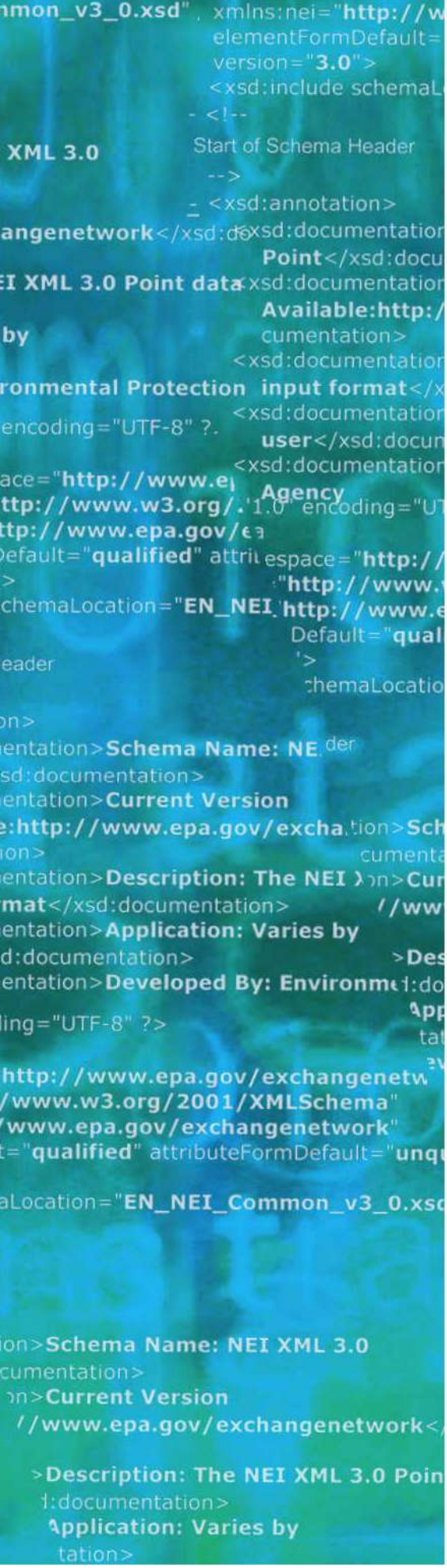

OpenNode2

RCRAInfo Outbound 5.6 Data Exchange Implementation Guide (Java)

Date: 4/11/2018

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Environmental Information exchange Network

Revision History

Date	Author	Changes	Version
12/7/2016	Windsor	Initial version	1
4/11/2018	Windsor	Updated for version 5.6 schema.	1.1

Table of Contents

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Data Exchange Overview

The purpose of this document is to provide detailed instructions for the installation and configuration of the Exchange Network Resource Conservation and Recovery Act information system (RCRAInfo) Outbound data exchange on the Java implementations of the Exchange Network OpenNode2 (OpenNode2).

The RCRAInfo Outbound data exchange offers a data service that is used to **solicit and retrieve** data from the EPA RCRAInfo system and load the data into the RCRA Outbound staging tables.

Further detail about the RCRAInfo Outbound data exchange is available in the Flow Configuration Document (FCD) published at exchangenetwork.net.

The RCRAInfo Outbound data exchange configuration process involves two main steps: 1) install and configure the RCRAInfo data flow 2) configure exchange services and node job schedules. The rest of this document will describe these two processes in detail.

Terminology

Outbound data flow refers to the ability to obtain (solicit, query) data from the EPA. In other words, it is data outbound from the EPA.

Inbound data flow refers to the ability for a partner to push data to another partner. In the case of EPA, the data is going from the State, and data is coming Inbound into the EPA.

This document describes the RCRA Outbound data flow. Separate documentation can be found on GitHub that describes the RCRA Inbound data flow.

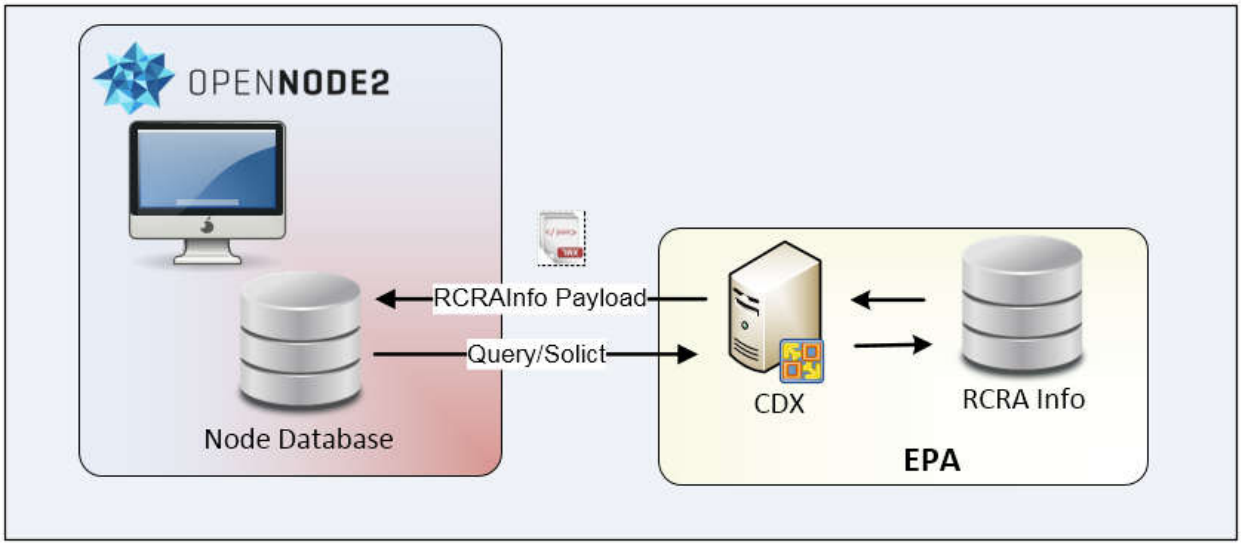
Important 5.6 Updates

The newest schema version, 5.6, introduced several important changes. The new GetCurrentHandlerByState and GetCurrentHandlerByID allows users to download the most current handler record, which is populated from the HREPORT_UNIV RCRA table. Additionally, new attributes have been added to the Handler payload (GetHDDataByState) including Trader Import and Export indicators, Slab Import and Export Indicators, Recycler Activity and Manifest Broker.

