



# openIDL ND Uninsured Motorist POC

Quick Start Guide

## Table of Contents

**Introduction..... 2**

**openIDL Overview..... 2**

**The Flow..... 4**

**Loading Data into the HDS (Carrier) ..... 4**

**Creating a Data Call (Regulator) ..... 5**

        Sign-in to the Multi-Tenant Node as a Regulator ..... 5

        View the Data Call List Page..... 5

        Create a New Data Call ..... 6

        Fill in Data Call..... 6

        The Data Call is Saved as Draft..... 7

**Review the Data Call (Carrier) ..... 7**

        The Carrier Logs into the Carrier Node ..... 7

        The New Data Call Appears in the Draft List ..... 8

        Review the Data Call and Like It..... 8

        The Like is Recorded on the Blockchain ..... 9

        The Like Count Changes on the Data Call ..... 9

**Review and Issue the Data Call (Regulator) ..... 10**

        The Likes on the Data Call change for the Regulator as Well ..... 10

        Issue The Data Call ..... 10

        The Data Call is Issued..... 11

**Update the Extraction Pattern (Stat-Agent)..... 11**

        The Stat Agent logs into the Multi-Tenant Node ..... 11

        Navigate to the Issued List..... 12

        Select the Data Call from the Issued List..... 12

        Upload the Extraction Pattern into the System ..... 13

        Update the Extraction Pattern and Delivery Date ..... 13

**Consent to the Data Call (Carrier)..... 16**

        Logs in and selects the Data Call..... 16

        Consent to the Data Call ..... 16

        The consent succeeds and the extraction pattern is run ..... 17

**The Report is Generated ..... 18**

**The Report is Connected to the Data Call (Stat-Agent) ..... 18**



## Introduction

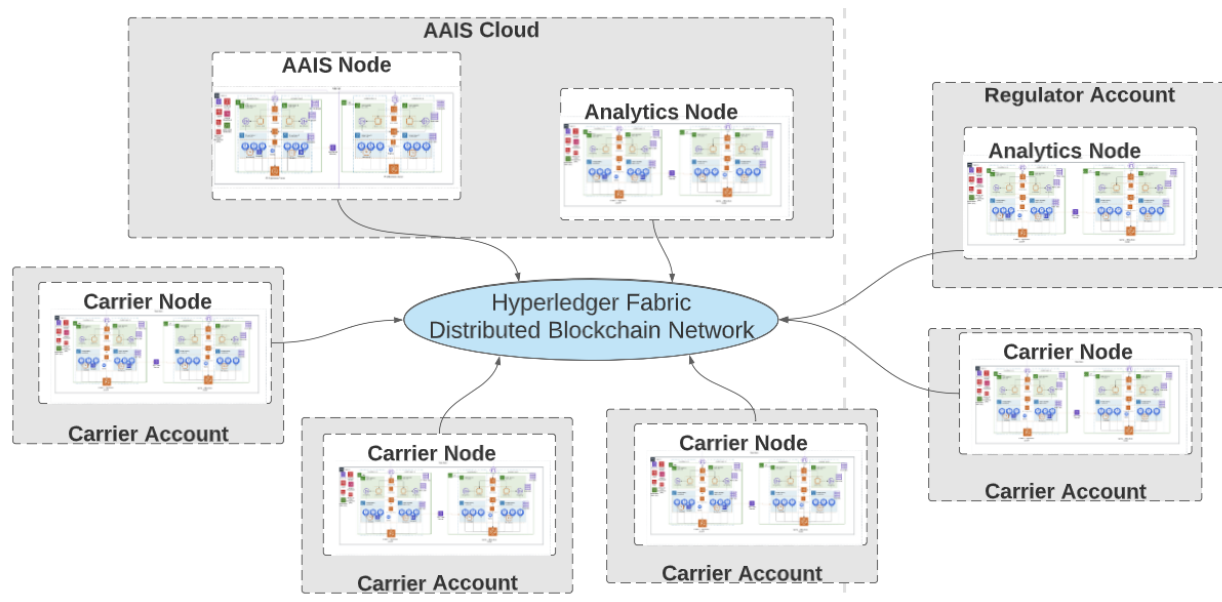
This document describes the openIDL system to be used for the ND Uninsured Motorist POC. There are two main areas we will be using:

