

AQS Submit Automation Tutorial

Presented by the EPA AQS Team

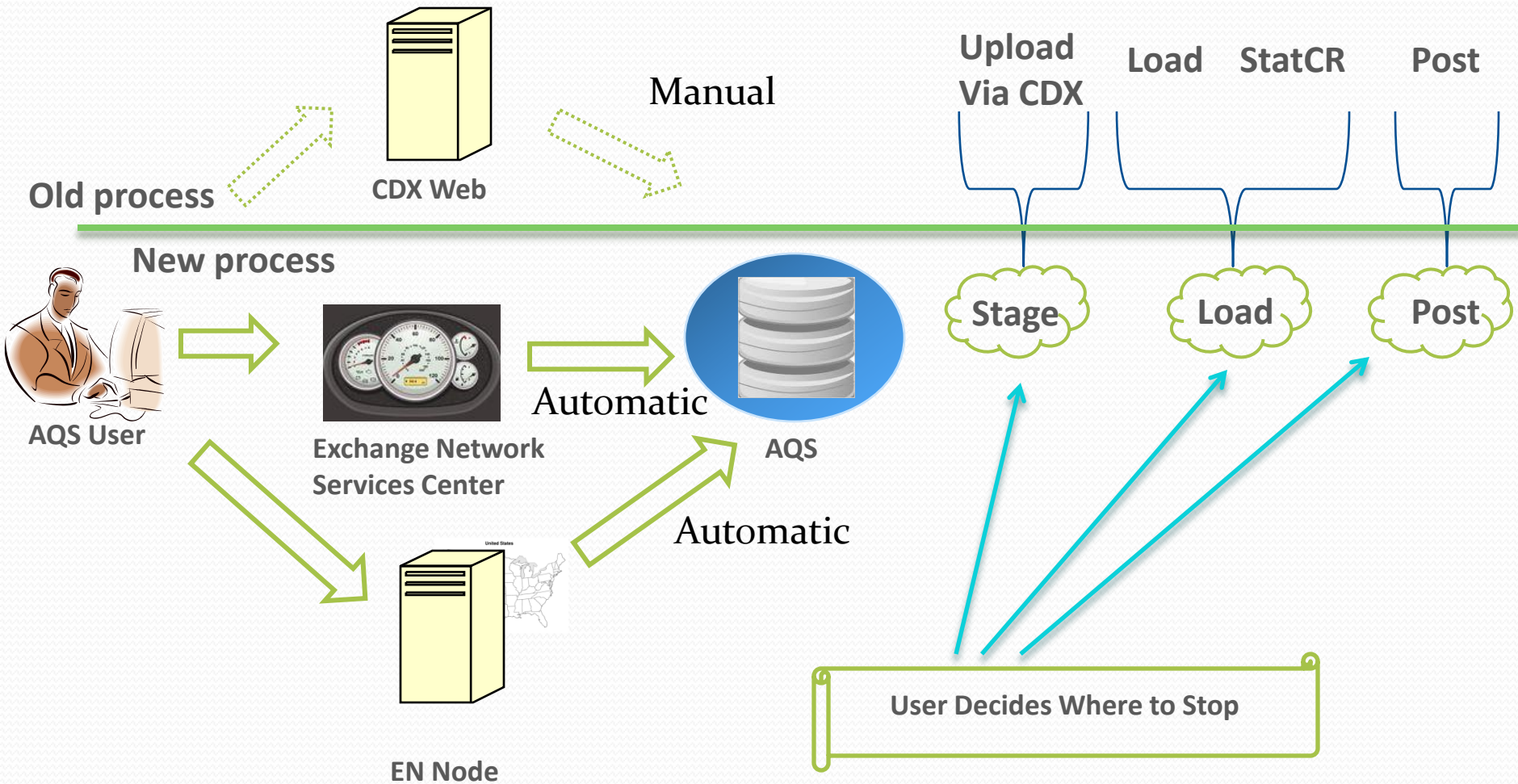
What does this tutorial cover?

- Background/Why are we doing this?
- CDX Changes
- AQS Changes
- Timeline/Where do we go from here?
- New AQS URL: <https://aqs.epa.gov/aqs/>
- New CDX ENSC URL: <https://enservices.epa.gov>
- Tutorial Slides URL:
http://www.epa.gov/ttn/airs/airsaqs/training/Autoloader_Tutorial.pdf

Background – Why?