Note, there is no 5.5 plugin for this dataflow. The plugin version went from 5.4 to 5.6.

Plugin Architecture

The diagram below shows the architecture of a typical OpenNode2 Outbound plugin and how services that access the plugin's functionality are configured by a node administrator.



A plugin contains one or more **implementers**. Implementers are canned functionality that are specific to the data exchange. An implementer performs some task, such as composing XML from a series of staging tables.

A node administrator exposes the functionality in an implementer by creating **services**. When a service is created, an implementer must be chosen. Each service may have one or more configuration arguments, defined by the implementer. For example, the service may require that a database connection or node partner URL be provided. Services can be made available to external partners in the form of a query or solicit or as an inbound submission processor. "Task" services are internal only and are accessed via a **schedule**. Schedules also can have configuration arguments which are used by the plugin implementer assigned to the schedule.

RCRAInfo Data Flow Deployment

NOTE: This deployment and configuration guide is for the **Java version** of OpenNode2 with an **Oracle** database platform.

Install Data Objects for RCRAInfo Data Flow

Install RCRAInfo Data Objects for Node Flow Database

1. Open **Oracle SQL Developer (or other Oracle SQL tool)**
2. Select the existing Node Flow schema (typically called NODE_FLOW). A new schema can be created if desired.

3. Open and execute "RCRA_5.6_DDL-java-outbound.sql. For the outbound staging tables, if you already have existing version, please drop all tables from the schema and run the this create table script. There is no upgrade scipt.

Configure Partner and Data Sources

For the following steps, use the appropriate OpenNode2 Administration Utility.

Configure Network Partner

1. Click the **Configuration** button
2. Click the **Network Partners** button
3. Click **Add Partner**, and enter the following values for the new Network Partner:
    - **Name**: CDX RCRA Production *["Test" or "Production"]*
    - **Endpoint URL** (test): *https://testngn.epacdxnode.net/ngn-enws20/services/NetworkNode2Service*
    - **EndPoint URL** (production): *https://cdxnodengn.epa.gov/ngn-enws20/services/NetworkNode2Service*
4. **Version**: Select *Node v2.0* from the drop-down list

Configure Node Data Sources

1. Click the **Configuration** button
2. Click the **Data Sources** button
3. Click **Add Data Source**, and enter the following values for the Node Flow staging tables where the RCRA outbound tables are located:
    - **Name**: *RCRA-OUTBOUND*
    - **Provider:** *oracle.jdbc.OracleDriver*
    - **Connection**: jdbc:oracle:thin:[database name]/[password]@[host name or IP address]:[port number, i.e. 1521]:[Oracle SID]

Configure Node Exchange and Services

For the following steps, use the appropriate OpenNode2 Administration Utility.

Configure Exchange

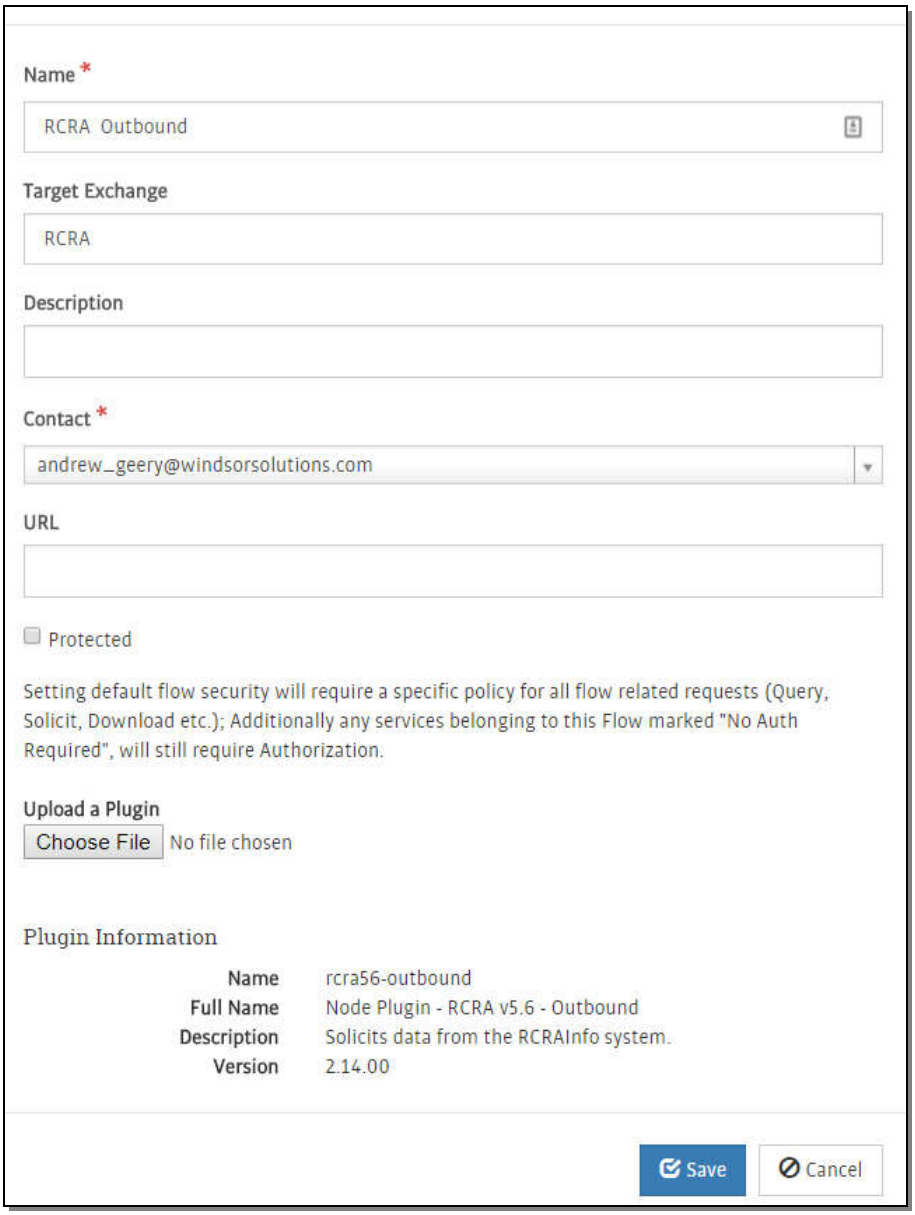
1. Click on the **Exchanges** tab
2. Click the **Add a New Exchange** button**,** and enter the following values for the new Exchange:

- **Name**: *RCRA Outbound*

- **Target Exchange:** *RCRA Outbound*
- **Description**: *RCRAInfo Outbound (from EPA) Data Exchange*
- **Contact**: Select *YourEmailHere@State.gov* from the drop-down list
- **URL**: http://www.exchangenetwork.net/data-exchange/rcrainfo/
- **Protected**: Checked/True

3. Click the Choose File button under **Upload a Plugin**
4. Select the java_rcra56Out_plugin zip file.

   OpenNode2 and all related Java plugins can be found at GitHub, by clicking Download Java.
5. Click the **Save** button



Configure Exchange Services

Solicits

Solicit services will provide the ability to obtain data from the EPA.

For each module that will be required (e.g., Compliance & Enforcement (CE), Handler (HD), Permitting (PM), Corrective Action (CA), GeoSpatial (GS), Financial Assurance (FA), Current Handler (CH)) a corresponding exchange will need to be established. Each module can have separate exchanges for returning results by State or by Handler.

Processor

The processor looks for pending solicits and checks the status at the EPA. If the status at the EPA is "completed" then the processor will download the file and insert the data into the RCRA Outbound staging tables. Only one processor service needs to be established to accommodate all solicits.

Clear Pending

The clear pending service will set the local status of any solicits from pending to "failed". If a user ever encounters a message in the processor that says, a pending solicit already exists, this service can be run to clear out that pending solicit.

Establish Solicit Services

Note, By State is most common. There is no need to establish By Handler if you are looking for all data for a given state.

Get CE By State

Under the **RCRA Info Outbound** exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *RCRA Info Import Get CE By State*
- **Implementer**: Select *SolicitOpCEByState* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get CE By Handler

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get CE By Handler*
- **Implementer**: Select *SolicitOpCEByHandler* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get HD By State

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get HD By State*
- **Implementer**: Select *SolicitOpHDByState* from the drop-down list

- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get HD By Handler

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get HD By Handler*
- **Implementer**: Select *SolicitOpHDByHandler* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get PM By State

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get PM By State*
- **Implementer**: Select *SolicitOpPMByState* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get PM By Handler

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get PM By Handler*
- **Implementer**: Select *SolicitOpPMByHandler* from the drop-down list
- **Type**: *Task*

- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get CA By State

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get CA By State*
- **Implementer**: Select *SolicitOpCAByState* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get CA By Handler

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get CA By Handler*
- **Implementer**: Select *SolicitOpCAByHandler* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get GS By State

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get GS By State*
- **Implementer**: Select *SolicitOpGSByState* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service

- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get GS By Handler

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get GS By Handler*
- **Implementer**: Select *SolicitOpGSByHandler* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get FA By State

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get FA By State*
- **Implementer**: Select *SolicitOpFAByState* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get FA By Handler

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get FA By Handler*
- **Implementer**: Select *SolicitOpFAByHandler* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service

- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get Current Handler By State (HREPORT_UNIV)

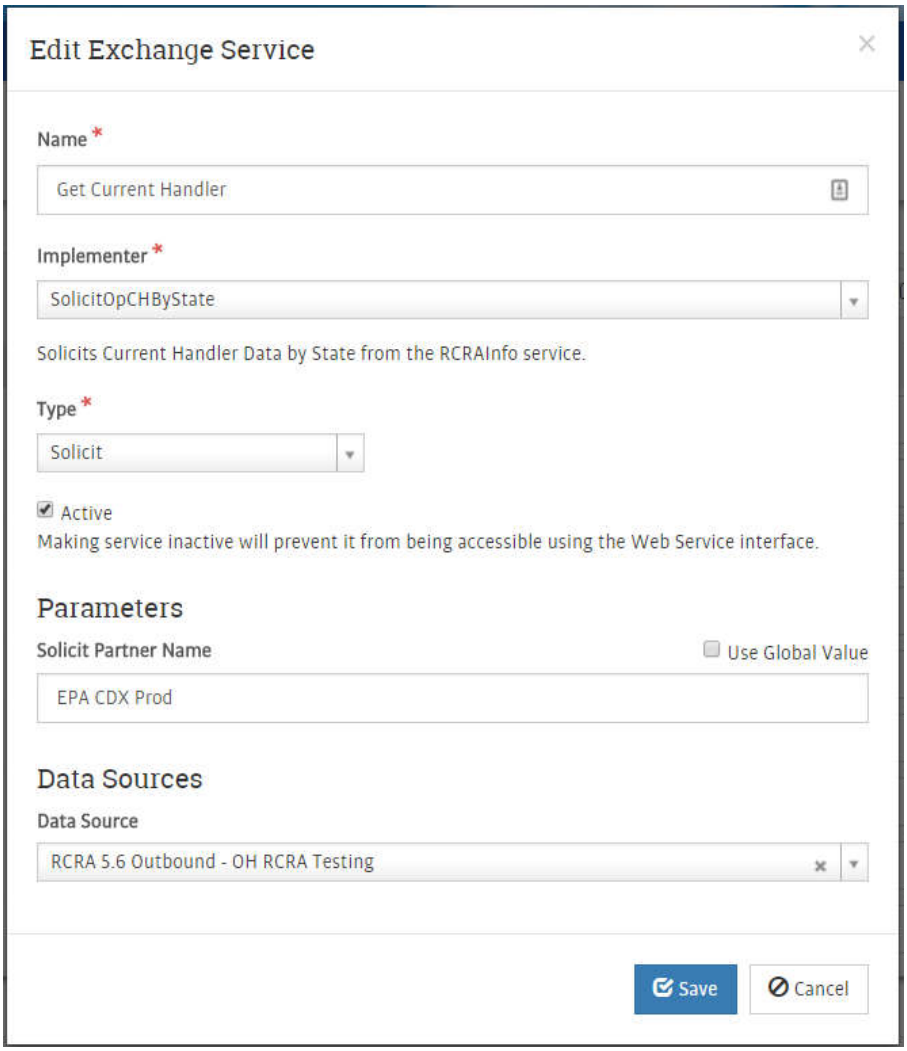
Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get Current Handler By State*
- **Implementer**: Select *SolicitOp**CH**ByState* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

