Pacific Northwest
NATIONAL LABORATORY

PNNL-33559

Watchmen 3.2.0 Release Notes

October 2022

DT Keller
RE Wilson
JB Chapman
MF Mayer
CJ McCall
CT Smith
MW Cooper

U.S. DEPARTMENT OF ENERGY

Prepared for the U.S. Department of Energy
under Contract DE-AC05-76RL01830

DISCLAIMER

PACIFIC NORTHWEST NATIONAL LABORATORY
operated by
BATTELLE
for the
UNITED STATES DEPARTMENT OF ENERGY
under Contract DE-AC05-76RL01830

Printed in the United States of America

Available to DOE and DOE contractors from
the Office of Scientific and Technical Information,
P.O. Box 62, Oak Ridge, TN 37831-0062
www.osti.gov
ph: (865) 576-8401
fox: (865) 576-5728
email: reports@osti.gov

Available to the public from the National Technical Information Service
5301 Shawnee Rd., Alexandria, VA 22312
ph: (800) 553-NTIS (6847)
or (703) 605-6000
email: info@ntis.gov
Online ordering: http://www.ntis.gov

1 Changes since version 3.1.0

1.1 New Features

- Added a new Live page that shows the 10 latest measurements that have come in. Information on system status is shown for each measurement including the indicators and thumbnail of the gamma-coincident spectrum.
- Added the ability to set a station as inactive. Inactive stations will not appear in the station list unless the Inactive Stations button is toggled. The user can also switch between active stations and all stations on the Station Health page. The user can also choose to only show measurements from active stations on the Live page.
- Added button to download the PHD file for a measurement.
- Added a new Tags page for creating tags. These tags can be assigned to measurements or stations. Measurements can be filtered on the Search page based on tags. Added the ability to assign a tag to all measurements from detectors within a certain date range.
- Added the ability to trigger recalculations from the Station and Station Detector pages. A recalculation preview shows how many measurements would be included and provides an estimate for how long the recalculations will take, including other measurements already queued for recalculation. Progress recalculating measurements is displayed on these pages.
- Added the ability to transpose the Beta Gamma heatmap and the option to recalculate the measurement after the transpose is complete.
- Added the ability to trigger reparsing of measurements from the Sample and Station pages. Progress reparsing measurements is displayed on these pages. Once a measurement has been reparsed, it is then automatically queued to be recalculated. On the Station page, a reparse preview shows how many measurements would be included and provides an estimate for how long the reparsing and recalculation will take, including other measurements already queued for recalculation.
- Measurement logs are updated when a measurement is recalculated, reparsed, or its Beta Gamma heatmap is transposed.

1.2 Changes

- Filter the date range to show samples from the same week when clicking a point on a trend chart. The measurement tile for the selected sample is shown among the first on the search filmstrip.
- Rebuilt the indicator quality analysis visualization tool on the Station page. The new tool supports calibration selection and has new zoom and pan capabilities.

- Rebuilt the station performance overview visualization tool. The tool has new zoom and pan capabilities.
- Rebuilt the indicator configuration page to make understanding and editing indicator configurations more intuitive.
- Improved buttons, spinners, and modal dialogs across the site to be consistent.
- Made the station link bigger and added a detector link on the Sample page.
- Refreshing the status indicators, isotopes value table, and charts on the Sample page after recalculation. Updated the Recalculate button to indicate when recalculation completes.
- Samples Report enhancements. Added sigma character to column titles. Sorting the table by the calibration start date. Added the station code and date range to the report title. Added the ability to filter the report by calibration.
- Added the Acquisition Stop date to measurement tile popovers on the Search page.
- Updated the Search page so measurements and their preliminary measurements are sorted by their Acquisition Stop dates.
- Using the default date format for dates in the measurement tile popovers and on the Live page.
- Storing the location of a measurement's archived source file in the database when the file measurement is loaded.

1.3 Fixes

- Fixed the back button not working on the search and reassign pages to return to the previous page.
- Fixed the back button not going to the previous pages in the correct sequence on the search page.
- Updated Ad Hoc Query Tool to filter out erroneous values such as infinity. These values previously caused an error.
- Fixed Samples Report dates to be UTC.
- Fixed page titles in browser tabs becoming undefined when scrolling the Station or Station Detector pages.
- Fixed getting the list of detectors for a station.
- Fixed color-coding in the isotopes value table on the Sample page.

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
- Automatic Radionuclide Report (ARR) and Reviewed Radionuclide Report (RRR) using the current IMS formats and protocols cannot be parsed
- ARR and RRR views are not currently accessible
- Xecon Report will return a report with default values
- 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.)