- ECOS (Environmental Council of States) and EPA Administrator – make the Exchange Network the preferred means of submitting data to EPA National Systems
- EPA National Computer Center: Must migrate to new version of Oracle software – old version no longer supported. (Drives schedule)

Submitting files



What is changing?

- Submit a file without logging into AQS
- New CDX website Exchange Network Services Center (ENSC) & new EN user ID (email address)
- Files submitted to ENSC or EN Node will be automatically processed by AQS
- Stat/CR is now part of Load
- New AQS batch form
- Processing done by **file**, not by screening group
- Reports are auto-generated and consolidated
- Records inserted in Correct forms will have file name like ONLINE-user-nnnnnn. (e.g. ONLINE-RCG-12345)

Other Changes

- Security Profile in AQS has a new field for EN User ID
- Exchange Network nodes are allowed to “download” the submission log and reports
- New AQS URL: <https://aqs.epa.gov/aqs/>
- Old AQS URL kept during migration, then retired (June 2012)

Set Up – Verify EN User ID

Administration - Application Security (Read Only)

User Profile | Maintain Security | Security Reference Tables | Maintain Roles | User History

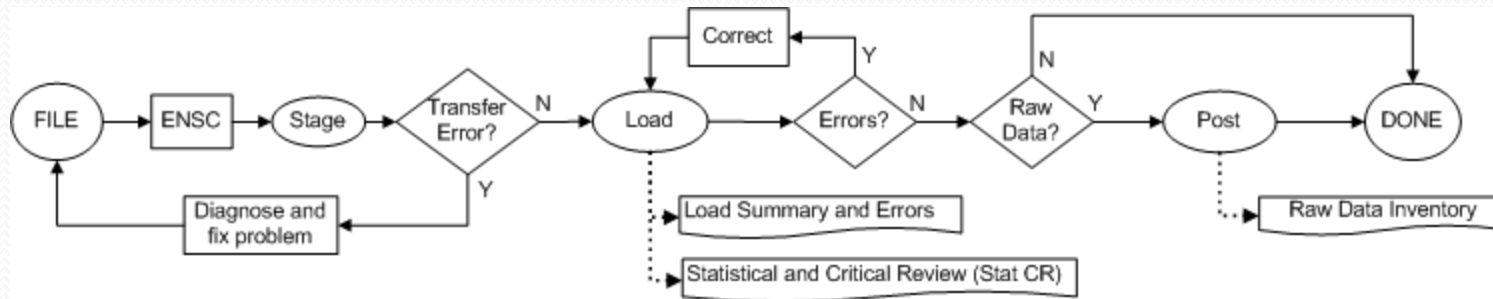
First Name	ROBERT	Initial	S	Last	COATS
Phone	919.541.5448	Street Address 1	109 TW Alexander Dr	Street Address 2	335H
Zip Code	27711	City	Research Triangle Park	State Code	37
County Code	063	User Type	H	Agency Code	1108
AQS User ID	RCG	Status Ind	P	AQS Contact	N
EN User ID	COATS.ROBERT@E	E Mail	coats.robert@epa.gov	EPA Region Code	04
Fax	919.541.7674	Tribal User	<input type="checkbox"/>		

Change Your Oracle Passwords

AQS New Password: Confirm password:

CDX Current CDX Password:

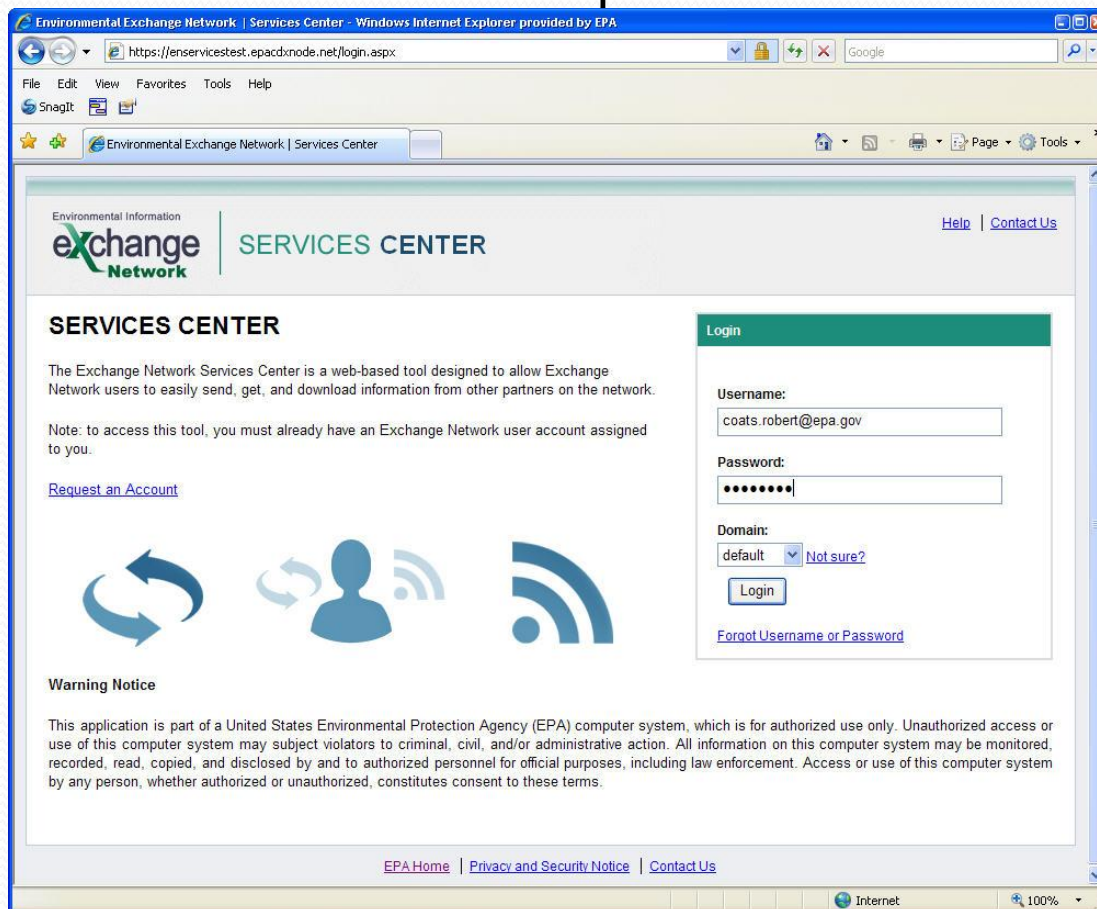
Submit Process



- ENSC: User enters File name (**zipped**), AQS Access information, and Processing Options
- Automatic: File is submitted by ENSC to AQS with user information
- AQS:
 - User monitors status & records processed
 - Correct any Errors
 - Submit / resubmit remaining processing steps

ENSC website

- URL: <https://enservices.epa.gov/login.aspx>
- Username = your email address (from AQS Profile)
- Password: Same as CDX Web password



The screenshot shows the ENSC website in a Windows Internet Explorer browser window. The address bar displays <https://enservicetest.epacdxnode.net/login.aspx>. The page header includes the "Environmental Exchange Network" logo and the "SERVICES CENTER" title. The main content area features a "Login" form with fields for Username (containing "coats.robert@epa.gov"), Password (masked with dots), and Domain (set to "default" with a "Not sure?" link). A "Login" button is present, along with a "Forgot Username or Password" link. To the left of the login form, there is a "SERVICES CENTER" heading, a descriptive paragraph about the tool, a note about account requirements, a "Request an Account" link, and three circular icons representing data exchange. Below these is a "Warning Notice" section with a disclaimer about the system's authorized use. The footer contains links for "EPA Home", "Privacy and Security Notice", and "Contact Us".

Environmental Exchange Network | SERVICES CENTER


[Help](#) | [Contact Us](#)

SERVICES CENTER

The Exchange Network Services Center is a web-based tool designed to allow Exchange Network users to easily send, get, and download information from other partners on the network.

Note: to access this tool, you must already have an Exchange Network user account assigned to you.

[Request an Account](#)



Warning Notice

This application is part of a United States Environmental Protection Agency (EPA) computer system, which is for authorized use only. Unauthorized access or use of this computer system may subject violators to criminal, civil, and/or administrative action. All information on this computer system may be monitored, recorded, read, copied, and disclosed by and to authorized personnel for official purposes, including law enforcement. Access or use of this computer system by any person, whether authorized or unauthorized, constitutes consent to these terms.

