

```
XMLSchema" xml version="1.0" encoding="UTF-8"
exchangenetwork" - <xsd:schema
targetNamespace="http://www.epa.gov/exchangenetwork"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:nei="http://www.epa.gov/exchangenetwork"
elementFormDefault="qualified" attributeFormDefault="unqualified"
version="3.0">
<xsd:include schemaLocation="EN_NEI_Common_v3_0.xsd" />
- <!--
Start of Schema Header
-->
<xsd:annotation base="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.epa.gov/exchangenetwork"
documentation="Point" />
<xsd:documentation base="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.epa.gov/exchangenetwork"
documentation="Point data" />
<xsd:documentation base="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.epa.gov/exchangenetwork"
documentation="Available: http://www.epa.gov/exchangenetwork" />
<xsd:documentation base="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.epa.gov/exchangenetwork"
documentation="input format" />
<xsd:documentation base="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.epa.gov/exchangenetwork"
documentation="user" />
<xsd:documentation base="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.epa.gov/exchangenetwork"
documentation="Agency" />
<xsd:documentation base="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.epa.gov/exchangenetwork"
documentation="qualified" attributeFormDefault="unqualified" />
schemaLocation="EN_NEI_Common_v3_0.xsd" />
Header
'>
schemaLocation="EN_NEI_Common_v3_0.xsd" />
on>
mentation>Schema Name: NEI XML 3.0
xsd:documentation>
mentation>Current Version
e:http://www.epa.gov/exchangenetwork
tion>Sch
ion>
mentation>Description: The NEI XML 3.0 Point data
rmat</xsd:documentation>
mentation>Application: Varies by
sd:documentation>
mentation>Developed By: Environmental Information
ding="UTF-8" ?>
http://www.epa.gov/exchangenetwork
/www.w3.org/2001/XMLSchema"
/www.epa.gov/exchangenetwork"
t="qualified" attributeFormDefault="unqualified"
aLocation="EN_NEI_Common_v3_0.xsd" />
ion>Schema Name: NEI XML 3.0
cumentation>
on>Current Version
//www.epa.gov/exchangenetwork</
>Description: The NEI XML 3.0 Point data
f:documentation>
Application: Varies by
tation>
```

EPA Moderated Transaction System (EMTS)

Flow Configuration Document

Version: 1.0
January 19, 2010

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Table of Contents

Table of Contents	3
1 Change Tracking Log	4
1.1 Version and Component Alignment	4
2 Introduction	5
2.1 How to Use This FCD	6
3 Submission File Structure	7
3.1 Overview	7
3.2 Implementing the Header Document	7
3.3 Header Document Structure	7
3.3.1 Namespace and Schema	8
3.3.2 Document Header Definitions	8
3.4 EMTS Namespace	11
3.5 Payload	12
3.5.1 Validating the EMTS XML	12
4 Configuring the Network Exchange	13
5 Submission Processing and Feedback	14
5.1 Submission Using a Node or Node Client.....	14
5.2 Submission from the EMTS Website	16
5.3 Get Submission Status.....	19
5.4 Obtain Transaction History.....	19
5.5 Obtain Document History	20
5.6 Download Document	21
6 Web Service Methods	22
6.1 Authenticate	22
6.2 Submit	22
6.3 GetStatus	23
6.4 Query.....	23
6.5 Download	24
Appendix A Node Options.....	A-1
Appendix B OTAQ Registration Process	B-1
B – 1 New User Registration	B-1
B – 2 NAAS Node Clients User Registration.....	B-1
B – 2 NAAS Full Nodes User Registration	B-2
B – 2 NAAS User Revocation.....	B-3
Appendix C Procedures To Test EMTS Flow	C-1
Appendix D Accessing EMTS from MyCDX Web	D-1
Appendix E Notifications for EMTS Flow	E-1
Appendix F EMTS Support	F-1

1 Change Tracking Log

Date	Version	Description	Author
October 12, 2009	1.0	Original Draft	PQA
November 18, 2009	1.0	Updates	PQA
December 23, 2009	1.0	Updates describing the OTAQ Registration process. Clarification provided in section 5 on the EMTS data flow.	PQA
January 11, 2010	1.0	Updates for submission, and registration	CGI
January 15, 2010	1.0	Updates	CGI
January 18, 2010	1.0	Updates and addition of Notification appendix.	PQA

1.1 Version and Component Alignment

The following table indicates the version of related documents and components to which this document applies.

Component	Version(s) Supported	Explanation
FCD	V1.0	
EMTS Schema	V1.0	
DET	V1.0	

2 Introduction

The purpose of this Flow Configuration Document (FCD) is to describe the operation of the EMTS flow across the Exchange Network to the CDX Node. This includes data flow between industry users and EPA that meet the RFS submission requirements.

An FCD is intended to describe the operational aspects of an Exchange Network data exchange. The specifications included in this document define the supported data services, the approaches, and processes that are used to exchange information between the EPA and submitters.

This document will describe the data exchange process by which industry users will submit XML files to the EMTS.

The EMTS intends to offer outbound services that will allow Exchange Network partners to query data collected and managed by the EMTS. These outbound data services will be documented once these capabilities have been designated and developed in a future release.

The scope of this document is limited to the process of submitting electronically reported EMTS submissions to EMTS from an EPA Exchange Network 2.0 compliant node, such as the EMTS Website, Node, or Node Client.

The high-level process for the EMTS data flow includes the following steps:

1. An EMTS-registered user authenticates to NAAS.
2. The user submits EMTS transaction data to the CDX Node using an Exchange Network 2.0 Node or Node Client.
3. The user's NAAS credentials are mapped to the user's Web CDX credentials, which are used by the EMTS for authentication.
4. The CDX Node validates the structure of the XML file.
5. The CDX Node submits the XML file to the EMTS.
6. The EMTS processes the contents of the file.
7. The EMTS notifies the submitter regarding the status of the submission.

As the Renewable Fuel Standards rule undergoes comments and is finalized, it is anticipated that this FCD may undergo further revisions. The EMTS is currently in the beta testing phase. This document will be revised when the RFS rule is final and the EMTS flow is moved to production.

2.1 How to Use This FCD

This document provides guidance on implementing and using the EMTS flow, an XML-based submission process through the CDX Node to the EMTS.

The document includes the following main sections:

Submission File Structure

This section describes the various portions that need to be implemented in the EMTS submission file, in addition to the EMTS XML document. The submission file must adhere to this structure in order to be processed properly in route through the exchange network to the EMTS. The EMTS flow makes use of the Exchange Network Header Document to describe the payload content of a Network message. Every submission to the EMTS must adhere to the Header Document structure.

Configuring the Network Exchange

This section describes how the EMTS Network Exchange is configured for the EMTS data flow.

In addition to this FCD, the submitter should obtain the following documents related to the EMTS Flow. These documents can be requested from EMTS Support at emts_testing@PQA.com during the testing period and emts@PQA.com during production, or by contacting the EMTS Support line at 1-800-385-6164.

EMTS Data Exchange Template
EMTS XSD
EMTS Transaction Instructions

Submission Processing and Feedback

This section of the FCD provides a description of the EMTS flow including submitting files from a Node or Node Client and submitting files from the EMTS website.

Web Service Methods

This section describes the web service methods utilized by the Exchange Network Node to submit to the EMTS flow.

Help and Technical Assistance

If you have questions on how to report your transactions to the EMTS or how to use the EMTS website, technical assistance can be provided by sending your question to emts_testing@PQA.com during the testing period and emts@PQA.com during production, or by contacting the EMTS Support line at 1-800-385-6164.

3 Submission File Structure

3.1 Overview

The EMTS submission file consists of a single XML document that can only be submitted from a Node, Node Client, or the EMTS website. The submission must adhere to the Exchange Header v2.0 document structure. Information on the header can be found on the Exchange Network website at http://www.exchangenetwork.net/dev_schema/HeaderSpecification_v2.0.doc. The Exchange Header xsd is available at http://www.exchangenetwork.net/schema/header/2/header_v2.0.xsd.

