators Guide.

2.2.2 Update the Analysis Tools

Once the AnalysisTools zip file has been placed into deployment system's filesystem, unpack and overwrite the existing AnalysisTools installation including the "plugins" folder:

```
`unzip /path/to/file.zip -d /path/to/analysis/tools/installation/dir`
```

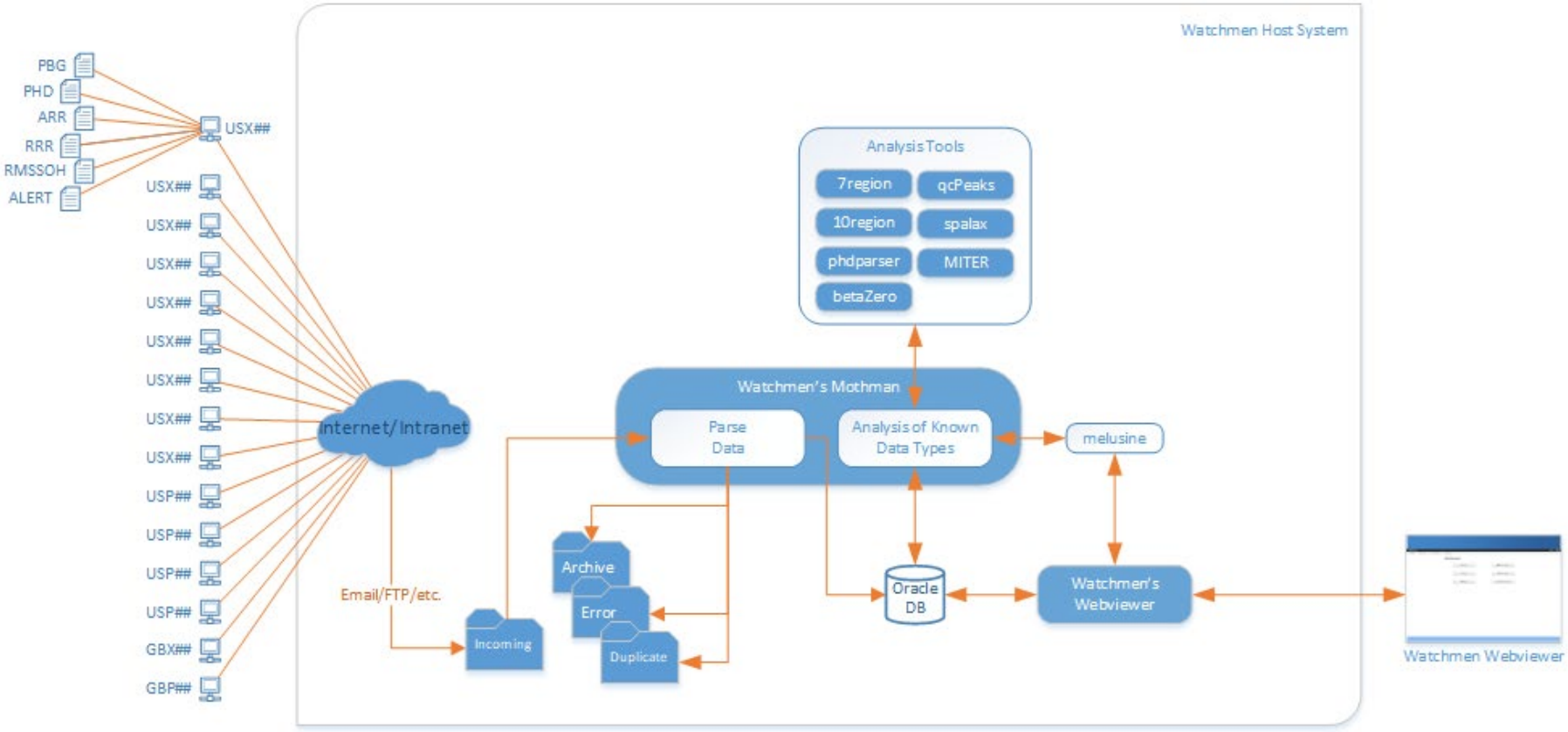
or

```
`tar -zvxf /path/to/file.tar.gz -d /path/to/analysis/tools/installation/dir`
```

2.2.3 Uploading the new mothman.war and webviewer2.war

Using the Tomcat manager or copying via the filesystem, upload the new mothman.war and webviewer2.war
For more instructions on how to do this, consult the Installing section of the System Administrators Guide.

3 Block Diagram



4 Other Information

4.1 System Requirements

Web Browser: Chrome or Firefox

Host Server:

RedHat Enterprise Linux 7+ or CENTOS 7+ 64bit

Java 8+ (note: Java 8 is not compatible with Apache Tomcat versions prior to 7.0.58)

Apache Tomcat 7/8/9

Oracle 11+ Database

5 Other Contributors Acknowledgement

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