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Initial ENSC Home Page

Environmental Information

exchange
Network


SERVICES CENTER

Logged In: coats.robert@epa.gov
[My Profile](#) | [Help](#) | [Contact Us](#) | [Logout](#)

Home | My Services Center | Exchange Network Services | News & Data Channels


MY SERVICES CENTER

Quickly access the services and queries you use and check the status of your requests [GO](#)




EXCHANGE NETWORK SERVICES

Send, get, and download information from Exchange Network partners [GO](#)



NEWS & DATA CHANNELS


View news and data feeds from Exchange Network partners, subscribe to channels of interest, or contribute your own content to these channels [GO](#)



My Quick Links

[Manage](#)

- » [Exchange Network](#)
- » [Check your Submission \(QA Services\)](#)
- » [Exchange Network Discovery Services \(ENDS\)](#)
- » [Production CDX Web](#)



Check out our **News Feed** for the latest on what's happening with the Exchange Network Services Center

Click here

[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

First-time AQS Selection (1)

The screenshot shows the EPA Exchange Network Services Center interface. At the top, it says "Environmental Information" and "exchange Network". The main header is "SERVICES CENTER". On the right, it says "Logged In: coats.robert@epa.gov" with links for "My Profile", "Help", "Contact Us", and "Logout". Below the header are navigation tabs: "Home", "My Services Center", "Exchange Network Services", and "News & Data Channels". A "My Quick Links" dropdown is also present.

Below the navigation tabs, a message states: "Use either the **Step-by-Step** OR **Express** approach to send, get, or download information from the Exchange Network."

The "CHOOSE" section is divided into two main options:

- Guide Me Step-by-Step ?** (recommended for novice users)
 - Step 1: Choose the Type of Transaction to Perform ?**
 - ☒ **Send information** to a system on the Exchange Network
 - ☐ **Get information** that is stored on the Exchange Network
 - ☐ **Download a document** from the Exchange Network. You must know the [Transaction ID](#) or [Document ID](#) to perform a download.
 - Continue** button
- Express Request ?** (recommended for advanced users)
 - Search for a Service by Keyword**
 - Input field: "AQS"
 - Search** button
 - OR**
 - Browse our entire Services Directory**
 - Browse Services Directory** button

Type
AQS

Then
Click
Here

First-time AQS Selection (2)

[Home](#) [My Services Center](#) [Exchange Network Services](#) [News & Data Channels](#) [My Quick Links](#) ▼

[Add this page to My Quick Links](#)

Services Directory

This directory runs from Exchange Network Discovery Service (ENDS) metadata. It requires the commitment of our Network to keep it up to date and useful. For the BETA version, the Services Directory contains only services that support Submit, Query, Solicit, and Download operations. Select the name of the Service you wish to use.

Filter By: [Filter](#) [Clear](#)

1 - 4 of 4 [< Previous](#) [1](#) [Next >](#)

Service Transaction	Dataflow	Service Name	Service Description	Node	Service Provider
Get Info	AQDE	AQDERawData	Queries or Solicits the Raw Data for the AQDE Flow. The return is an XML file that conforms to the AQS Version 2.0 Schema.	NewJerseyNodeV1_Prod	NJDEP
Send Info	AQS	AQS Submit	Air Quality System Document Submissions	NGNProd2.0	U.S. Environmental Protection Agency
Get Info	AQS	DNR.AQSSubmitRawData	DNR.AQSSubmitRawData	WDNRnode2	Wisconsin DNR
Get Info	FRS	DNR.AQSSubmitRawData	DNR.AQSSubmitRawData	WDNRnode2UAT	Wisconsin DNR

Click Here

ENSC Upload Form

Express Request: AQS Submit ?

Select a Document to Upload (max. size 1 GB):

Browse...

Required

One file only;
Must be zipped

Enter Sender's Email Address to Notify of Transaction Status Changes:

Optional

AQS User ID:

Required

Additional Data Flow Specific Information:

Screening Group :

Required

Flat or
XML

File Type :

Required

Stage,
Load, or
Post

Final Processing Step :

Optional

Stop On Error :

Optional

Yes or
No

► [Provide information \(metadata\) about this Document \(recommended\)](#)

[Cancel](#)

SEND DATA

Defaults:
Final Processing Step = "Post"
Stop on Error = "Yes"

Submit Acknowledgement

Request Received!