Get Current Handler By Handler (HREPORT_UNIV)

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Get Current Handler By Handler*
- **Implementer**: Select *SolicitOp**CH**ByHandler* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Solicit Partner Name**: *EPA CDX Prod (for example) ["Test" or "Production"] (note: must match exactly to the partner name set up in the configuration – network partners section.)*
- **Stored Procedure:** Name of the post processing stored procedure located on the target data provider database. This accommodates data migrating to another source database. If not post processing, then leave blank. (optional)
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)



Current Handler

(example Exchange Service Configuration)

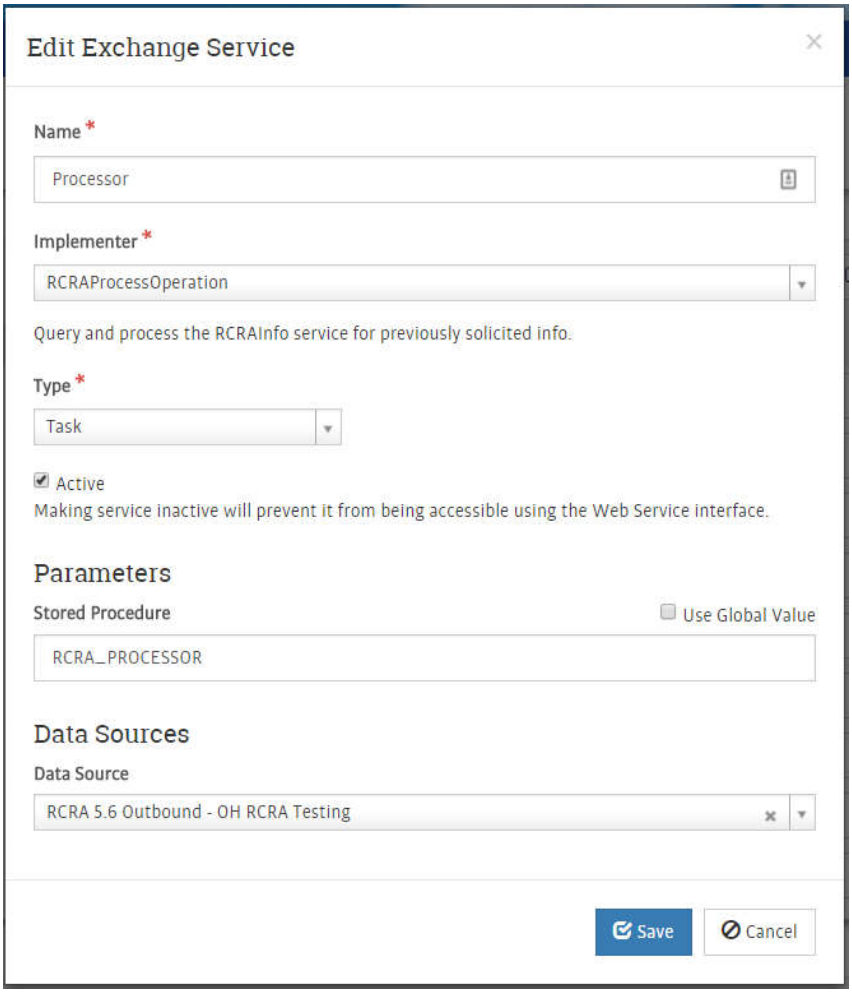
Establish Processor Service

Processor (download and import)

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Processor*
- **Implementer**: Select *RCRAProcessOperation* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service

- **Stored Procedure:** Name of the post processing stored procedure located on the target data provider database. This accommodates data migrating to another source database. If no post processing is involved, then leave blank. (optional)
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)