1. The upload UI for loading insured VINs (carriers) and registered VINs (ND DOT) data into the Harmonized Data Store (HDS). See the Data Submission Guide for more details.
2. The Data Call UI where we'll communicate between the regulator (ND DOI), carriers and state-agent (UI)

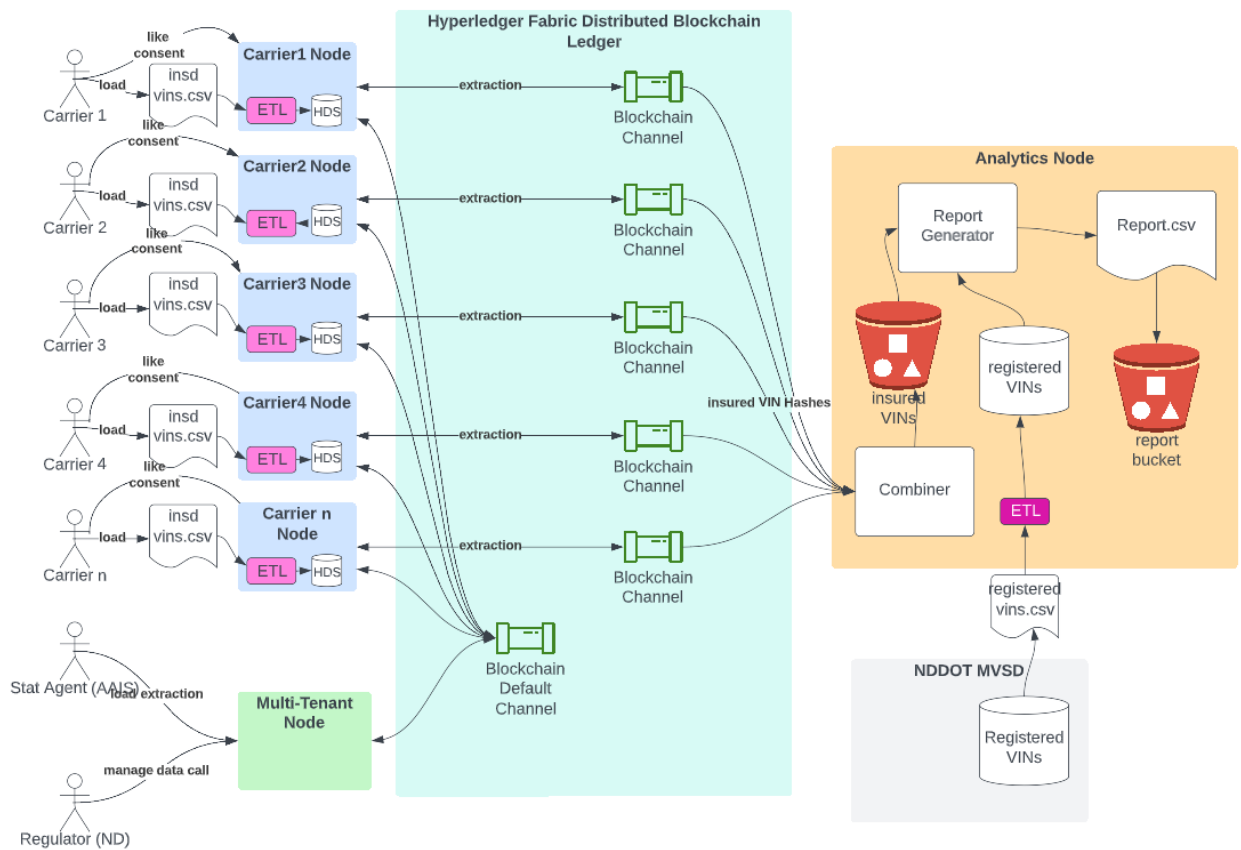
## openIDL Overview

The openIDL system is a network of nodes. There are three kinds of nodes:

- **AAIS Node** - a multi-tenant node which can be used by multiple carriers, the DOI and stat agents.
- **Analytics Node** - The recipient of data extractions and where the report creation happens.
- **Carrier Node** - a single-tenant node that holds the carrier harmonized data in a private account owned by the carrier.