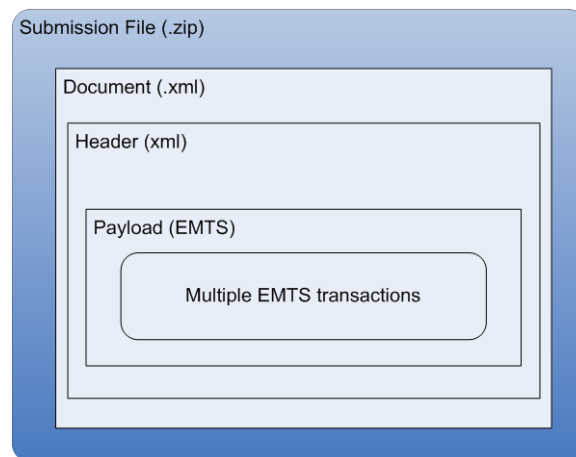
The header document provides the following information:

- Description of payload; and
- Information regarding the submitter and date of submission.

3.2 Implementing the Header Document

The header is required for all Submit operations through the Exchange Network. Every submission file sent to the EMTS must use the Header Document structure to meet EPA CDX processing requirements. The header contains information about the submitter and the contents of the payload. The root element of the header document is the Document element, with two child elements, Header and Payload. The Payload contains the actual EMTS data, adhering to the structure of the EMTS schema. The figure below shows the file submission structure.

Figure 1: Submission File Structure



3.3 Header Document Structure

The following table describes the Header Document attributes and how they are used for the purposes of an EMTS submission. Note that most elements are not required to be reported in the header, these data are used as metadata. Only the user's application user identifier will be used by the EMTS to process the payload.

3.3.1 Namespace and Schema

The XML namespace for the Exchange Network Document is <http://www.exchangenetwork.net/schema/header/2>.

All documents that use the Header 2.0 specification must use this namespace URL. The schema file is located at http://www.exchangenetwork.net/schema/header/2/header_v2.0.xsd.

3.3.2 Document Header Definitions

The document header is the first child of the Document tag. The header may contain the elements and attributes defined below:

Table 1: Exchange Header 2.0 Document Attribute

Document (the root element of an Exchange Network Header Document)				
Name	Description	Example	Required	Notes
ID	A unique identifier for the XML document that is the payload. This may be a file name or a unique identification number that can be used to identify the document.	ID123456789	Yes	
hdr XML Namespace	The Exchange Header 2.0 namespace. This is different from the EMTS namespace which is contained in the EMTS document.	xmlns:hdr = "http://www.exchangenetwork.net/schema/header/2"	Yes	Must be http://www.exchangenetwork.net/schema/header/2 . All documents that use the Header 2.0 specification must use this namespace URL.
xsi XML Namespace	The w3c 2001 XML schema instance namespace.	xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance"	Yes	
Schema Location	References an XML Schema document that has a target namespace.	xsi:schemaLocation = "http://www.exchangenetwork.net/schema/header/2 http://www.exchangenetwork.net/schema/header/2/header_v2.0.xsd"	No	The first member of each pair is the namespace for which the second member is the hint describing where to find to an appropriate schema document.

The following table describes the Header Document elements and how they are used for the purposes of an EMTS submission.

Table 2: Exchange Header 2.0 Elements

Header				
Name	Description	Example	Required	Notes
AuthorName	Originator of the document. This should be the name of a person or a network node Id if the document is automatically generated.	John Smith	Yes. Tag must be present but null string can be provided.	Used for reference only.
Organization Name	The organization to which the author belongs. It may be a state name, an organization name, or a company name. For submissions to the CDX Node, this should be the name of the organization.		Yes. Tag must be present but null string can be provided.	Used for reference only.
DocumentTitle	Title of the document.	EMTS	Yes. Tag must be present but null string can be provided.	Reference to the flow.
CreationDate Time	This is a timestamp that marks when the document, including the payload and header part, was created.	2006-04-05T09:30:47-05:00	Yes (Cannot be empty).	Must be in valid xsd:datetime format.
Keywords	Description of the payload. Multiple keywords should be separated by commas. This is used only for document categorization and searching.		No.	
Comment	Additional comments for processors.		No.	
DataFlowName	The name of the data flow associated with the payload.	EMTS	No.	
DataService Name	Not used by EMTS.		No.	

(cont.)

Table 2: Exchange Header 2.0 Elements (cont.)

Name	Description	Example	Required	Notes
SenderContact	The sender's additional contact information. It can contain sender's electronic address and/or telephone numbers where the author can be reached.	P.O. Box 1234 Richmond, VA	No.	Element is not used by EMTS. If data is provided it will be ignored.
Application UserIdentifier	Application specific submitter identification.	JohnSmith	No.	The submitter may supply his CDX registered account information that is used to access MyCDX. The CDX user Id is the equivalent of the EMS user identifier.
SenderAddress	A well-formed URI where results or reports can be sent.		No.	Element is not used by the EMTS.
Property	Other properties of the document using named value pairs.		No.	Element is not used by the EMTS.
Signature	An XML signature associated with the document.		No.	Element is not used by the EMTS.

3.4 EMTS Namespace

The EMTS namespace uses a URL to reference the location of the current version of the EMTS on the CDX network, and allows the user to reference it through a prefix "emts:". The major version number of the EMTS is also included in the namespace. Without this reference, all complex types and XML elements cannot be validated resulting in an XML file validation error.

Figure 2 provides an XML example which declares the EMTS namespace through the use of the xmlns (XML Namespace) schema attribute and assigns the namespace a prefix of "emts:"

Figure 2: Declaring the EMTS Namespace

```
<?xml version="1.0" encoding="UTF-8"?>
<emts:EMTS xsi:schemaLocation="http://www.exchangenetwork.net/schema/emts/1 EMTS_EMITS_v1.0.xsd"
xmlns:emts="http://www.exchangenetwork.net/schema/emts/1" xmlns:xsi="
http://www.w3.org/2001/XMLSchema-instance">
```

The declaration of the namespace is included at the top of each XML file, and allows the user to reference the EMTS complex types and elements with the "emts:" prefix followed by a colon (as in emts:GenerateTransactionDetail). Each complex type and XML element, including root elements, must contain the namespace prefix.

The following XML example demonstrates an XML submission file that contains the Exchange Network Header with an EMTS payload. This file should be zipped before it is submitted to the EMTS.

Figure 3: Header Example

```
<hdr:Document id="ID01" xsi:schemaLocation="http://www.exchangenetwork.net/schema/header/2 header.xsd"
xmlns:hdr="http://www.exchangenetwork.net/schema/header/2" xmlns:ds="http://www.w3.org/2000/09/xmldsig#23"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<hdr:Header><hdr:AuthorName/><hdr:OrganizationName/><hdr:DocumentTitle/><hdr:CreationDateTime>
2009-12-18T09:22:50</hdr:CreationDateTime><hdr:ApplicationUserIdentifier>CindyFerreira
</hdr:ApplicationUserIdentifier></hdr:Header>
  <hdr:Payload>
    <emts:EMTS xsi:schemaLocation="http://www.exchangenetwork.net/schema/emts/1 EMTS_EMMS_v1.0.xsd"
xmlns:emts="http://www.exchangenetwork.net/schema/emts/1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <emts:UserLoginText>CindyFerreira</emts:UserLoginText>
      <emts:SubmittalCreationDate>2009-12-18</emts:SubmittalCreationDate>
      <emts:OrganizationIdentifier>1234567</emts:OrganizationIdentifier>
      <emts:SubmittalCommentText>Non-ester Renewable Diesel Retire</emts:SubmittalCommentText>
      <emts:RetireTransactionDetail>
        <emts:RINQuantity>65</emts:RINQuantity>
        <emts:BatchVolume>65</emts:BatchVolume>
        <emts:FuelCode>5</emts:FuelCode>
        <emts:AssignmentCode>1</emts:AssignmentCode>
        <emts:RINYear>2009</emts:RINYear>
        <emts:RetireReasonCode>70</emts:RetireReasonCode>
        <emts:TransactionDetailCommentText>No comment provided</emts:TransactionDetailCommentText>
      </emts:RetireTransactionDetail>
    </emts:EMTS>
  </hdr:Payload>
</hdr:Document>
```

3.5 Payload

The EMTS supports the inclusion of only one payload per submission file. The CDX Node will not route submissions including more than one payload. However, a payload can contain multiple EMTS transactions. The format of the payload must be constructed in accordance with the EMTS schema.