Your File AQS_Sample_Blanks_v2.2.zip has been received.

The following Transaction ID has been assigned to this request:

78f61539-6c17-47e7-81c8-ec209d80b9fc

Record for
future
reference

Current Status of Request:

Transaction Status	Service Name	Transaction Type	Date
Processing	AQS Submit	Send Information	3/21/2012 2:59 PM

What would you like to do next?

[View the Status of this request in My Activity](#)

[Complete another Transaction using this same Service](#)

[Complete another Transaction using a different Service](#)

[Add this Service to My Quick Links](#)

[Log out of the Services Center](#)

ENSC Status Page

[My Services](#) | [My EPA Activity](#) | [My Channels](#)

[+ Add this page to My Quick Links](#)

☐ Make this my Start page

My EPA Activity ? View the status of your transactions

Filter By:

 [Refresh Activity](#)

1 - 20 of 92

[< Previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [Next >](#)

<u>Service Name</u>	<u>Dataflow Name</u>	<u>Transaction Status</u>	<u>Transaction Type</u>	<u>Date</u>	<u>Transaction ID</u>
AQS Submit	AQS	COMPLETED	Send Info	3/21/2012 2:59:26 PM	78f81539-6c17-47e7-81c8-ec209d80b9fc
AQS Submit	AQS	COMPLETED	Send Info	3/20/2012 11:57:58 AM	a58dc04a-c31a-4907-806d-dbac17b96e27
AQS Submit	AQS	COMPLETED	Send Info	3/20/2012 11:50:35 AM	beb83740-c422-4e6b-922c-35ebc390b17e
AQS Submit	AQS	COMPLETED	Send Info	3/19/2012 4:18:00 PM	9095f836-9f32-43b7-972f-201d3bb73b1f
AQS Submit	AQS	COMPLETED	Send Info	3/16/2012 2:21:47 PM	578d2e0f-a5ae-4b6c-9b1c-60e906b73261

ENSC Download Page

Transaction Details

Transaction ID: _78f81539-6c17-47e7-81c8-ec209d80b9fc

Transaction Status: COMPLETED

Date: 3/21/2012 2:59:26 PM

Service Name: AQS Submit

Message: Number of transactions processed successfully: 882. Number of transactions rejected with error: None.

DataFlow: AQS

Transaction Type: Submit

Approved Count: 0

Recipients:

[Return to My Activity](#)

Documents Associated with this Transaction:

[AQS Load Reports.zip](#)

[View Details](#)

[ValidationResults.xml](#)

[View Details](#)


[AQS Sample Blanks v2.2.zip](#)

[View Details](#)

Second ENSC Login

Environmental Information
exchange
Network

SERVICES CENTER



Logged In: [coats.robert@epa.gov](#)
[My Profile](#) | [Help](#) | [Contact Us](#) | [Logout](#)

[Home](#) | [My Services Center](#) | [Exchange Network Services](#) | [News & Data Channels](#) | [My Quick Links](#) ▼

[My Services](#) | [My EPA Activity](#) | [My Channels](#) (Added to My Quick Links)

☒ Make this my Start page

My Services ?

Access services you have used before. [Use a New Service](#)

[All](#) | [Send Info](#) | [Get Info](#) | [Download](#) | [My Queries](#)

Find a Service: ☒ My Services ☐ Services Directory [Find](#)

<u>Service Name</u>	<u>Service Description</u>	<u>Publisher</u>	<u>RSS-enabled</u>	<u>Last Used</u>
NGNTest2.0/AQS/AQS Submit	AQS Submit: Send files to the Air Quality System (AQS).	U.S. Environmental Protection Agency	No	3/21/2012 2:59:25 PM

AQS Batch form (1)

BATCH (Robert Coats Test)

Process by File

History

HISTORY AND STATUS

Submission Date	File Name	User Name	Records In File	Date (last)	Process Status	LOAD			POST		
						Recs Loaded	Recs Failing to Load	Stat/CR Finding Count	Records to Post	Skip'd Monitors	Records Posted
20120502 10:44	Del_Raw_XML.zip	ROBERT COATS	939	20120502 10:45	CRST-COMPLETED	939	0	191	939	0	
20120502 10:42	Ins_PA.zip	ROBERT COATS	64	20120502 10:42	STAGE-COMplete						
20120502 10:30	Ins_Raw.zip	ROBERT COATS	951	20120502 10:33	POST-COMPLETED	939	12	12	939	0	939
20120502 10:07	ONLINE_RCG_779491	ROBERT COATS	6	20120502 10:07	STAGE-COMplete						
20120222 12:42	do_nothing.zip	ROBERT COATS	0	20120222 12:42	STAGE-ERROR						

