

Testing AQS Node Submissions

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What you will need

1. Test data. Preferably with schema version 3.0. Also, to keep things as simple as possible, we strongly recommend that you initially test with inserting raw data (measured values) only and limit the number of measured values to two or three hundred at most. If you want to test monitor metadata or quality assurance transactions, we recommend you put those in files by themselves. Note that the AQS Extract Raw Data reports let you get your existing data from AQS in XML v3.0 format. This report can be run using the standard reports screens.
2. An AQS User ID, password, and screening group (agency) for the "AQSQA" database.
3. A CDX Test Node account associated with the AQS User ID.

Overview

We suggest you follow these steps to test XML data submissions.

1. Transfer your data file to EPA
2. Load* the data into AQS.
3. If there are errors, Delete the data from AQS**, adjust your XML file based on the error report, and return to step 1.

*The header (and ENSC interface) allows you to select the final processing step. If you can LOAD data, it meets all of the format and content requirements for AQS processing. The POST option completes additional relationship and quality assurance checks that are not part of the XML format but the data contents. STAGE will perform (essentially) only schema validation checks. We suggest you set the stop on error to no.

**This must be done from within the AQS application by a registered user.

Testing Process

This is a detailed description of how to do steps 1 and 2 above. Performing steps 1 and 2 below will demonstrate that you can make a successful node submission and pass schema validation. Performing step 3 below 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 3 is critical to ensure full testing.

1. Validate the XML file that you plan to submit; you can use a product like XML-Spy or the Exchange Network validation tool at <http://tools.epacdxnode.net/> for this purpose.
2. Submit the test data file. Select Load (recommended, see * note above – if in doubt, coordinate with the AQS user who owns/regularly submits the data) or Post as the final processing step.
 - a. Either from your (test) node to the EPA CDX test node.
 - i. 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. Or, you can also use the Test ENSC at <https://enservicetest.epacdxnode.net/login.aspx> and select the AQS flow, the AQS *Submit* Service to the *NGNTest2.0* (not Dev) node.
 - c. If you have any questions or issues related to node submissions, please call the node helpdesk at 888-890-1995 option 2.
3. Wait for, or retrieve, your submission status and feedback reports. They will be emailed to the address we have on file for the submitter. You can add additional emails to get copied on this information in the header.
 - a. If you are able to LOAD the data, you know the instance document is valid, it could be parsed by AQS, and correctly cross-references with other AQS data. If you are able to POST the data, you know it passes AQS quality assurance (business rule) checks as well.
 - b. If you get errors on LOAD, the "Edit Load Summary" will provide the counts of the data transactions successfully processed and the counts of transactions in error (AQS translates XML to our native transaction types during the load). The "Edit Error Details" reports will display any elements with errors and the error messages.

- i. 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 business keys (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 – get help from your AQS user contact (who owns / regularly submits the data).

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 testing contact is Way Poteat: poteat.way@epa.gov.