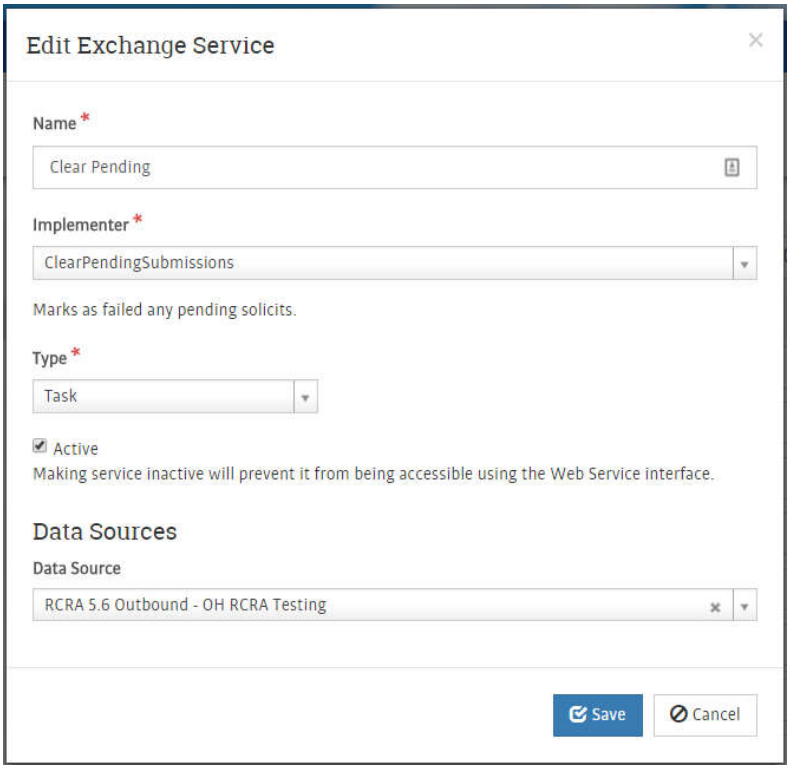


Establish Clear Pending

Clear Pending

Under the RCRA Info Outbound exchange, click the **Add Service** button  , and enter the following values for the new Service.

- **Name**: *Clear Pending*
- **Implementer**: Select *ClearPendingSubmissions* from the drop-down list
- **Type**: *Task*
- **Active**: check the box to enable the service
- **Data Source**: Select *appropriate data source* from the drop-down list. (location of the staging tables)



Configure Node Job Schedules

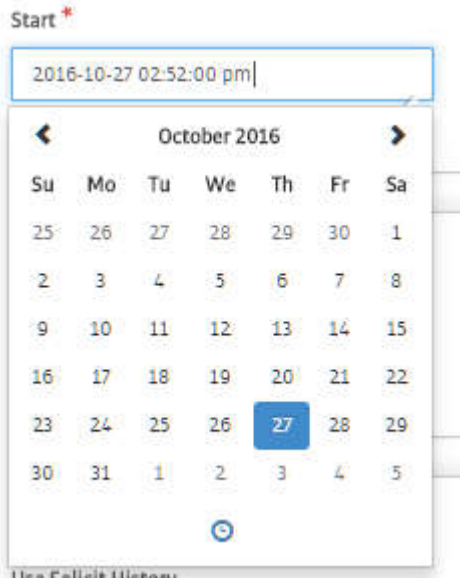
Scheduled Node jobs will be required for the RCRAInfo Outbound Data Flow implementation. Select Schedules from the main menu bar, and locate the RCRA Outbound exchange that was established during the last step. These steps will be repeated to solicit additional modules. Each Data Exchange created will have an accompanying Schedule block automatically created. The examples below are for HD by State and HD by Handler.

Additionally, a schedule need to be created for Processor (to download and import the solicited data) and Clear Pending services.

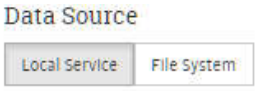
Configure "HD By State" Schedule

1. Click **Schedule** in the main menu
2. Click the **Add Schedule** (+) button for the RCRA Outbound exchange, and enter the following values for the new Schedule

- **Name**: *HD By State*
- **Active:** *Check box selected*
- **Start**: *<Select Date> by typing or selecting date/time from picker tool.* For an exact time, select the clock icon at the bottom of the calendar.



- **End**: *<Select Date> by typing or selecting date/time from picker tool.*
- **Frequency**: *This is a number incrementer – set this to the frequency numeric which will combine with the "Every" field to the right. Example "1 every Week"*
- **Every:** *Choose the appropriate time frame to correspond to the frequency field to the left. Example "1 every Week"*
- **Data Source**



  i. *Select the* **Local Service** *option*
  ii. *Select* **HD By State** *from the drop-down list*

- **Parameters**
  i. **Use Solicit History: '***true' or 'false' (see usage in the Schedule Using Submission History section of this document)*
  ii. **State**: *Two Letter State Code (e.g. 'OH')*
  iii. **Change Date**: *enter a date in the* ***YYYY-MM-DD*** *format (this will obtain all RCRA data that has been added or edited at RCRAInfo since data entered)*
- **Results Target**
  i. Select the **None** option