3.5.1 Validating the EMTS XML

Prior to transmitting any XML files to EPA, the XML document should be checked for validity. This can be accomplished using either or both of the following:

- EPA's XML schema validation tool. This web-based validation tool is a set of XML web services for validating XML documents against the associated schemas and custom rules. This can be found at <http://tools.epacdxnode.net/>.
- A third party XML validation tool (e.g., XML Spy, Liquid XML, etc.) is strongly encouraged. The validation tool must validate that an XML document is both well-formed and valid against the EMTS schema specifications.

4 Configuring the Network Exchange

There is one flow for the EMTS on the Exchange Network, and is detailed in the following table.

Table 3: Configuration of Network Exchange Parameters

FCD Specification Area	Value	Notes
Flow Name	EMTS	
Network Method/Parameters	Submit Parameters <ul style="list-style-type: none"> • SecurityToken: A security ticket issued by the service provider or a trusted service provider. • Dataflow: The name of target dataflow: "EMTS". Node Submission will support one payload per document. Only one document will be provided, comprised of the payload.	
Payload Schema	EMTS_EMMS_v1.0.xsd	
Header Property	N/A	
Payload Operation	N/A	
Payload Formatting/Structure		
Payload File Naming Convention	The payload must be an XML document that is compressed as a ZIP document type.	
GetStatus Responses	All standard Get Status responses.	
Timing	N/A	
Authentication and User Id's Mapping	All node users must be registered in NAAS and their CDX user Id's must be mapped to their NAAS Id's. Contact the EMTS Support Desk or Appendix B for details.	
NAAS Authorized User Accts	CDX must authorize Submit to EMTS	

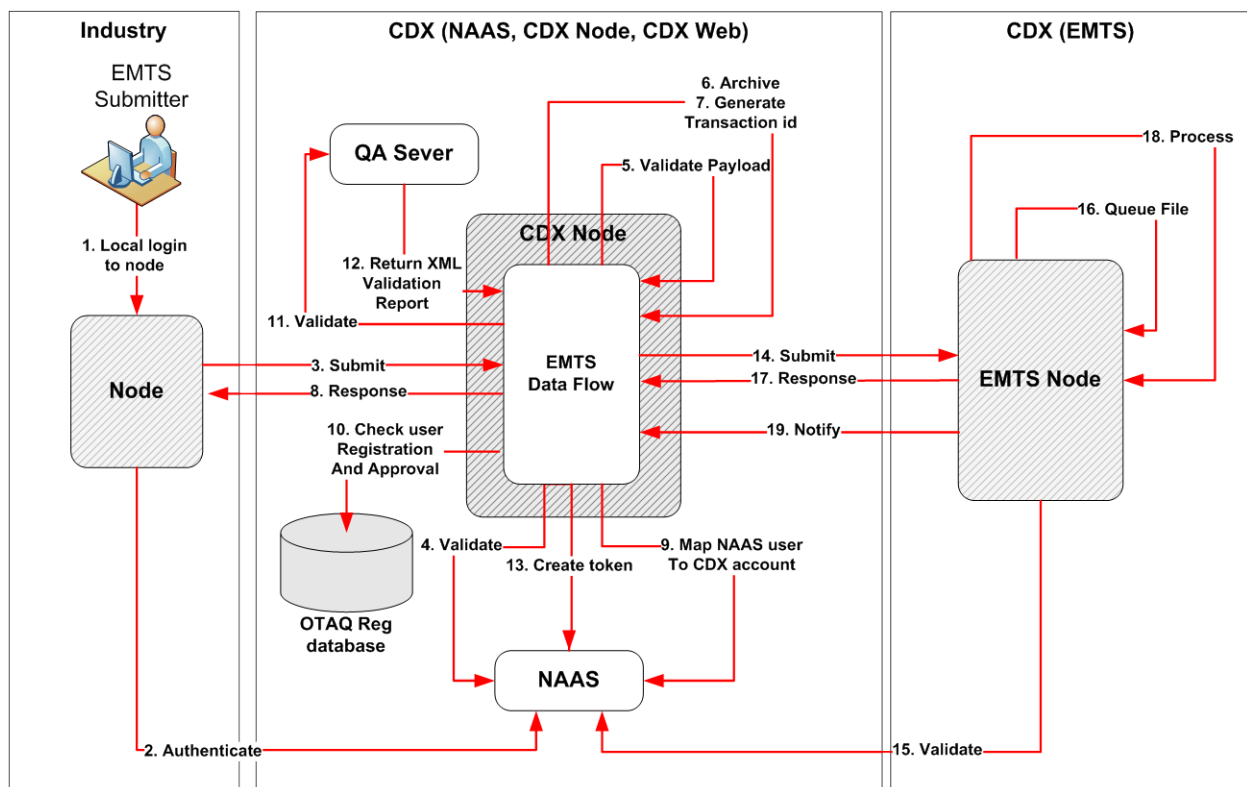
5 Submission Processing and Feedback

In order to initiate an EMTS flow submission, the user must have a CDX web account to access the MyCDX website and have registered their organization and facilities through the OTAQ Fuel Registration process. The user must also have a NAAS account and have permission to participate in the EMTS data flow. Both Node Client and Full Nodes must use user NAAS accounts registered for EMTS data flow. See Appendix B: OTAQ Registration Process, for more information on acquiring account and permissions.

5.1 Submission Using a Node or Node Client

The following diagram and steps demonstrate how an EMTS submitter submits an XML file using a Node or Node Client.

Figure 4: Submission from Node or Node Client



1. The submitter logs onto their Node Client or Full Node application. Depending on the node application, this step may or may not be required.
2. The submitter logs in to NAAS via CDX Node using his NAAS user Id. The submitter node issues an Authentication web service to CDX Node. The following end point URLs may be used:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>
 Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

The submitting node passes following parameters:

- UserId: NAAS user Id
- Credential: password

- Domain: "default"
- AuthenticationMethod: "Password"

On success CDX Node returns security token to the submitter node. On failure, the CDX Node returns an Authentication SOAP Fault.

The following sequence is performed as a synchronous set of actions. If an action fails, the CDX Node returns a failed submission response containing error information and the transaction ends.

3. The submitter node submits the XML file to the CDX Node. The following end point URLs may be used:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>

Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

The submitting node passes following parameters:

- Security token: Security token received in step 2.
 - Transaction Id: Not used.
 - Dataflow: "EMTS"
 - FlowOperation: Not used.
 - Recipient: Not used.
 - Documents: One document containing zipped EMTS XML document.
4. The CDX Node validates security token against NAAS. This will authenticate the submitter and authorize the submission to the EMTS.
 5. The CDX Node validates the payload. The submission payload can contain only one document. The document must be compressed and be a ZIP document type.
 6. The CDX Node archives the submitted document.
 7. The CDX Node generates a unique Transaction Id and assigns a status of "PROCESSING". The CDX Transaction Id uniquely identifies the submission, and can be used to check the status of the submission.
 8. If the previous operations were successful, the CDX Node returns a Submit response to the submitter node with the following information:
 - Transaction Id: The unique CDX Transaction Id for the submission.
 - Status: PROCESSING
 - StatusDetails: Your submission has been accepted and can be tracked using the following id:[cdx transaction id].