The specific network for the ND POC looks like the following:



There are  $n$  carrier nodes. One for each carrier. The data is loaded into the node by the carrier. During the load, the VINs are hashed and the hashes are stored alongside the VINs in the HDS. The business of communication about the data call happens on the default channel. The data, when extracted, is passed to the analytics node over a peer-to-peer channel between the carrier and the analytics node. The analytics node combines the extracted data from all the carriers, compares the extracted insured VIN hashes with the registered VIN hashes and produces a report of matches.



## The Flow

### Loading Data into the HDS (Carrier)

The first thing required is for the insured VINs to be loaded into the harmonized data store. This is done by using the Load UI. You can open this URL by following the link provided in your onboarding package.

You will see something like the following (as of this writing the UI is under construction)

File	Intake Status	Load Status	Date
File 1	success	failed	2022-06-01
File 2	success	success	2022-06-01
File 3	success	success	2022-07-01
File 4	success	success	2022-08-01
File 5	failure	failed	2022-09-01

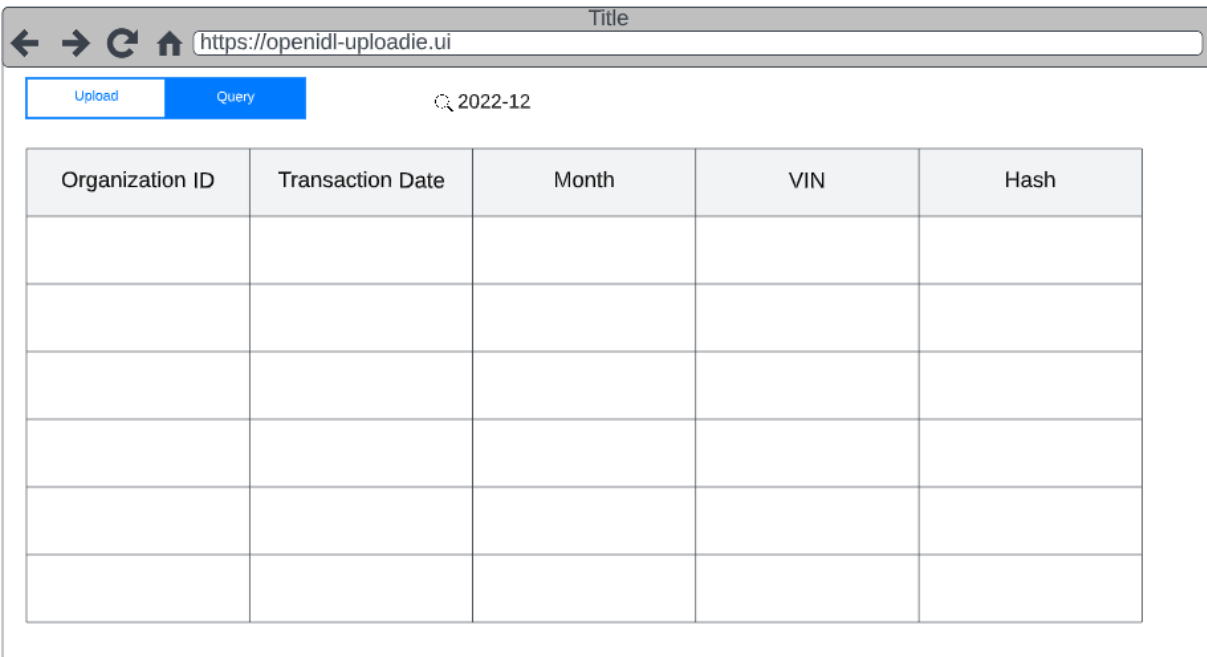
Click the upload file. Choose a file from your disk drive. You cannot load the same file multiple times.