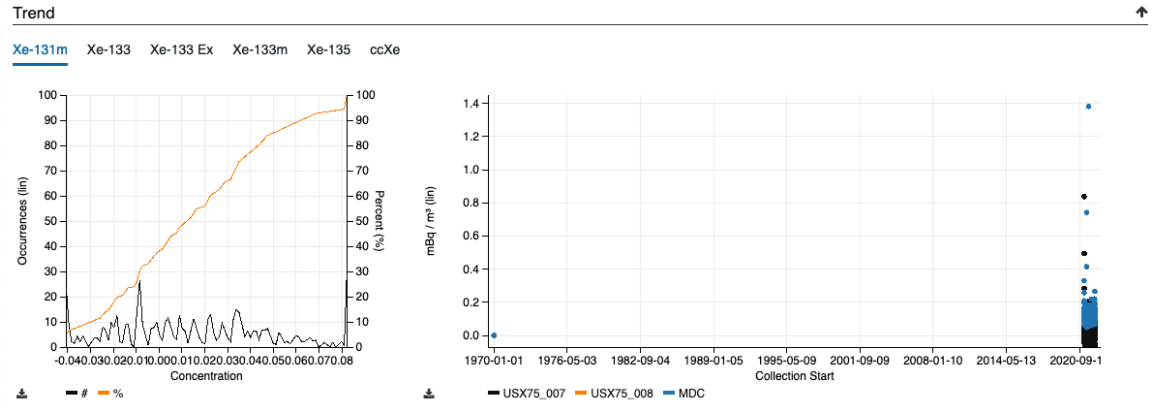


Figure 1: Trend chart displaying collection start time of January 1, 1970

1.5 Removed

- Isotope Analyzer needs to be reworked due to drastic changes necessary during the last few releases.

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.

- SQLUpgrade3.2.0.sql

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

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`
```

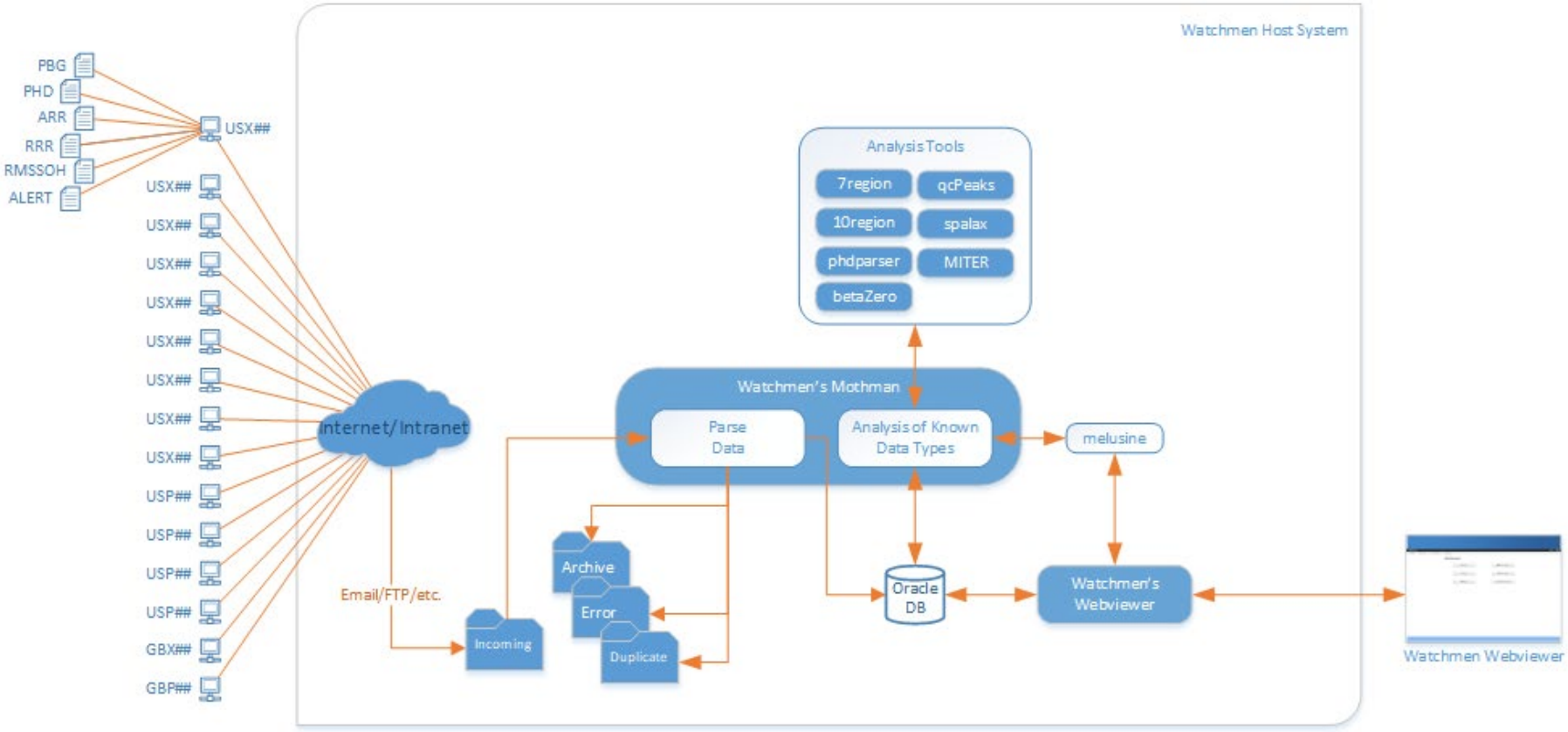
or

```
`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

Pacific Northwest National Laboratory

902 Battelle Boulevard
P.O. Box 999
Richland, WA 99354
1-888-375-PNNL (7665)

www.pnnl.gov