

EMTS Node Webinar Script Part 3

Introduction

In this next section of the webinar, we will look at the EMTS submission dataflow.

The EMTS Dataflow

The dataflow is comprised of a series of web service methods that the node or node client invokes.

We will review how these web service methods are called in sequence and demonstrate how your file submission is routed and processed.

The steps are slightly different if you are using your own node or node client as opposed to using the EMTS website (which has a customized node client interface).

Please click Next to continue.

Submission Using a Node or Node Client

Once you have registered your data and have prepared your XML file, you are ready to submit. This is a multi-step process.

For the purposes of this demonstration, we will use the term "node client" to mean that you are either using the node client interface to your node, or you have created custom code that issues these commands programmatically.

Throughout this next section, you can use the "Next" and "Back" buttons to navigate through the steps.

Please click Next to continue.

Step 1

In the first step, log on to your node.

Depending on how you have configured your node application, this step may not be required.

Step 2

The second step involves using your NAAS ID to log in and authenticate with the CDX Node.

Upon successful authentication, the CDX Node will return a security token.

If your authentication fails, the web service will return an Authentication SOAP Fault.

The next steps are performed as a synchronous set of actions.

If an action fails, the CDX Node returns a failed submission response containing error information and the dataflow ends.

Step 3

Submit your XML file to the CDX Node.

Include the security token you received from the CDX Node, identify the dataflow as "EMTS," and include one zipped XML file which contains your transactions.

Step 4

The CDX Node validates the security token against NAAS.

This will authenticate the submitter and authorize the submission to the EMTS.

Step 5

The CDX Node validates the payload.

The submission payload can contain only one document which must be compressed as a ZIP document type.

Step 6

The CDX Node archives the submitted document.

Step 7

The CDX Node generates a unique CDX transaction ID and assigns a status of "RECEIVED."

This transaction ID uniquely identifies the submission, and can be used to check the status of the submission at any time in the submission process.

Step 8

If the previous operations were successful, the CDX Node returns a submit response.

The response will include the CDX transaction ID, the current status of the file, and additional status details.

When you receive the submit response, you should store the returned CDX transaction ID, as you will need this information to track your submission file.

If the previous operation fails, the CDX Node returns an Authentication SOAP Fault in the response.

In this case, the file is never sent to the EMTS for further processing and you must resolve the issue identified in the SOAP Fault response and re-try your submission.

The next sequence of steps are performed asynchronously after the submit response has been sent back to your node.

This begins the series of steps that the CDX Node performs before sending the file to the EMTS.

Step 9

The CDX Node updates the status for the submission to "PROCESSING." The CDX Node maps your NAAS credentials to your CDX Web credentials.

If the CDX Node cannot cross map your NAAS ID to a registered CDX Web ID, validation will fail and the dataflow ends.

The CDX Node will send you and the CDX Node Administrator an email regarding the failure.

Step 10

The CDX Node verifies that you are an active registered user in the OTAQ Registration database.

If you are not active or are not registered in the OTAQ Registration database, the transaction status is set to "FAILED" and the dataflow ends.

The CDX Node will send you and the CDX Node Administrator an email regarding the failure.

Step 11

The CDX Node then validates the XML file contained in the submission against the QA Server.

This action is performed asynchronously and checks that the XML file is valid and well-formed.

After completion, the QA Server submits an XML Validation report to the CDX Node which is then archived.

This XML validation report can be downloaded at any time using the "Download" web service method.

We will discuss the download flow in more detail later in this webinar.

Step 12

If the XML document fails XML validation, then the transaction status is set to "FAILED" and the dataflow ends.

The CDX Node will send you an email regarding the failure and include instructions on how to download the QA validation report for the failed submission file.

Step 13

The CDX Node will create a new security token that includes your CDX Web user ID, email address, and affiliation.

This is mapped from your NAAS user ID.

Step 14

The CDX Node submits your XML file to the EMTS Node using the security token.

If there is heavy internet traffic, the CDX Node will resubmit up to three times if submission to the EMTS Node is not successful.

If the submission is successful, the transaction status is set to "PENDING." Otherwise, it is set to "FAILED" and the dataflow ends.

The CDX Node sends you and the CDX Node Administrator an email regarding the failure.

Step 15

The EMTS Node validates the security token with NAAS and extracts your CDX Web user ID from the security token.

Step 16

The EMTS Node then places your submission file in a queue for processing.

Step 17

If the validation of the security token fails or the file could not be placed in the queue, the EMTS Node returns the CDX transaction ID and a SOAP Fault to the CDX Node.

The CDX Node sets the transaction status to "FAILED" and the dataflow ends.

The CDX Node sends you and the CDX Node Administrator an email regarding the failure.

The EMTS now begins a sequence of steps to process your file.

Step 18

The EMTS processes the submission by removing it from the queue and checking the contents of each of the transactions in the file.

If just one transaction fails a critical check, the entire file is failed.

Step 19

If the file is successfully processed, the EMTS will send a notification to the CDX Node with the final status of the submission.

This is the last step in the dataflow and the CDX Node updates the status to "COMPLETED."

The CDX Node then sends an email to the address registered with your NAAS ID regarding the completion of the transaction.

Step 20

However, if processing fails, the EMTS Node will submit a QA Feedback report to the CDX Node.

This document contains a zipped QA Feedback report.

The CDX Node will archive the QA Feedback report and update the status to "FAILED."

You will be sent an email regarding the failure of a transaction and instructions on how to download the QA Feedback report.

Please click Next to view a roll-over diagram showing all of the steps.

Animated Roll-over Diagram

As you can see there are numerous steps in the dataflow.

This entire process can take a few seconds or several minutes, depending on the load on the Exchange Network.

You can roll-over any of these steps to see each of the corresponding web service calls.

This concludes the third section of the webinar; please click Next when you are done.