Once the file is uploaded, the data will arrive in the HDS. You won't be able to see it unless you have administrative access to the data base. The data in the database looks something like this:

The screenshot shows the MongoDB Compass interface. The left sidebar displays the database structure for 'CND-ND' on 'localhost:27017', listing several collections including 'insurance\_trx\_db\_12345'. The main window shows the 'Documents' tab for the collection 'openidl-offchain-db.insurance\_trx\_db\_1235'. It displays a list of documents with fields such as '\_id', 'carrierNumber', 'state', 'vin', 'transactionDate', 'effectiveDate', 'expirationDate', 'chunkId', and 'chunkid'. The documents are JSON objects representing individual insurance transactions.

There will be a simple UI for searching the database for data entered for a particular month. It will look something like the following:





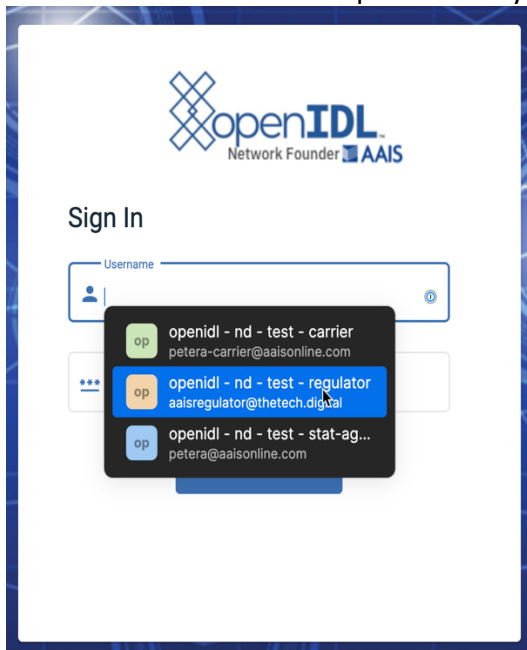
Organization ID	Transaction Date	Month	VIN	Hash

You can enter the month in yyyy-mm format to see what data is loaded for that month.

### Creating a Data Call (Regulator)

Sign-in to the Multi-Tenant Node as a Regulator

If you are the regulator, this is where you will begin. You log into the system with the credentials and at the URL provided in your onboarding package.