If the previous operation fails, the CDX Node returns a SOAP Fault to the submitter node and archives the returned transaction for further processing. See section 5.3, "Get Submission Status", for more details on the submit web service.

The following sequence is performed asynchronously after the submit response is sent back to the submitting node.

9. The CDX Node maps the submitter's NAAS credentials to his Web CDX credentials. The submitter's Web CDX credentials will be submitted to the EMTS and used by the the EMTS for submission authentication and authorization. If the mapping fails, the transaction status is set to "FAILED" and the transaction is ended. The CDX Node will send an email to the submitter and the CDX Node Administrator regarding the failure.
10. The CDX Node verifies that the user is registered and active in the OTAQ Registration database. If the user is not active or not registered in the OTAQ Registration database, the transaction status is set to "FAILED" and the transaction is ended. The CDX Node will send an email to the submitter and the CDX Node Administrator regarding the failure.

11. The CDX Node performs XML validation against the QA Server. The QA Server performs XML validation asynchronously. After completion of XML validation, the QA Server submits an XML validation report to the CDX Node. The CDX Node archives the XML validation report. This XML validation report can be downloaded by the submitter node via download web service. See section 5.6, "Download Document", for more details on the download web service.
12. If the XML document does not pass XML validation, the transaction status is set to "FAILED" and the transaction is ended. The CDX Node will send an email to the submitter regarding the failure. The email text will contain XML validation errors.
13. The CDX Node creates a security token that includes the submitter's Web CDX user Id, submitter's email address, and affiliation. This is mapped from the submitter's NAAS user Id in step 9 above.
14. The CDX Node submits the XML file to the EMTS Node, using the security token created in step 13. The CDX Node will retry three times if the submission to EMTS node is not successful. If the CDX Node successfully submits the document to the EMTS Node, the transaction status is set to "PENDING". If the submission fails, the transaction status is set to "FAILED" and the transaction is ended. The CDX Node sends an email to the submitter and the CDX Node Administrator regarding the failure.
15. The EMTS Node validates the security token with NAAS and extracts the submitter's Web CDX user Id from the security token.
16. The EMTS Node queues the submission for processing.
17. If steps 15 – 16 were successful, the EMTS Node returns the CDX Transaction Id to the CDX Node. If the transaction has failed, the EMTS Node returns a SOAP Fault to CDX Node. The CDX Node sets the transaction status to "FAILED" and the transaction is ended. The CDX Node sends an email to the submitter and the CDX Node Administrator regarding the failure.

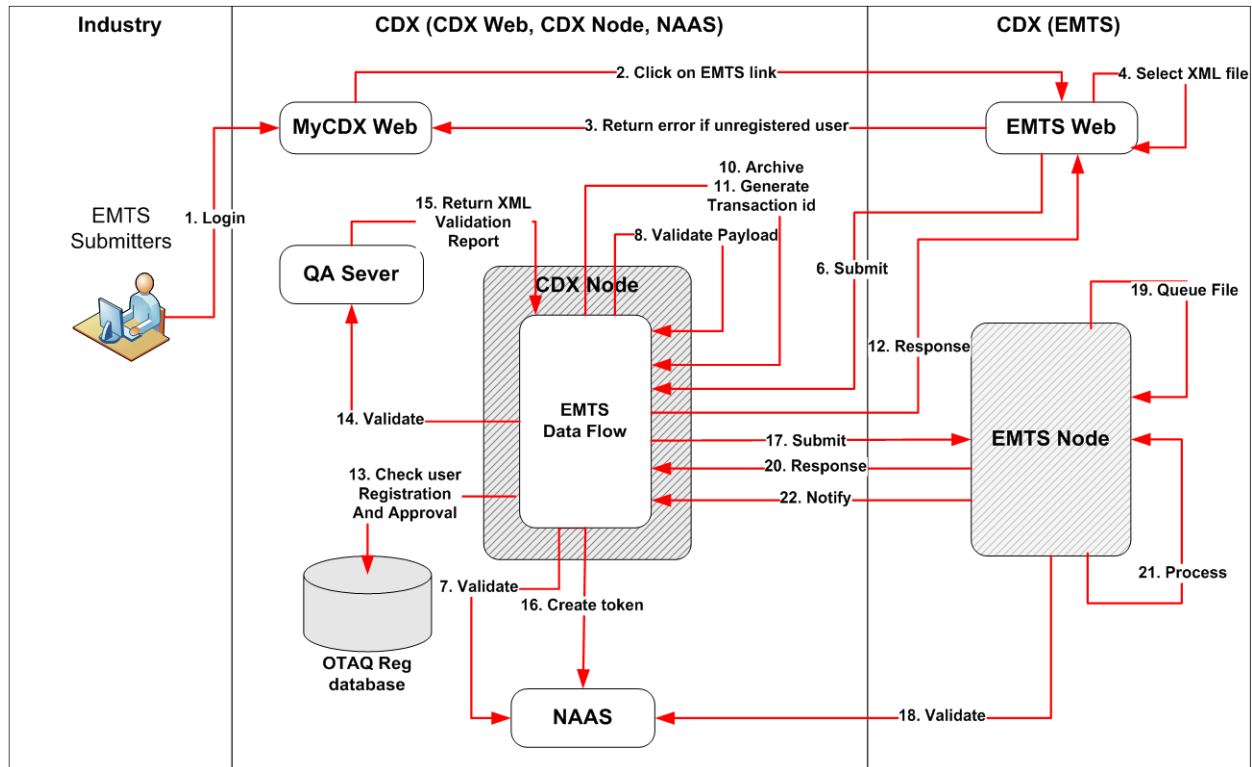
The following sequence is performed asynchronously after the submit response action in step 19.

18. The EMTS processes the submission.
19. If processing is successful, the EMTS issues a Notify request to the CDX Node, informing the CDX Node of the final status of the submission. The CDX Node ends the transaction and updates the transaction status to "COMPLETED". If processing failed during any of the processing steps, the EMTS issues a Notify request to inform CDX regarding the failure. The CDX Node ends the transaction and updates the transaction status to "FAILED". The CDX Node sends email to the submitter regarding the outcome of the transaction.

5.2 Submission from the EMTS Website

The following diagram and steps demonstrate how an EMTS submitter submits an XML file from the EMTS website. The EMTS website has a node client interface customized for the EMTS flow.

Figure 5: Submission from EMTS Website



1. The user logs into the MyCDX website.
2. The user clicks the OTAQEMTS:OTAQ EMTS Application link. The user's CDX credentials are passed to the EMTS website for auto sign-on to the EMTS.
3. If the user does not have permission to operate in the EMTS website, the user is given an error message and redirected back to the MyCDX website.

The following sequence is performed as a synchronous set of actions:

4. The user selects an XML file to submit. The File Submission interface is customized for the EMTS data flow. The CDX Node URL, data flow name, and other submission parameters are provided automatically by the EMTS. The EMTS verifies that the document is zipped, and that the XML conforms to the Exchange Network Header 2.0 and EMTS xsd specifications.
5. The EMTS creates a security token that contains the user's CDX Web user Id, email address, and affiliation.
6. The EMTS submits the XML file to the CDX Node, using the security token created in step 5.
7. The CDX Node validates the security token against NAAS, which will authenticate the submitter and authorize the submission to the EMTS.
8. The CDX Node validates the payload. The submission payload can contain only one document. The document must be compressed and be a ZIP document type.
9. The CDX extracts the submitter's Web CDX user Id, email address, and affiliation.
10. The CDX Node archives the submitted document.
11. The CDX Node generates unique Transaction Id and assigns the status to "PROCESSING". The submission CDX Transaction Id uniquely identifies the submission, and can be used to check the status of the submission.
12. If the previous operations are successful, the CDX Node returns the following Submit response to EMTS:
 - TransactionId: The unique CDX Transaction Id.
 - Status: PROCESSING

- StatusDetails: Your submission has been accepted and can be tracked using the following id:[cdx transaction id]

If the previous operation fails, the CDX Node returns a SOAP Fault to the submitter node. The submitter node archives the returned transaction for further processing. See section 5.3, "Get Submission Status", for additional information regarding the submission status.