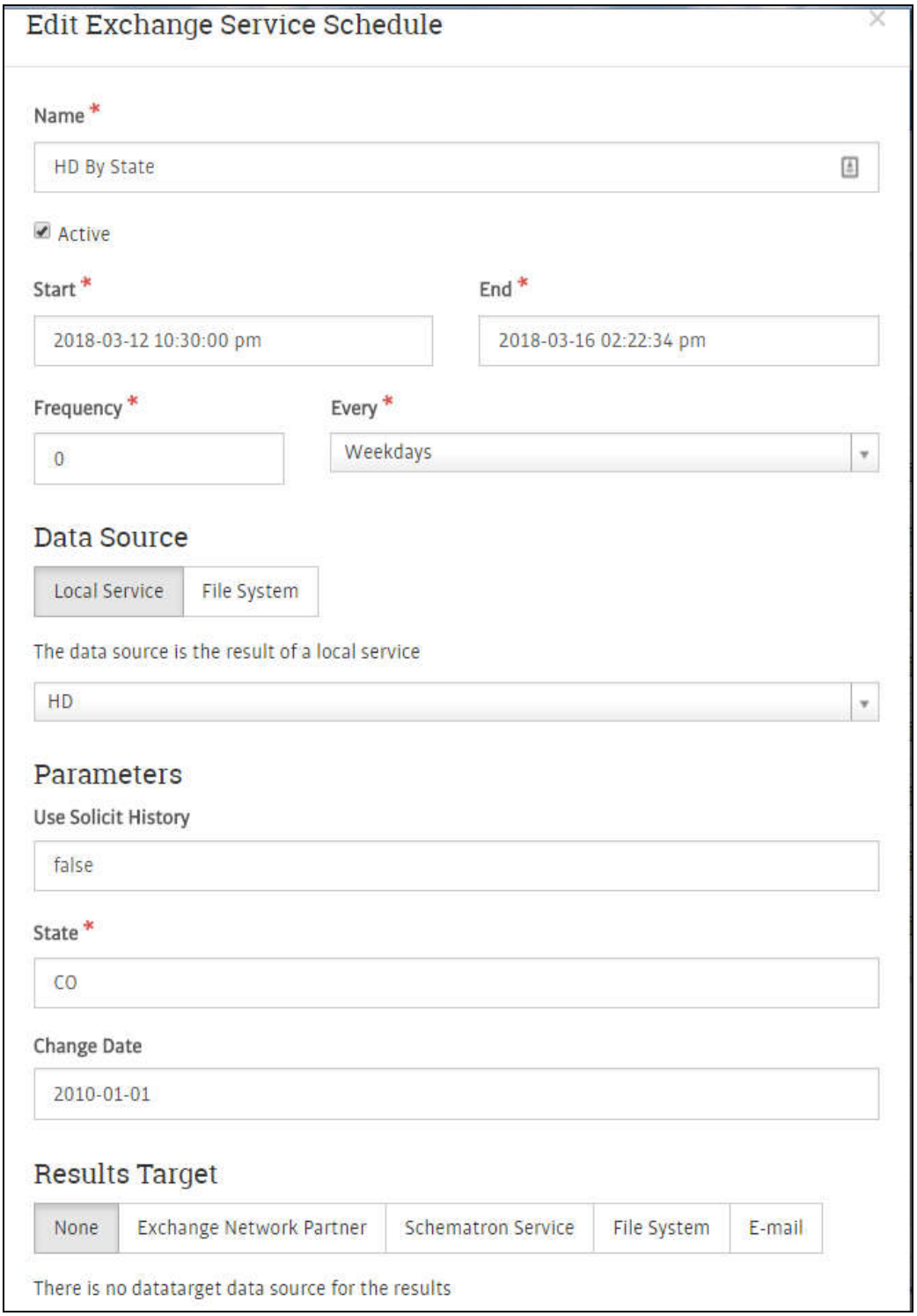
3. Click the **Save** button

Configure "HD By Handler" Schedule

1. Click **Schedule** in the main menu
2. Click the **Add Schedule** (+) button for the RCRA Outbound exchange, and enter the following values for the new Schedule
   - **Name**: *HD By Handler*

- **Active:** *Check box selected*
- **Start**: *<Select Date> by typing or selecting date/time from picker tool.*
- **End**: *<Select Date> by typing or selecting date/time from picker tool.*
- **Frequency**: *This is a number incrementer – set this to the frequency numeric which will combine with the "Every" field to the right. Example "1 every Week"*
- **Every:** *Choose the appropriate time frame to correspond to the frequency field to the left. Example "1 every Week"*
- **Data Source**
    i. *Select the* **Local Service** *option*
    ii. Select **HD By Handler** *from the drop-down list*
- **Parameters**
    i. **Use Solicit History:** *'true' or 'false' (see usage in the Schedule Using Submission History section of this document)*
    ii. **Handler ID:** *ID code for Handler whose data you wish to return*
    iii. **Change Date**: *enter a date in the* ***YYYY-MM-DD*** *format (this will obtain all RCRA data that has been added or edited at RCRAInfo since data entered)*
    iv. **State:** *Two Letter State Code (e.g. 'OH')*
    v. **Source Type:** *Options: A, B, E, I, N, R, T(leaving blank will obtain all source type records)*
    vi. **Sequence Number:** *Enter sequence number of record described (1 – 99999) (Leaving blank will obtain all sequence records)*
- **Results Target**
    i. Select the **None** option

3. Click the **Save** button

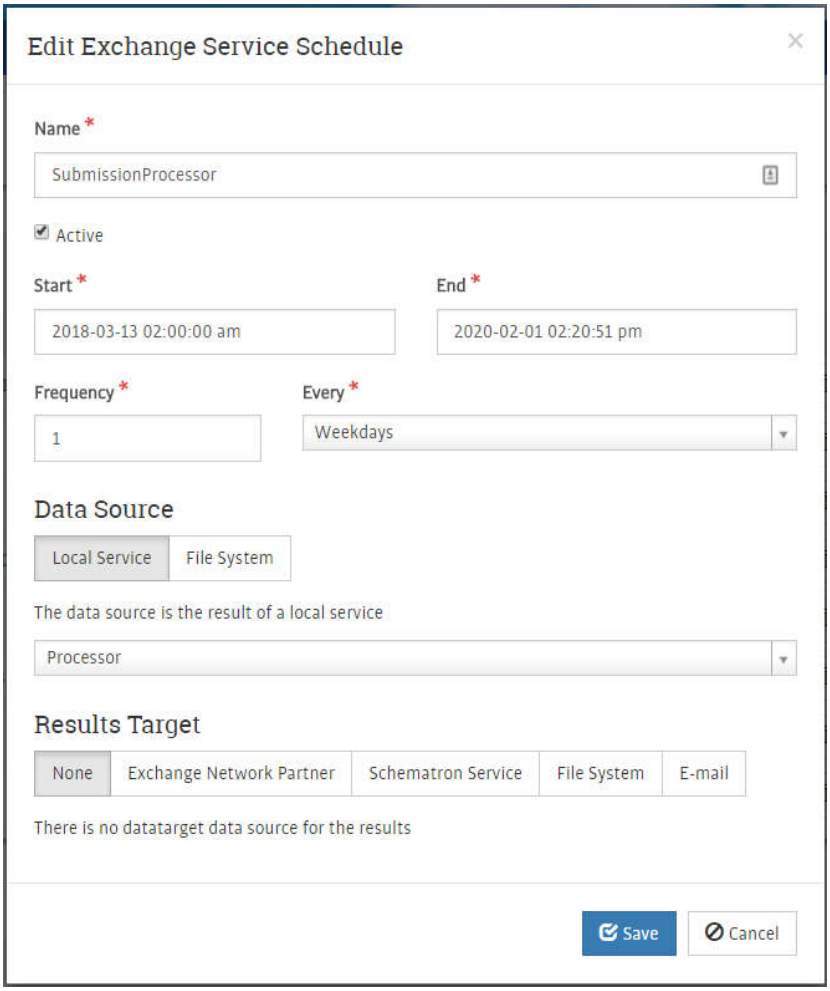


Get Handler By State Schedule

Configure "Processor" Schedule

Typically, you would schedule the processor service 30 mins to an hour after the last solicit schedule is run. This will allow enough time for the solicit to be completed by the EPA, so that the solicit file can be downloaded and imported into the staging tables.