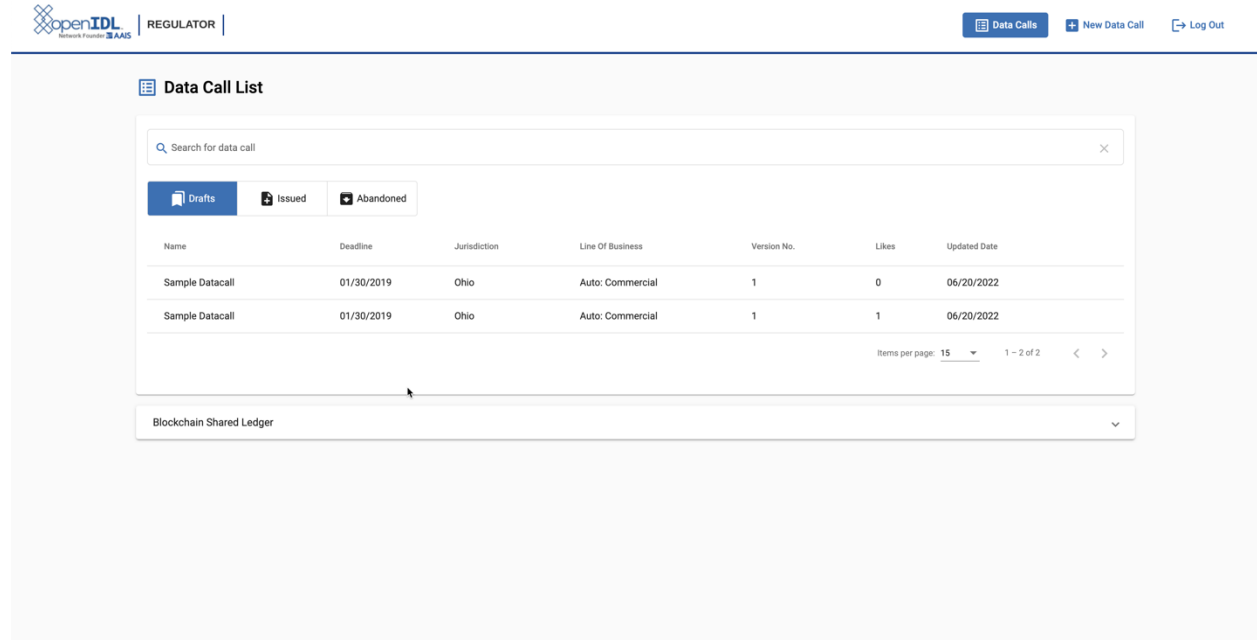


View the Data Call List Page

You will see the data call list where all drafts, issued and abandoned data calls can be found.

Drafts are changeable. Issued data calls are not changeable. Abandoned data calls are no longer viable.

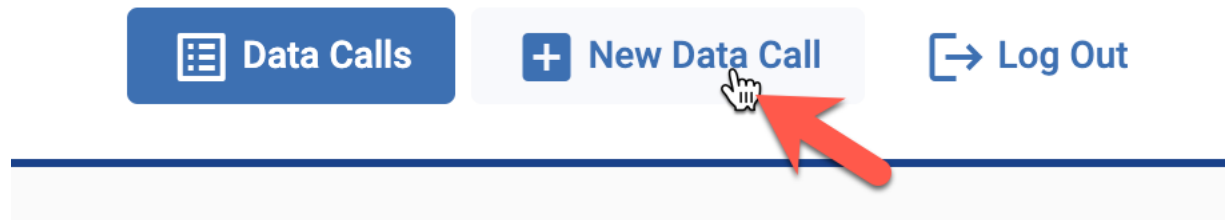
For the POC, we will let you know which data calls we'll be using.



The screenshot shows the 'Data Call List' interface. At the top, there is a search bar labeled 'Search for data call'. Below it are three tabs: 'Drafts' (selected), 'Issued', and 'Abandoned'. A table lists data calls with columns for Name, Deadline, Jurisdiction, Line Of Business, Version No., Likes, and Updated Date. Two rows are visible, both for 'Sample Datacall' with a deadline of 01/30/2019 and an updated date of 06/20/2022. The first row has 0 likes, and the second has 1 like. At the bottom right of the table, it says 'Items per page: 15' and '1 - 2 of 2'. Below the table is a dropdown menu labeled 'Blockchain Shared Ledger'.

### Create a New Data Call

Click on the **New Data Call** button to create a new data call.



The screenshot shows the navigation bar with three buttons: 'Data Calls', 'New Data Call', and 'Log Out'. A red arrow points to the 'New Data Call' button, which is highlighted with a mouse cursor icon.

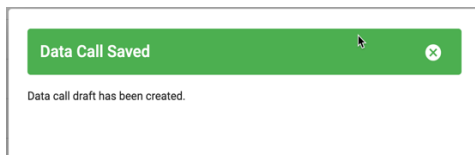
### Fill in Data Call

Fill in the necessary Information and click the **Save as Draft** button.