The following sequence is performed asynchronously after the submit response is sent back to the EMTS.

13. The CDX Node verifies that the user is registered and active in the OTAQ Registration database. If the user is not active or not registered in the OTAQ Registration database, the transaction status is set to "FAILED" and the transaction is ended. The CDX Node sends email to the submitter and the CDX Node Administrator regarding the failure.
14. The CDX Node performs XML validation against the QA Server. The QA Server performs XML validation asynchronously. After completion, the QA Server submits an XML validation report to the CDX Node. The CDX Node archives the XML validation report.
15. If the document did not pass XML Validation, the transaction status is set to "FAILED" and the transaction is ended. The CDX Node will send an email to the submitter regarding the failure. XML validation content is provided within the email.
16. The CDX Node creates a security token that includes the submitter's Web CDX user Id, email address, and affiliation. This is extracted from the security token in step 8 above.
17. The CDX Node submits the XML file to the EMTS Node, using the security token created in step 16. The CDX Node will retry three times if submission to the EMTS Node is not successful. If the CDX Node successfully submits the document to the EMTS Node, the transaction status is set to "PENDING". If the submission fails, the transaction status is set to "FAILED" and the transaction is ended. The CDX Node sends email to the submitter and the CDX Node Administrator regarding the failure.
18. The EMTS Node validates the security token with NAAS and extracts the submitter's Web CDX user Id from security token.
19. The EMTS Node queues the submission for processing.
20. If steps 18 – 19 are successful, the EMTS Node returns the CDX Transaction Id to the CDX Node. If steps 18 – 19 fail, the EMTS Node returns a SOAP Fault to the CDX Node. The CDX Node sets the transaction status to "FAILED" and the transaction is ended.

The following sequence is performed asynchronously after the submit response action in step 20.

21. The EMTS processes the submission.
22. If processing is successful, the EMTS issues a Notify request to the CDX Node to inform the CDX Node regarding the final status of the submission. The CDX Node ends the transaction and updates the status to "COMPLETED". If processing fails during any of the processing steps, the EMTS issues a Notify request to inform the CDX Node of the failure. The CDX Node ends the transaction and updates the status to "FAILED".

5.3 Get Submission Status

The following steps demonstrate how the submitter node obtains the current transaction status. This functionality is applicable to all node types (Client Nodes, Full Nodes, EMTS Node).

1. The submitter logs into NAAS using his NAAS user Id. NAAS returns a security token to the submitter node.
2. The submitter node issues the GetStatus web service method using one of the following end point URLs:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>

Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

The following parameters are used:

- Security token: Security token returned in step 1.
 - Transaction Id: Transaction Id returned in section 5.1 step 8.
3. The CDX Node validates the security token against NAAS.
 4. If the user was authenticated and authorized, the CDX Node returns a StatusResponse containing status information:
 - TransactionId: Passed Transaction Id.
 - Status: CDX Node returns any of the following statuses:
 - o Processing: Submission was received and steps 4 – 13 from section 5.1 were successfully performed.
 - o Pending: Submission was successfully distributed to EMTS Node.
 - o Completed: Submission was received by EMTS Node and processed.
 - o Failed: Submission failed.
 5. The submitter node archives the received information.

5.4 Obtain Transaction History

The following steps demonstrate how the submitter node can obtain the transaction history using a Query web service. This functionality is applicable to all node types (Client Nodes, Full Nodes, EMTS Node).

1. The submitter logs into NAAS using his NAAS user Id. NAAS returns a security token to the submitter node.
2. The submitter node issues a Query web service method using one of the following end point URLs:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>

Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

The following parameters are used:

- Security Token: Security token.
 - Dataflow
 - Request (GetTransactionHistoryByTransactionId).
 - Parameters: Transaction Id (Transaction Id returned by CDX Node in step 9 section 5.1).
3. The CDX Node authenticate and authorizes the submitter node user via NAAS.
 4. The CDX Node returns NAAS Authentication/Authorization SOAP Fault to the submitter node if authentication on authorization fails.

5. The CDX Node returns a transaction history XML to the submitter node. This XML contains the transaction and document information in the following format:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<TransactionList>
  <Transaction xmlns="">
    <Id>transaction id</Id>
    <Status>Processing/Pending/Pending/Completed/Failed</Status>
    <Dataflow>EMTS</Dataflow>
    <CreationTime>yyyy-mm-ddThh:mm:cc</CreationTime>
    <DocumentList>
      <Id>document id</Id>
      <Name>file name</Name>
      <Type>file type</Type>
      <Status>document status</Status>
    </DocumentList>
  </Transaction>
</TransactionList>
```

6. The submitter node archives the transaction history as needed.

5.5 Obtain Document History

The following steps demonstrate how the submitter node can obtain the document history for a transaction using a Query web service. This functionality is applicable to all node types (Client Nodes, Full Nodes, EMTS Node).

1. The submitter logs into NAAS using his NAAS user Id. NAAS returns a security token to the submitter node.
2. The submitter node issues a Query web service method using one of the following end point URLs:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>

Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

The following parameters are used:

- Security Token: Security token.
 - Dataflow
 - Request (GetDocuments).
 - Parameters:
 - o Transaction Id: Transaction Id returned by CDX Node in step 9 section 5.1.
 - o Category: Document category (SUBMISSION, VALIDATION_REPORT).
3. The CDX Node authenticates and authorizes the submitter node user via NAAS.
 4. The CDX Node returns NAAS Authentication/Authorization SOAP Fault to the submitter node if authentication/authorization failed.

5. The CDX Node returns the document history for a submission to the submitter node. The XML contains the Transaction Id and document information in the following format:

```
<DocumentList xmlns="">
  <TransactionId>transaction id</TransactionId>
  <Document>
    <Id>document id</Id>
    <Name>document name</Name>
    <Category>SUBMISSION/VALIDATION_REPORT</Category>
    <Status>PENDING/PROCESSED/COMPLETED/FAILED</Status>
    <Type>XML/ZIP</Type>
    <CreationTime> yyyy-mm-ddThh:mm:cc </CreationTime>
    <Size>document size</Size>
    <DocumentProperties xmlns="">
      <Property>
        <Name>property name</Name>
        <Value>property value</Value>
      </Property>
    </DocumentProperties>
  </Document>
</DocumentList>
```

5.6 Download Document

The following steps demonstrate how the submitter node may download a document using the Download web service. This functionality is applicable to all node types (Client Nodes, Full Nodes, EMTS Node).

1. The submitter logs into NAAS using his NAAS user Id. NAAS returns a security token to the submitter node.
2. The submitter node issues a Query web service method using one of the following end point URLs:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>

Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

The following parameters are used:

- SecurityToken: The security token received in step 1.
 - Dataflow: EMTS
 - TransactionId: The Transaction Id for the submission. The Transaction Id must be the same Transaction Id issued by the CDX Node (see step 8 section 5.1.).
 - Documents: An array of NodeDocumentType. When the documents parameter is empty, the CDX Node will return all documents associated with the Transaction Id. When a Document Id is specified in the document's parameter, the node will return only the associated document.
3. The CDX Node shall authenticate and authorize the submitter node user through NAAS.
 4. The CDX Node shall return a NAAS Authentication/Authorization SOAP Fault to the submitter node if authentication or authorization fails.
 5. The CDX Node shall return the requested document(s) to the submitter node.

6 Web Service Methods

The following section describes the web service methods utilized by an Exchange Network 2.0 Node. Please see the Exchange Network 2.0 functional specifications for detailed information of web services.

6.1 Authenticate

The Authenticate method is used to obtain a security token from the CDX Node. This token is passed in any subsequent method calls in the exchange between the submitting node and the CDX Node.

The following URLs may be used:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>
Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

Authenticate Parameters:

- UserId: The submitter's NAAS user Id.
- Credential: The submitter's NAAS password.
- Domain: EMTS uses "default".
- AuthenticationMethod: EMTS uses "password".

Returns:

- SecurityToken: A security token used to identify the submitter.

6.2 Submit

The Submit method is used to submit an XML file to EMTS.

The following URLs may be used:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>
Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

Submit Parameters:

- SecurityToken: The security token issued by NAAS and returned from the Authenticate method. This security token can be used for several submissions as long as the token has not expired.
- TransactionId: Leave empty.
- Dataflow: "EMTS".
- FlowOperation: Leave empty.
- Recipient: Not used by EMTS.
- NotificationURI: Not used by the EMTS.
- Documents: An array of type nodeDocument. Each nodeDocument structure contains a single submission file. The EMTS requires a single nodeDocument.

Returns:

A Submit response with the following data:

- TransactionId: A unique CDX Transaction Id.
- Status: Text describing the submission's status ("Processing", "Pending", "Completed", or "Failed").
- StatusDetails: Additional details regarding the submission.

6.3 GetStatus

GetStatus method is used to obtain the transaction status of a submission.

The following URLs may be used:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>
Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

GetStatus Parameters:

- SecurityToken: The security token issued by NAAS and returned from the Authenticate method.
- TransactionId: The Transaction Id issued by the CDX Node from the Submit service.

Returns:

A GetStatus response with the following data:

- StatusResponseType containing following information:
 - TransactionId: The Transaction Id issued by the CDX Node from the Submit service.
 - Status: Text describing the submission's status ("Processing", "Pending", "Completed", or "Failed").
 - StatusDetail: Additional details on the Status description.

6.4 Query

The Query method is used to obtain transaction and document history.

The following URLs may be used:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>
Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

Query Parameters:

- SecurityToken: The security token issued by NAAS and returned from the Authenticate method.
- Dataflow: NODE
- Request: GetTransactionHistoryByTransactionId/GetDocuments.
- Parameters: See sections 5.4 and 5.5 for parameters.

Returns:

The XML representing transaction or document history. See 5.4 and 5.5 for details.

6.5 Download

The Query method is used to download document. The following documents can be downloaded:

- Original Submission
- XML Validation Report

The following URLs will be used:

Test: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>

Prod: <https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service>

Download Parameters:

- SecurityToken: The security token issued by NAAS and returned from the Authenticate method.
- Dataflow: EMTS
- TransactionId: The Transaction Id issued by the CDX Node from the Submit service. (See step 8 section 5.1.)
- Documents: An array of NodeDocumentType. When the documents parameter is empty, the CDX Node will return all documents associated with the Transaction Id. When a Document Id is specified in the documents parameter, the Node will return only the associated document.

Returns:

A message contains an array of zero or more NodeDocumentType.

Appendix A

Node Options

There are several options for how to transport the XML file through the Exchange Network.

CDX Network Node: A server that facilitates the interface between database systems and the Exchange Network. It is a partner's "point of presence" on the Exchange Network. Each partner has only one node. Nodes support:

- Server accessibility on the web;
- Protocols to ensure secure exchanges;
- Sending and receiving standards-based messages; and
- Returning requested information as XML.

Exchange Network Web Client: EPA's site for submitting environmental information via standard web browsers. The web client supports:

- Users to submit data via web-based forms and file uploads (flat file, XML file);
- Users to receive submission confirmation and processing reports;
- XML for the payload;
- Simple Object Access Protocol (SOAP) as a wrapper for the payload;
- Web Services Description Language (WSDL) for network exchange functions and services; and
- Hypertext Transfer Protocol (HTTP) for secure communication via the Internet.

EMTS Web Client: The EMTS website also supports a submittal environment which allows:

- Users to submit data via file uploads (XML file only); and
- XML for the payload.

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Appendix B

OTAQ Registration Process

This section describes the business processes for obtaining a CDX and NAAS account and the permissions to participate in the EMTS flow.

B – 1 New User Registration

The following procedures are for all new users that are currently not registered with CDX.

All users must register for a CDX Web account by self-registering in the following two available environments:

TEST: <https://test.epacdx.net/>

PROD: <https://epacdx.net/>

Once the user has acquired a CDX Web account, they are prompted to register for one or more programs. To register for the EMTS program, the steps are as follows:

- The user registers for the EMTS flow. This will automatically register the user for the OTAQ Registration Fuels flow.
- The user enters all necessary information into OTAQ Registration Fuel application.
- The user prints appropriate document prior to submitting registration information and mail the document to the address provided on the screen.
- EPA will review and approve registration materials.
- User will request registration with NAAS (See section B-2).
- Once approved, the user will receive permissions to submit documents to the EMTS flow and access the EMTS website.

B – 2 NAAS Node Clients User Registration

Users who plan to use Node Clients to submit files must be affiliated with the CDX Node EMTS Domain. These users will be registered and managed by CDX Node Administrator. Setting access privileges for the EMTS flow will be managed by the CDX Node Administrator via NAAS Web UI. The mapping between Web CDX user Id's and NAAS user Id's will be managed by the CDX Node Administrator via NAAS application mapping UI.

Following procedures will be required for all the users which were not registered with CDX or registered with CDX for other than EMTS/OTAQ REG flows and does not have NAAS EMTS user id:

1. Register with CDX Web for the EMTS flow. The user will be automatically registered for OTAQ Reg flow. (See Appendix B-1 for details.)