1. Click **Schedule** in the main menu
2. Click the **Add Schedule** (+) button for the RCRA Outbound exchange, and enter the following values for the new Schedule
    - **Name**: *Submission Processor*
    - **Active:** *Check box selected*
    - **Start**: *<Select Date> by typing or selecting date/time from picker tool.*
    - **End**: *<Select Date> by typing or selecting date/time from picker tool.*
    - **Frequency**: *This is a number incrementer – set this to the frequency numeric which will combine with the "Every" field to the right. Example "1 every Week"*
    - **Every:** *Choose the appropriate time frame to correspond to the frequency field to the left. Example "1 every Week"*
    - **Data Source**
        i. *Select the* **Local Service** *option*
        ii. Select **Processor** *from the drop-down list*
    - **Results Target**
        i. Select the **None** option
3. Click the **Save** button



Processor Schedule

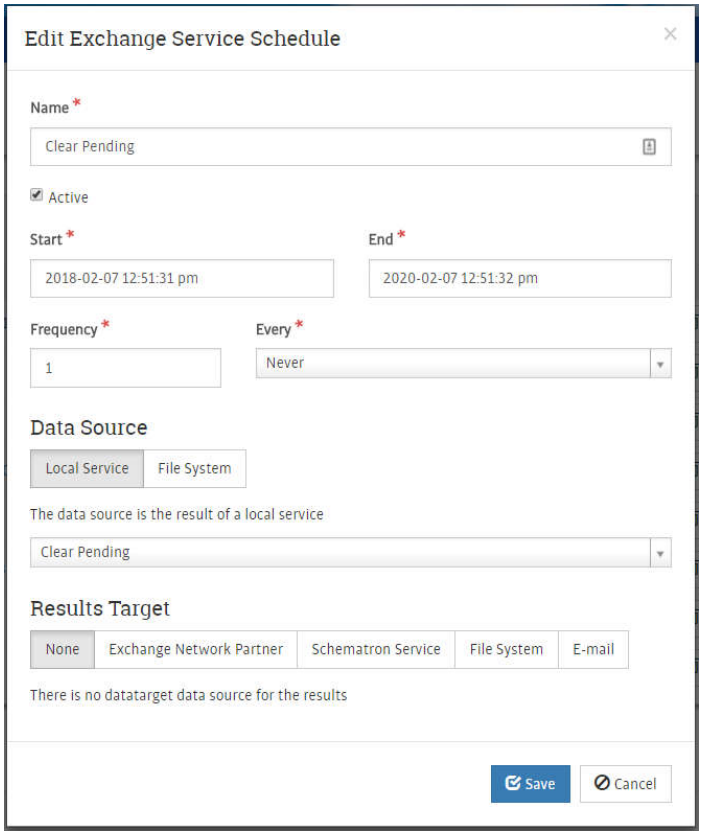
Configure "Clear Pending" Schedule

Note, this is not a schedule that you would typically set u to run automatically/nightly. But you will need to create the schedule, set the dates to anything, and set frequency to 1 and Every to Never. This will allow you to run the schedule manually by clicking the run now button.

1. Click **Schedule** in the main menu
2. Click the **Add Schedule** (+) button for the RCRA Outbound exchange, and enter the following values for the new Schedule
    - **Name**: *Clear Pending*
    - **Active:** *Check box selected*
    - **Start**: *<Select Date> by typing or selecting date/time from picker tool.*
    - **End**: *<Select Date> by typing or selecting date/time from picker tool.*
    - **Frequency**: *This is a number incrementer – set this to the frequency numeric which will combine with the "Every" field to the right. Example "1 every Week"*

- **Every:** *Choose the appropriate time frame to correspond to the frequency field to the left. Example "1 every Week"*
- **Data Source**
    i. *Select the* **Local Service** *option*
    ii. Select **Clear Pending** *from the drop-down list*
- **Results Target**
    i. Select the **None** option

3. Click the **Save** button



Clear Pending Schedule

Schedule Using the Submission History

In addition to manually choosing a "change date" to indicate what data should be pulled from RCRA Info, you can also have the schedule use the most recent successful pull date. The "change date" field is used on the first run; if the run is successful then the plugin will note the date and time of the successful run as well as the RCRA Info function that was used (this is located in the RCRA_SolictHistory table). During the next run, the "change date" field will be ignored and the last successful run date will be used instead.

All of the schedules that support this function will have a field called "Use Solicit History", if you would like to use this feature then type "yes" or "true" into this field. When the schedule is run, you will be able

to confirm that the correct date was used by clicking on the "Last Run Info" link. You will see output similar to the following:

```
Using submission history...
Submission history change date: 2016-07-01
```

Typing in "no" or "false" will ignore the submission history feature. A history record will not be written to the database, and the solicit will use the 'Change Date' to determine which data to solicit from the EPA.