### + Create Data Call

Name ND Demo - KS - 2022-07-24 01	Jurisdiction Alabama
Description Uninsured Motorist Data Call for July	Line of Business Auto: Personal
Premium Dates 1/1/2022 - 12/31/2022	Loss Dates 1/1/2022 - 12/31/2022
Expected Public Circulation? <input checked="" type="checkbox"/>	Deadline 7/24/2022
Purpose Determine Uninsured Motorists in ND	
Detailed Criteria Gather insured VINs from carriers and compare them against registered VINs from the DOT	
Eligibility Requirement Top 10 Carriers	
Add list of participants to summary report? <input checked="" type="checkbox"/>	
<a href="#">Save as Draft</a> <a href="#">Issue</a>	

### The Data Call is Saved as Draft



The data call will now appear in the list of draft data calls. Anyone on the default channel will be able to see the new data call in their drafts list.

### Review the Data Call (Carrier)

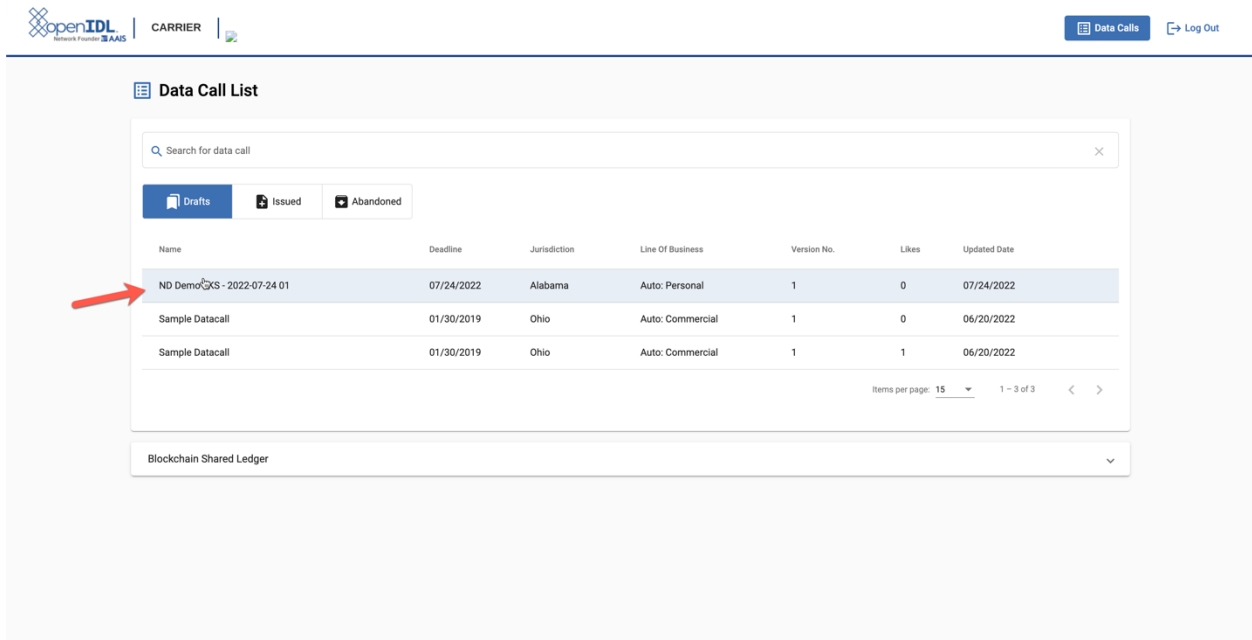
The Carrier Logs into the Carrier Node

Using the credentials and the URL provided in your onboarding package, log into the data call UI.



### The New Data Call Appears in the Draft List

The data call created by the regulator appears on the drafts list on the carrier node.



Name	Deadline	Jurisdiction	Line Of Business	Version No.	Likes	Updated Date
ND DemoS-2022-07-24 01	07/24/2022	Alabama	Auto: Personal	1	0	07/24/2022
Sample Datacall	01/30/2019	Ohio	Auto: Commercial	1	0	06/20/2022
Sample Datacall	01/30/2019	Ohio	Auto: Commercial	1	1	06/20/2022

### Review the Data Call and Like It

At this point, you as the carrier can review the data call and react by pressing the **like** button. This tells the regulator you are comfortable participating in the data call.