2. Enter all necessary information into OTAQ Reg application.
3. The OTAQ Registration Approver reviews and approves the user.

4. Once approved, request the Node Administrator to register with NAAS and request privileges for accessing EMTS flow and user mapping between the NAAS and CDX Web user Id's. Provide following information to the Node Administrator:
 - o Email address to receive communications from the EMTS flow associated with the user NAAS Id;
 - o EMTS Web CDX user Id; and
 - o Application: EMTS.

5. The CDX Node Administrator will register the user with NAAS. This includes:
 - 5.1 Creating the NAAS user Id using email provided by the user.
 - 5.2 Activating the user.
 - 5.3 Setting privileges for the user to be able to:
 - Submit EMTS data; and
 - Get EMTS transaction status.
 - 5.4 Query the CDX Node for the following:
 - Flow: "NODE";
 - Services: "GetTransactionHistoryByTransactionId" and "GetDocuments";
 - Parameters: Any; and
 - Download EMTS documents.
 - 5.5 Map the NAAS user Id to CDX Web user Id for the EMTS Application using NAAS application mapping UI.
 - 5.6 Send confirmation email to the user.

For users already registered with CDX Web for the EMTS flow and who do not have NAAS user Id's, see sections 4.4. For all users registered with CDX Web for the EMTS flow with existing NAAS user Id's see sections 4.5.3 through 4.5.5.

B – 2 NAAS Full Nodes User Registration

Users which are using Full Node will be affiliated with this Full Node. Full Node users will be registered by the Full Node Administrator. Setting access privileges for EMTS flow for Node users will be managed by CDX Node Administrator. Mapping between NAAS user Id and Web CDX user Id managed by CDX Node Administrator.

The following procedures will be required for all users which were not registered with CDX Web or registered with CDX Web for flows other than EMTS/OTAQ REG and do not have NAAS EMTS user Id:

1. Register with CDX Web for the EMTS flow. The user will be automatically registered for OTAQ Reg flow. (See Appendix B-1 for details.)
2. Enter all necessary information into OTAQ Reg application.
3. The OTAQ Registration Approver reviews and approves the user.
4. Once approved, request the Node Administrator to register with NAAS and request privileges for accessing EMTS flow and user mapping between the NAAS and CDX Web user Id's. Provide following information to the Node Administrator:
 - o Email address to receive communications from the EMTS flow associated with the user NAAS Id;
 - o EMTS Web CDX user Id; and
 - o Application: EMTS.

5. The CDX Node Administrator will register the user with NAAS. This includes:
 - 5.1 Creating the NAAS user Id using email provided by the user.
 - 5.2 Activating the user.
 - 5.3 Setting privileges for the user to be able to:
 - Submit EMTS data; and
 - Get EMTS transaction status.
 - 5.4 Query the CDX Node for the following:
 - Flow: "NODE";
 - Services: "GetTransactionHistoryByTransactionId" and "GetDocuments";
 - Parameters: Any; and
 - Download EMTS documents.
 - 5.5 Map the NAAS user Id to CDX Web user Id for the EMTS Application using NAAS application mapping UI.
 - 5.6 Send confirmation email to the user.

For all the users already registered with CDX Web for EMTS Flow and does not have NAAS user Id's, see sections 4.4 through 4.8. For all the users registered with CDX Web for EMTS Flow with existing NAAS user Id see sections 4.5.3 through 4.8.

B – 2 NAAS User Revocation

If the user was deactivated from OTAQ Reg Application this user privileges to access EMTS flow will be revoked. The following describes the steps taken to revoke a users privileges.

1. The OTAQ Reg Approver will send CDX Node Administrator email to revoke user privileges providing the user NAAS user Id.
2. The CDX Node Administrator will revoke the following user privileges:
 - Submit EMTS data.
 - Get EMTS transaction status.
 - Query THE CDX Node for the following:
 - o Flow: "NODE";
 - o Services: "GetTransactionHistoryByTransactionId" and "GetDocuments"; and
 - o Parameters: Any.
 - Download EMTS documents.
4. The CDX Node Administrator will email OTAQ Reg Approver upon completion of revocation.

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Appendix C

Procedures To Test EMTS Flow

The following describe how a user should test their connectivity to the EMTS flow. The following steps apply to the TEST environment and not Production.

1. If the user is not registered in either CDX or the OTAQ Registration, the user will create a Web CDX account and register their information in the OTAQ Registration application at <https://test.epacdx.net/>. See Appendix B-1 for more details.
2. The user will register their NAAS credentials. See Appendix B-2 for more details.
3. The user will produce a valid EMTS XML document for submission. See section 3 for more details.
4. The user will validate XML document via QA Server Web UI at <https://tools.epacdxnode.net/> or using any local XML validation tool.
5. The user will submit the XML document to the CDX Node using their submitter node. The submitter node will submit the XML document to the CDX Node. The following end point URL will be used: <http://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service>.
6. The CDX Node will process the submission and returns Transaction Id to the submitter node. The submitter node retains the Transaction Id for future processing. See section 5.1 for more details.
7. The user obtains the current transaction status using submitter node. See section 5.2 for more details.
8. The user can obtain the transaction history for the Transaction Id. See section 5.3 for more details.
9. The user can download submission documents. See section 5.4 for more details.

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Appendix D

Accessing EMTS from MyCDX Web

This section describes how users access the EMTS website from MyCDX Web. During the EMTS beta testing period, select users will have access to the EMTS application. Users may only access the EMTS through a registered account profile. An example of an account profile with access to the EMTS is shown below in figure D-1.

Figure D-1: MyCDX Account Profile

Central Data Exchange - MyCDX			
Welcome, Ms. Cindy Ferreira , None		Last Login:	December 21, 2009
		Registered Since:	November 23, 2009
		Recertification Date:	November 23, 2009
CDX Registration Status: Active			
You have 1 new message in your Inbox			
Change System Password	Edit Personal Information	Edit Current Account Profiles	Add New Employer Profile
Available Account Profiles:			
<ul style="list-style-type: none">• OTAQEMTS: OTAQ EMTS Application• OTAQREG: Fuels Programs Registration			

The EMTS URL link will be active for all registered OTAQ Fuels Registration participants. During the beta testing period, active beta testers will have access to the EMTS by clicking on the OTAQEMTS:OTAQ EMTS Application link. Users that are not approved beta testers will receive an error message indicating that you are not a registered EMTS user.

After the end of the beta testing period, all users that have registered for EMTS and Fuels and have been approved by EPA to participate in the EMTS flow can access the EMTS website through this link. Delays may occur for new users waiting for approval of their registration materials by EPA.

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Appendix E

Notifications for EMTS Flow

The following table outlines the notifications that are sent from either the CDX Node or the EMTS to the submitter.

Emails Sent from the CDX Node Regarding File Submission Status

Sender	Recipient	Notification Subject Line	Content
CDX	Submitter, CDX Help Desk	CDX Node Failure to Distribute Document to EMTS	<p>CDX Node failed to distribute the following document to the EMTS.</p> <p>EMTS submission with Transaction Id of: <cdx transaction id> On: <TEST/PROD> Submission time: <mm/dd/yyyy hh:mm:ss> Document name: <Document Name> Submitter NAAS user Id: <NAAS user id> Submitter CDX Web user Id: <CDX Web user id> Submission status: FAILED.</p> <p>CDX Node may be experiencing some technical difficulties. Please resubmit your document at a later time. Contact the CDX Help Desk at helpdesk@epacdx.net or 1-888-890-1995, option 1 if this problem persists.</p>
CDX	Submitter	CDX Node XML Schema Validation Failure on EMTS Document	<p>Document: <Document Name> did not pass XML schema validation.</p> <p>EMTS submission with Transaction Id of: <cdx transaction id> On: <TEST/PROD> Submission time: <mm/dd/yyyy hh:mm:ss> Submitter NAAS user Id: <NAAS user id> Submitter CDX Web user Id: <CDX Web user id> Submission status: FAILED.</p> <p>The following XML error report <Document ID> is available for download. Please check the format of your XML document against the EMTS schema to ensure that it is valid and well-formed before re-submitting your file.</p>

(cont.)

Emails Sent from the CDX Node Regarding File Submission Status (cont.)

Sender	Recipient	Notification Subject Line	Content
