Testing AQS Node Submissions
Updated July 17, 2007

What you will need

1. Test data. Presumably you will want this in XML v2.0 format. Also, to keep things as simple as possible, we strongly recommend that you initially test with inserting raw data (measured values) only <u>and</u> limit the number of measured values to two or three hundred at most. Note that the AQS Extract Raw Data report lets you pull your existing data from AQS in XML v2.0 format. This report can be run using the standard reports screens.
2. An AQS User ID and password[1].
3. A CDX Test Node account associated with the AQS User ID.

Background

Getting data into AQS is a process with 5 steps.
1. Transfer your data file to EPA
2. Load the data into AQS. If there are no errors, skip to step 4.
3. If there are errors:
    a. Review and correct the data and return to step 2, <u>or</u>
    b. Delete the data and return to step 1
4. Run and view reports about the impact of the newly submitted data on the data already in AQS.
5. Post the data to the database.

Making a node submission <u>only replaces step #1</u>. The rest of the steps must be done from within the AQS application by a registered user[1].

In the future (currently scheduled for mid 2008) steps 2, 4, and 5 will be happen automatically with a node submission. If the submitted file contains errors, step 3 will always be a manual process.

Testing Process

This is a detailed description of how to do steps 1 and 2 above. Performing step 1 will demonstrate that you can make a successful node submission and pass schema validation. Performing step 2 will demonstrate that the submitted XML file can be read by AQS (which has data structure business rules beyond what schema validation can check for). It is possible to make a successful node submission with a file that AQS cannot read, so performing step 2 is critical to ensure full testing.

1. Submit the test data file from your (test) node to the EPA CDX <u>test</u> node.
    a. Details of the message construction are in the AQS Flow Configuration Document (FCD) located on the EN website: http://www.exchangenetwork.net/exchanges/air/aqs.htm
    b. If you have any questions or issues related to node submissions, please call the node helpdesk at 888-890-1995 option 2.
2. Find your local AQS user and ask them to log onto the AQSQA database and load the data file that was just transferred. Below are detailed, step-by-step instructions.
    a. Open the AQS application at: https://iasint.rtpnc.epa.gov/forms/frmservlet?config=aqs&form=A000.fmx.
    b. Log on with your AQS user ID, AQS password (as of July 12, 2007), and a database of "AQSQA". If you don't remember your password or it has expired, call the AQS helpdesk at 866-411-4372. Be sure to tell them you need your <u>AQSQA</u> password reset.
    c. On the welcome screen, select "Screening Group Access".
    d. From the pop-up window, select the screening group that 'owns' the data that was submitted.
    e. On the top menu, select "Batch". You should see a screen like the one below:

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[1] Only State, local, and tribal agency employees are permitted to get an AQS account. This policy specifically excludes contractors and consultants; you must work with the regular AQS user in your client agency to test the process beyond node submissions. All data, User IDs, and passwords were copied from the AQSPROD (Production) database to the AQSQA (Test) database on April 08, 2007.
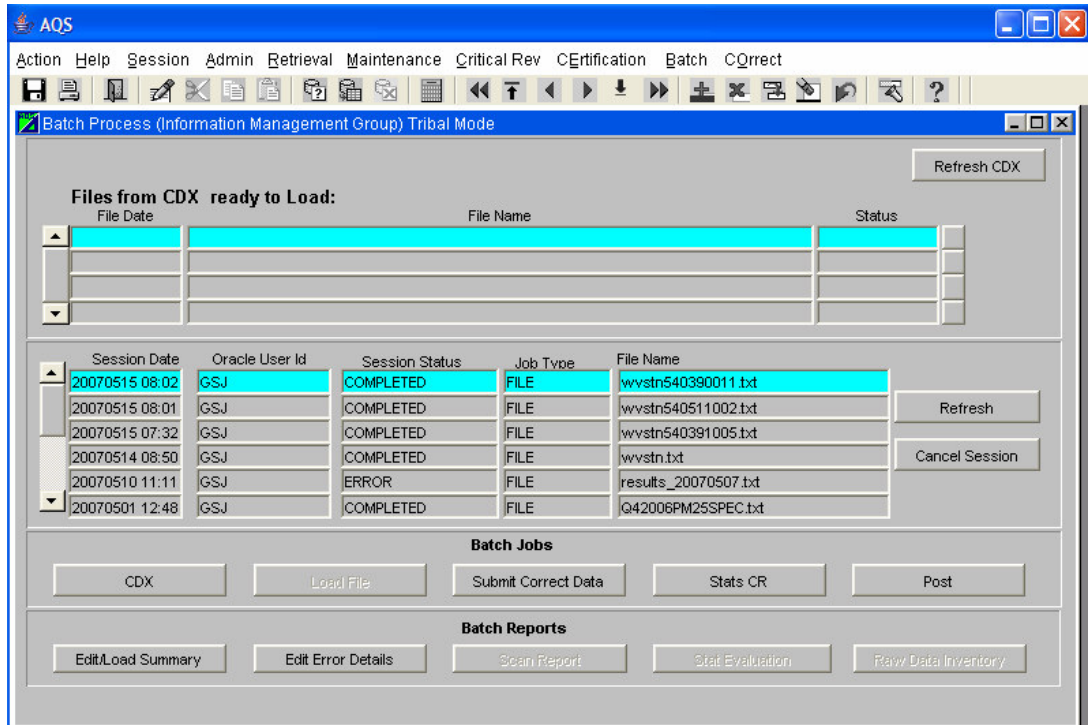
You will notice a row of 5 buttons near the bottom of the screen that correspond to the 5 steps of processing AQS Data. The first button will open a CDX Web window.

    f.   If the file you transferred via the node does not appear on the upper list, periodically press the "Refresh CDX" button until it does (large files can take 5-10 minutes to arrive from CDX).

    g.   Highlight the file on the upper list by clicking the name (so the line is light blue – it should default to this condition).

    h.   Click the "Load File" button at bottom of the screen. The file will be moved from the upper list to the top of the lower list with a Session Status of ACTIVE. You can click on the "Refresh" button on the right to update the Session Status. It will change to ERROR or COMPLETED.

    i.   If you get a status of COMPLETED, the file had no errors (XML or data quality) congratulations!

3.   If you get status of ERROR, wait for the job log email to be sent to the email address of record for the user (the "Edit Load Summary" and "Edit Error Details" reports will not return results in the test environment – contact the person listed below if you need these reports).

    a.   If you get an email that lists no specific data records in error, this means that AQS was not able to successfully open and read your file, and there was probably an XML formatting error.

    b.   If you do get a count or list of data records in error, this probably means that the XML was read correctly and there were data quality issues, which are explained. (Note the email will only list the first 50 or so errors). This may also mean that required XML elements were missing or superfluous ones were included or a format allowed by the schema is not allowed by AQS (since shared elements are re-used, sometimes AQS actually has a stricter limit on a format than the schema). Be aware that the error list will refer to data elements by the target system record and field names as listed in columns G and H of the DET spreadsheet and not by the XML tag names.

Note: If you get errors in the data, the data will remain in the AQS "staging" space and conflict with new incoming data for the same monitors and times. You can either try again with different data or clean out the data in the staging space. Cleaning out the staging space can be a complex process depending on the errors in the file and is beyond the scope of this document.

If you have you have questions or issues related to AQS usage or data, you may call the EPA main helpdesk at 866-411-4372 and tell them you have an AQS issue. (Please note that the test environment does not have the same schedule as AQS and may not always be available.)

For general questions, or additional help, the AQS flow contact is Nick Mangus: mangus.nick@epa.gov