### Draft Data Call


[Back to Data Calls](#)

**Current Version** | 7/24/2022 | 08:31 PM 0

Available Versions	Name	Jurisdiction	Description
<b>Current Version</b> 7/24/2022   08:31 PM	ND Demo - KS - 2022-07-24 01	Alabama	Uninsured Motorist Data Call for July

Deadline	Premium Dates	Loss Dates
07/24/2022	01/01/2022 to 12/31/2022	01/01/2022 to 12/31/2022

Line of Business	Expected Public Circulation?
Auto: Personal	Yes

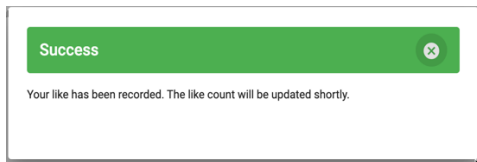
Add list of participants to summary report	Organization Likes
Yes	 <a href="#">View Organizations</a>

Purpose
Determine Uninsured Motorists in ND

Detailed Criteria
Gather insured VINs from carriers and compare them against registered VINs from the DOT

Eligibility Requirement
Top 10 Carriers

### The Like is Recorded on the Blockchain



### The Like Count Changes on the Data Call

You will notice that the number of likes changes on the data call in the drafts list.

### Data Call List

Search for data call

[Drafts](#) [Issued](#) [Abandoned](#)

Name	Deadline	Jurisdiction	Line Of Business	Version No.	Likes	Updated Date
ND Demo - KS - 2022-07-24 01	07/24/2022	Alabama	Auto: Personal	1	1	07/24/2022
Sample Datacall	01/30/2019	Ohio	Auto: Commercial	1	0	06/20/2022
Sample Datacall	01/30/2019	Ohio	Auto: Commercial	1	1	06/20/2022

Items per page: 15 1 - 3 of 3

Blockchain Shared Ledger

## Review and Issue the Data Call (Regulator)

The Likes on the Data Call change for the Regulator as Well  
The number of likes also changes on the regulator's node.

### Data Call List

Search for data call

[Drafts](#) [Issued](#) [Abandoned](#) [Refresh this page](#)

Name	Deadline	Jurisdiction	Line Of Business	Version No.	Likes	Updated Date
ND Demo - KS - 2022-07-24 01	07/24/2022	Alabama	Auto: Personal	1	1	07/24/2022
Sample Datacall	01/30/2019	Ohio	Auto: Commercial	1	0	06/20/2022
Sample Datacall	01/30/2019	Ohio	Auto: Commercial	1	1	06/20/2022

Items per page: 15 1 - 3 of 3


Blockchain Shared Ledger

## Issue The Data Call

As the regulator, you can issue the data call by clicking on the **Issue** button.

### Draft Data Call

[Back to Data Calls](#)

Current Version | 7/24/2022 | 08:31 PM 

Available Versions

- Current Version 7/24/2022 | 08:31 PM

Name: ND Demo - KS - 2022-07-24 01

Jurisdiction: Alabama

Description: Uninsured Motorist Data Call for July

Line of Business: Auto: Personal

Premium Dates: 1/1/2022 - 12/31/2022

Loss Dates: 1/1/2022 - 12/31/2022

Deadline: 7/24/2022

Expected Public Circulation?


Purpose: Determine Uninsured Motorists in ND

Detailed Criteria: Gather insured VINs from carriers and compare them against registered VINs from the DOT


Eligibility Requirement: Top 10 Carriers

Add list of participants to summary report?