PROCESS CONTROL

Load

Post

Other

Process selected file through:

Load File

Post File

Show User Log

Results and Reports:

Load Summary and Errors

Stat CR Report

Raw Data Inventory

Goto ENSC

Refresh Sessions

PROCESS FLOW

```

graph LR
    FILE([FILE]) --> ENSC[ENSC]
    ENSC --> Stage([Stage])
    Stage --> TE{Transfer Error?}
    TE -- Y --> DFP[Diagnose and fix problem]
    DFP --> FILE
    TE -- N --> Load([Load])
    Load --> E{Errors?}
    E -- Y --> Correct[Correct]
    Correct --> Load
    E -- N --> RD{Raw Data?}
    RD -- Y --> Post([Post])
    Post --> DONE([DONE])
    RD -- N --> DONE
    E -.-> LSE[Load Summary and Errors]
    LSE -.-> SCR[Statistical and Critical Review Stat CR]
    SCR -.-> Load
    Post -.-> RDI[Raw Data Inventory]
    RDI -.-> Post
    
```

Batch Form Fields

- Submission Date: Date-time file received by AQS
- File Name: Name of file uploaded by user
- User Name: User who **last** processed file in AQS
- Records In File: Count of transactions received by AQS
- Process Status: Last process executed and its status
- Date that last process executed
- Records Loaded: Successfully loaded transactions
- Recs Failing to Load: Number of transactions with errors.
- Stat/CR Finding Count: Number of Statistical results + number of Critical Review results
- Records to Post: Count of Raw Data records ready to post
- Skipped Monitors: Number of monitors being modified by another user
- Records Posted: Count of Raw Data transactions posted to production

Batch Form Notes

- Each row on form shows processing status of single file (trace processing left-to-right)
- Blank columns mean either process has not been run yet or not appropriate to data (e.g. Post not valid for some transactions)
- Load button will run both old Load and Stat/CR
- Post button will run Load, Stat/Cr, and Post
- All reports created when processing job executes → their results will be available for 15 days
- Count columns are cumulative: i.e. if 10 records are processed successfully the first time load is run for file and 10 the second time, then Recs Loaded will be 20
- Records created in “Correct” forms will show up with filename of “ONLINE_”+user+number
- **Warning: While reports are running, no indication on form. Do not click Load or Post button until prior submission complete (Look at email or user log to check!)**

AQS Batch Form (2)

Form shows each individual program execution and its results

BATCH (Robert Coats Test)

Process by File History

PROCESS HISTORY

Session Date	Job Type	User Name	File Name	File Status	Successful Transactions	Failed Transactions
20120320 16:17	FILE	ROBERT COATS		COMPLETED		
20120320 12:03	POST	ROBERT COATS	Del_Raw.zip	COMPLETED	939	
20120320 12:03	CRST	ROBERT COATS	Del_Raw.zip	COMPLETED	939	9
20120320 12:02	LOAD	ROBERT COATS	Del_Raw.zip	ERROR	0	
20120320 11:59	CRST	ROBERT COATS	Del_Raw.zip	COMPLETED	939	191
20120320 11:58	LOAD	ROBERT COATS	Del_Raw.zip	ERROR	939	
20120320 11:58	STAGE	ROBERT COATS	Del_Raw.zip	COMPLETED	951	
20120320 11:53	POST	ROBERT COATS	Ins_Raw.zip	COMPLETED	939	
20120320 11:52	CRST	ROBERT COATS	Ins_Raw.zip	COMPLETED	939	12
20120320 11:51	LOAD	ROBERT COATS	Ins_Raw.zip	ERROR	939	
20120320 11:51	STAGE	ROBERT COATS	Ins_Raw.zip	COMPLETED	951	
20120319 16:57	CRST	ROBERT COATS	Del_Raw.zip	COMPLETED	0	0
20120319 16:56	LOAD	ROBERT COATS	Del_Raw.zip	ERROR	0	
20120319 16:18	STAGE	ROBERT COATS	do_nothing_unix.zip	COMPLETED	0	
20120316 14:26	POST	ROBERT COATS	Del_Raw.zip	COMPLETED	939	
20120316 14:26	CRST	ROBERT COATS	Del_Raw.zip	COMPLETED	939	9
20120316 14:25	LOAD	ROBERT COATS	Del_Raw.zip	ERROR	0	
20120316 14:23	CRST	ROBERT COATS	Del_PA.zip	COMPLETED	0	0
20120316 14:22	CRST	ROBERT COATS	Del_Raw.zip	COMPLETED	939	191
20120316 14:22	LOAD	ROBERT COATS	Del_PA.zip	ERROR	15	