Other RCRA Info Functions/Modules

All of the other RCRA Info functions are setup in the same way. Configure the service in the exchange and then the schedule; note that there is only one schedule required for each RCRA Info function. The following functions are supported by this plugin:

- CE By Handler, com.windsor.node.plugin.rcra56.solicit.SolicitOpCEByHandler
- CE By State, com.windsor.node.plugin.rcra56.solicit.SolicitOpCEByState
- HD By Handler, com.windsor.node.plugin.rcra56.solicit.SolicitOpHDByHandler
- HD By State, com.windsor.node.plugin.rcra56.solicit.SolicitOpHDByState
- CA By Handler, com.windsor.node.plugin.rcra56.solicit.SolicitOpCAByHandler
- CA By State, com.windsor.node.plugin.rcra56.solicit.SolicitOpCAByState
- PM By Handler, com.windsor.node.plugin.rcra56.solicit.SolicitOpPMByHandler
- FA By Handler, com.windsor.node.plugin.rcra56.solicit.SolicitOpFAByHandler
- FA By State, com.windsor.node.plugin.rcra56.solicit.SolicitOpFAByState
- PM By State, com.windsor.node.plugin.rcra56.solicit.SolicitOpCEByState
- GS By State, com.windsor.node.plugin.rcra56.solicit.SolicitOpGSByState
- GS By Handler, com.windsor.node.plugin.rcra56.solicit.SolicitOpGSByHandler
- Current Handler By State, com.windsor.node.plugin.rcra56.solicit.SolicitOpCHByState
- Current Handler By Handler, com.windsor.node.plugin.rcra56.solicit.SolicitOpCHByHandler

Data Structure

The DDL provided with the plugin will create a set of tables in the database that closely mimic the layout and organization of the XML data that the plugin will be receiving from RCRA Info. The following tables will be created and will be available for querying.

rcra_absfeaturepropertype	Abstract Feature Property Type Identifiers
rcra_areaacreage	Area Acreage of Handler or Area
rcra_cert	Hazardous Secondary Material Managed by the Handler

rcra_citn	Compliance Monitoring and Enforcement Citation Data
rcra_cmefacsub	CME Facility Submission
rcra_contact	Contact Information
rcra_contactaddress	Contact Address Information for Facility Owner/Operator
rcra_corractarea	Corrective Action Areas for Handler
rcra_corractauth	Corrective Action Authorities for Handler
rcra_corractevent	Corrective Action Event for Handler
rcra_corractfacsub	Corrective Action Facility Submission
rcra_corractrelevent	Corrective Action Related Event
rcra_corractrelpermitunit	Corrective Action Related Permit
rcra_corractstatcitn	Corrective Action Statutory Citation
rcra_costest	Estimates of the Financial liability costs associated with a given Handler
rcra_costestrelmech	Linking Data for Cost Estimates and Related Mechanisms
rcra_csnydate	Compliance Monitoring and Enforcement, Non-Complier Date Data
rcra_enfract	Compliance Monitoring and Enforcement Data, Enforcement Action
rcra_envpermit	Environmental Permits Issued to the Handler
rcra_eposodicwaste	Eposodic waste for the Handler
rcra_eval	Compliance Monitoring and Enforcement Data, Evaluation
rcra_evalcommit	Linking Data for Commitment/Initiative and Evaluation
rcra_evalvio	Linking Data for Evaluation and Violation
rcra_eventcommit	Linking Data for Commitment/Initiative and Corrective Action or Permitting Events
rcra_facownroper	Handler Owner and Operator Information
rcra_facsub	Facility Submission
rcra_finassurfacsub	Financial Assurance Data for Handler
rcra_finassursub	Financial Assurance Submission

rcra_geoginf	Geographic Information
rcra_geoginfsub	Geographic Information Submission
rcra_geogmeta	Geographic Metadata
rcra_gisfacsub	GIS Data for Handler
rcra_handler	Handler Identification Data
rcra_handlereposodicevent	Eposodic waste event for the handler
rcra_handlerlqgclosure	Closure information related to LQGs.
rcra_handlerlqgconsolidation	Consolidation data related to LQGs.
rcra_handlerwastecode	Codes Describing the Handler's Hazardous Waste Streams
rcra_hzrdsecondarymtrl	Hazardous Secondary Material Managed by the Handler
rcra_hzrdsecondarymtrlact	Hazardous Secondary Material Activity of the Handler
rcra_hzrdwastecmesub	Hazardous Waste CME Submission
rcra_hzrdwastecorract	Corrective Action Data for Handler
rcra_hzrdwastehandlersub	Hazardous Waste Handler Submission
rcra_hzrdwastepermit	Hazardous Waste Permit Submission
rcra_labhzrdwaste	Types of Laboratory Waste that the Handler Has Opted to Manage Under Sub-Part K
rcra_locaaddress	Location Address Information
rcra_mailingaddress	Mailing Address Information
rcra_mech	Mechanisms used to address cost estimates of the Financial liability associated with Handler
rcra_mechdetail	Details of the mechanism used to address cost estimates
rcra_media	Compliance Monitoring and Enforcement, Multimedia data
rcra_mlstn	Compliance Monitoring and Enforcement, Milestone Data
rcra_naics	NAICS Codes Reported for the Handler
rcra_otherid	Alternative Facility Identifiers

rcra_paymnt	Compliance Monitoring and Enforcement, Payment Data
rcra_penalty	Compliance Monitoring and Enforcement, Penalty Data
rcra_permitevent	Permit Event Data
rcra_permitfacsub	Permit Facility Submission
rcra_permitrelevent	Linking Data for Permitted Units and Permitting Events
rcra_permitseries	Permit Series Data
rcra_permitunit	Characteristics of process unit group
rcra_permitunitdetail	Characteristics of process unit group details
rcra_reportuniv	Current Handler data from the Report Universe table in RCRA Info.
rcra_reportunivsub	Report Universe Submission Data
rcra_request	Compliance Monitoring and Enforcement Request Data
rcra_sitewasteact	State and EPA Hazardous Waste Activity Codes
rcra_solcithistory	Tracks solicit history when Use Solicit History is set to true.
rcra_stateact	State Waste Activity of the Handler
rcra_suppenvproj	Compliance Monitoring and Enforcement, Supplemental Environmental Project Data
rcra_unvwasteactr	Universal Waste Generated by the Handler
rcra_usedoil	Used Oil Codes
rcra_vio	Compliance Monitoring and Enforcement Violation Data
rcra_vioenfrc	Linking Data for Violation and Enforcement
rcra_wastegenrtr	State and Federal Waste Generator Status Codes and Descriptions
rcra_wheretype	Geometry property element of a GeoRSS GML instance