CDX	Submitter	CDX is Unable to Find CDX Web User Identification based on NAAS Identification.	<p>CDX Node was unable to map NAAS user Id <NAAS user id> to CDX Web user Id.</p> <p>EMTS submission with Transaction Id of: <cdx transaction id> On: <TEST/PROD> Submission time: <mm/dd/yyyy hh:mm:ss> Submitter NAAS user Id: <NAAS user id> Submitter CDX Web user Id: <unknown> Submission status: FAILED.</p> <p>Please contact the CDX Node help desk at nodehelpdesk@epacdx.net to verify that your NAAS account has been completed properly.</p>
EMTS	CDX	EMTS has completed is processing of the document.	<p>EMTS submission with Transaction Id of: <cdx transaction id> Document: <Document Id><Document Name> Submission status: COMPLETED/FAILED.</p>
CDX	Submitter	CDX was unable to verify that the submitter is a registered user in OTAQReg	<p>CDX is unable to verify that you are a registered user in the OTAQ Registration system with permission to submit documents to the EMTS.</p> <p>EMTS submission with Transaction Id of: <cdx transaction id> Document: <Document Name> Submission time: <mm/dd/yyyy hh:mm:ss> Submitter NAAS user Id: <NAAS user id> Submitter CDX Web user Id: <CDX Web user id> Submission status: FAILED</p> <p>Please contact the OTAQ Registration Help desk at FuelsProgramsReporting@epa.gov or 1-202-343-9755 for assistance.</p>
CDX	Submitter	CDX Node has completed transaction	<p>EMTS submission with Transaction Id of: <cdx transaction id> Document: <Document Id><Document Name> Submission time: <mm/dd/yyyy hh:mm:ss> Submitter NAAS user Id: <NAAS user id> Submitter CDX Web user Id: <CDX Web user id> Submission status: COMPLETED/FAILED</p> <p>You will receive additional email from the EMTS containing additional information regarding your submission document.</p>

(cont.)

Emails Sent from the CDX Node Regarding File Submission Status (cont.)

Sender	Recipient	Notification Subject Line	Content
EMTS	All Submitters within an Organization	EMTS Processing Failure	<p>The following document submitted on <submission date> on behalf of <organization name (organization id)> could not be processed due to one or more critical errors.</p> <p><cdx transaction id><file name > submitted by <CDX Web user name></p> <p>To see the full error report for these files please go to <EMTS URL>.</p>
EMTS	All Submitters within an Organization	EMTS Daily Processed Document Summary	<p>The following files submitted on <submission date> on behalf of <organization name (organization id)> have been successfully processed:</p> <p><cdx transaction id><file name 1> submitted by <CDX Web user name></p> <p><cdx transaction id><file name 2> submitted by <CDX Web user name></p> <p>.....</p> <p>The following files submitted on <submission date> on behalf of <organization> were not successfully processed due to one or more critical errors:</p> <p><cdx transaction id><file name 3> submitted by <CDX Web user name></p> <p><cdx transaction id><file name 4> submitted by <CDX Web user name></p> <p>.....</p> <p>To see the full error report for these files please go to <EMTS URL>.</p>
EMTS	All Submitters within an Organization	EMTS Notification of Pending Trades	<p>Your organization has been named as a trading partner of RINs for the following transactions:</p> <p><Fuel Type><Assignment><RIN Quantity><Trading Partner></p> <p><Fuel Type><Assignment><RIN Quantity><Trading Partner></p> <p>You have until <date> to accept these transactions. To accept or deny these transactions please go to <EMTS URL>.</p>

(cont.)

Emails Sent from the CDX Node Regarding File Submission Status (cont.)

Sender	Recipient	Notification Subject Line	Content
EMTS	All Submitters within an Organization	EMTS Summary of RIN Transactions	<p>The following actions have been taken on account of <organization> on <date>:</p> <p>RINs Generated: <x> total, <n> RINs of type <m>, <p> RINs of type <q> RINs Separated: <x> total, <n> RINs of type <m>, <p> RINs of type <q> RINs Sold: <x> total, <n> RINs of type <m>, <p> RINs of type <q> RINs Bought: <x> total, <n> RINs of type <m>, <p> RINs of type <q> RINs Retired: <x> total, <n> RINs of type <m>, <p> RINs of type <q></p> <p>To see transactions performed on previous dates, please see <EMTS URL>.</p>
EMTS	All Submitters within an Organization	EMTS RINs Retired	<p>The following RINS have been retired by <organization name(organization id)> for <compliance year> as of <date>:</p> <p><fuel type><assignment><RIN Year><total></p> <p>To see a complete history of all transactions performed to date, please see <EMTS URL>.</p>
EMTS	All Submitters within an Organization	EMTS Blocked Party Trade Denied	<p>The trade transaction initiated by <organization> on <date> has been denied by <trading partner> due to the RINS originating from a blocked source.</p>
EMTS	All submitters associated with the organization	EMTS Submission Error due to Incorrect Business Activities	<p>The file <cdx transaction id><file name 1> submitted by <CDX Web user name> contains transactions that are not allowable for <organization>. No data was processed for this submission.</p> <p>Please update your registered information at <OTAQReg URL> to update business activities for <organization>.</p>
EMTS	All Submitters within an Organization	EMTS Submission Error due to Incorrect User Permissions	<p>The following user attempted to submit transactions on behalf of <organization>, but does not have the correct permissions to do so.</p> <p>EMTS submission with Transaction Id of: <cdx transaction id> Submission time: <mm/dd/yyyy hh:mm:ss> Document name: <Document Name> Submitter NAAS user Id: <NAAS user id> Submitter CDX Web user Id: <CDX Web user id></p> <p>Please update your registered information at FuelsProgramsReporting@epa.gov or 1-202-343-9755 for assistance.</p>

(cont.)

Emails Sent from the CDX Node Regarding File Submission Status (cont.)

Sender	Recipient	Notification Subject Line	Content
EMTS	All Submitters within an Organization	EMTS Quarterly Report	The quarterly RIN Holding report has been generated for <organization name (organization id)>. Please download this report at <EMTS URL>.
EMTS	All Submitters within an Organization	EMTS Annual Statement	The annual RIN holding statement has been generated for <organization name (organization id)>. Please download this report at <EMTS URL>.
EMTS	All Submitters within an Organization	EMTS Annual Statement has not been Received	The annual RIN holding statement has been generated for <organization name (organization id)>. This statement must be verified and submitted to EPA. If you have not already done so, please download this report at <EMTS URL>. If you do not submit this report by <date> this may result in the locking of <organization name> RIN Holding account.
EMTS	All Submitters within an Organization	EMTS Quarterly Report has not been Received	The quarterly RIN Holdings report has been generated for <organization name (organization id)>. This statement must be verified and submitted to EPA. If you have not already done so, please download this report at <EMTS URL>. If you do not submit this report by <date> this may result in the locking of <organization name> RIN Holding account.
EMTS	All Submitters within an Organization	EMTS has Changed Status of RINs	The following RINs held by <organization name (organization id)> have been locked: <Fuel Type><Assignment><RIN Quantity><RIN Year> locked by <CDX User Name> ... The following RINs have been unlocked: <Fuel Type><Assignment><RIN Quantity><RIN Year> locked by <CDX User Name>
EMTS	All Submitters within an Organization	EMTS RIN Holdings	The following RINs held by <organization name (organization id)> as of <date> are: <Fuel Type><Assignment><RIN Year>< total> To see all RIN Holding details, please see <EMTS URL>.
EMTS	All Submitters within an Organization. All Submitters within the Trading Partner.	EMTS Reminder - Outstanding Trade Transactions	The following trade transactions initiated by <organization> have not been accepted: <Fuel Type><Assignment><RIN Quantity><Trading Partner> <Fuel Type><Assignment><RIN Quantity><Trading Partner> These transactions will expire on <date>.

(cont.)

Emails Sent from the CDX Node Regarding File Submission Status (cont.)

Sender	Recipient	Notification Subject Line	Content
EMTS	All Submitters within an Organization. All Submitters within the Trading Partner.	EMTS Trade Expired	The following trade transaction initiated by <organization>: <Fuel Type><Assignment><RIN Quantity><Trading Partner> <Fuel Type><Assignment><RIN Quantity><Trading Partner> was not completed by <trading partner>. This transaction has expired.
EMTS	All submitters associated with the organization and all individuals for the trading partner	EMTS Trade Cancelled by Seller	The trade transaction initiated by <organization> on <date> involving the following RINs has been cancelled by the originating party. <Fuel Type><Assignment><RIN Quantity><Trading Partner>
EMTS	All Submitters within an Organization. All Submitters within the Trading Partner.	EMTS Trade Denied by Buyer	The trade transaction initiated by <organization> on <date> for the following RINS has been denied by <trading partner>.

Appendix F

EMTS Support

Using EMTS

- EMTS Technical Support
 - emts-testing@pga.com
 - 1-800-385-6164
 - (Monday through Friday 9:00 a.m. until 5:00 p.m. ET)

Establishing CDX Login

- CDX Helpdesk
 - helpdesk@epacdx.net
 - 1-888-890-1995, then select Option 1.

NAAS Authentication and Node Questions

- CDX Node Support
 - nodehelpdesk@epacdx.net
 - 1-888-890-1995, then select Option 2.