Results and Reports:

Load Summary and Errors Stat CR Report Raw Data Inventory

Refresh History

AQS Batch Form Goals

- Update the layout to make the process more intuitive
- Retain parts of the old form for user familiarity
- Status grid - all processing results for one file are on a single line
- Pare down processing steps
 - Load
 - Post
- Combine Reports
 - Load Report
 - Stat/CR Report
- History tab for display of individual processes

AQS Job Log /Email

AQS Processing Summary (User Log)

For AQS user: RCG In screening group: ROBERT COATS TEST

On 2012-03-20 at 12:02

Performing the following steps: LOAD POST

LOAD step completed for file: Del_Raw.zip

Number of data rows successfully loaded: 0

Number of data rows that failed to load: 12

Load summary and detail report is at this URL:

https://owlsstage.rtpnc.epa.gov/aqsweb/aqstmp/2012-03-20_12.02.23_7475/778990_LOAD.pdf

Statistical and critical review step completed for file: Del_Raw.zip

Number of monitors skipped: 0

Number of rows with statistical review issues: 0

Number of rows with critical review issues: 9

Statistical and critical review report is at this URL:

https://owlsstage.rtpnc.epa.gov/aqsweb/aqstmp/2012-03-20_12.02.23_7475/778991_STAT_CR.pdf

POST step completed for file: Del_Raw.zip

Number of monitors skipped by post process: 0

Number of rows posted: 939

Raw data inventory report is at this URL:

https://owlsstage.rtpnc.epa.gov/aqsweb/aqstmp/2012-03-20_12.02.23_7475/778992_RD_INVENTORY.pdf

Processing complete.

What is not changing?

- AQS will continue to accept all current data formats:
 - Delimited transactions
 - XML files
 - Card-image transactions (for limited time)
- AQS will continue to have the same functionality and same purpose

AQS setup needed to use EN

- New Exchange Network user ID
 - AQS Team will register you
 - Your EN user ID will be the email address on file in AQS
 - Check your AQS Security profile – will show
 - Email address in AQS
 - Exchange Network user ID (**NEW**)
- What EN user ID should be in your AQS Security Profile?
 - If you submit files using ESNC, then default is ok.
 - EN user ID = your EN user ID (ie, your email address.)
 - If you submit files using an EN Node, then change it.
 - Make EN user ID = your Agency Node Administrator's EN user ID.

Where do we go from here?

- March 2012 – AQS Team to migrate EPA Regional Office and Headquarters users to new interface
- April to May 2012 – AQS Team to migrate groups of users to new interface
- End of May 2012* – Migration complete
- June 2012* – Sunset date for old AQS interface and old servers

* Estimated dates

Known Issues (as of 5/02/2012)

- The Scan Report was not ported to the new environment. Instead, the Critical Review Raw Data report is run after Stat/CR. We are evaluating adding the Scan Report again.
- The Standard Reporting and Batch environments cannot presently detect report failures; they are indicated by a blank report.
- If a Batch report fails (e.g. Load Report) there is no mechanism to request that it be re-run. We expect to add this capability in June.

Common Usage Problems

- Submission Error: Access Denied
 - Most likely cause is EN User-ID on AQS user profile does not match submitting EN user.
 - Fix: Update AQS profile (Admin/Security menu pick)
- Submission Error: Invalid Screening Group
 - Cause: User is not assigned to selected screening group
 - Fix: Request agency contact for screening group to send authorization to AQSTeam
- File does not show up on AQS Batch form after extended time.
 - Fix: Call node helpdesk (888-890-1995) with Transaction-ID