Comment (Mandatory for saving a new data call draft)

[Clone](#) [Abandon](#) [Save New Draft](#) [Issue](#) 

### The Data Call is Issued

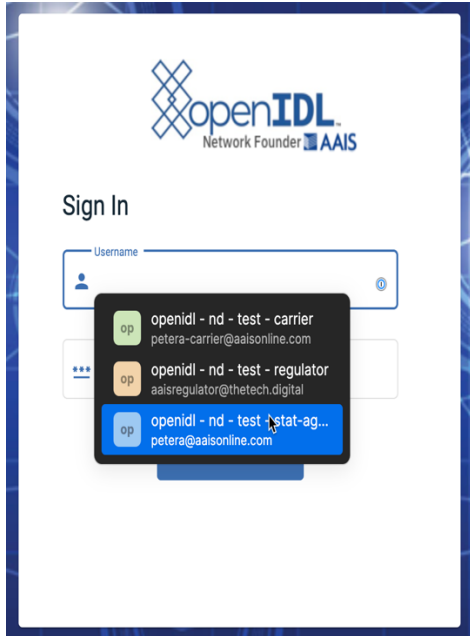
**Data Call Issued** 

Data call has been issued.

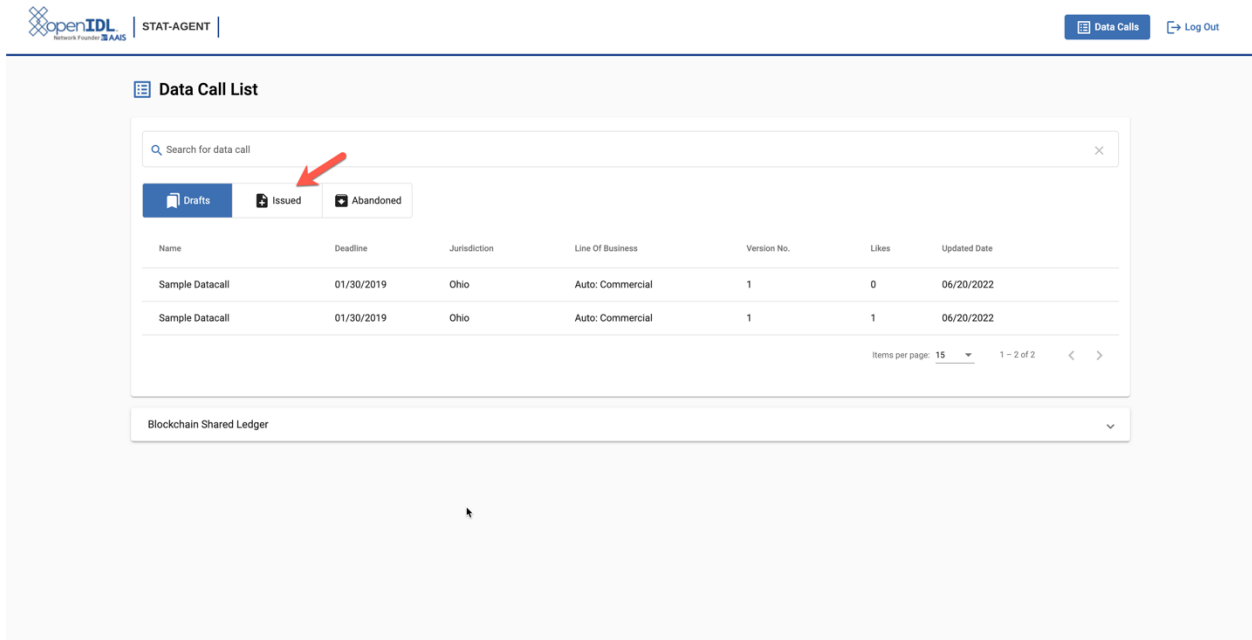
### Update the Extraction Pattern (Stat-Agent)

The Stat Agent logs into the Multi-Tenant Node

As the stat-agent, log into the multi-tenant node.



Navigate to the Issued List  
Click on the **Issued** tab to see the list of issued data calls.



Name	Deadline	Jurisdiction	Line Of Business	Version No.	Likes	Updated Date
Sample Datacall	01/30/2019	Ohio	Auto: Commercial	1	0	06/20/2022
Sample Datacall	01/30/2019	Ohio	Auto: Commercial	1	1	06/20/2022

Select the Data Call from the Issued List  
Select the data call from the list to update the extraction pattern.

### Data Call List

Search for data call

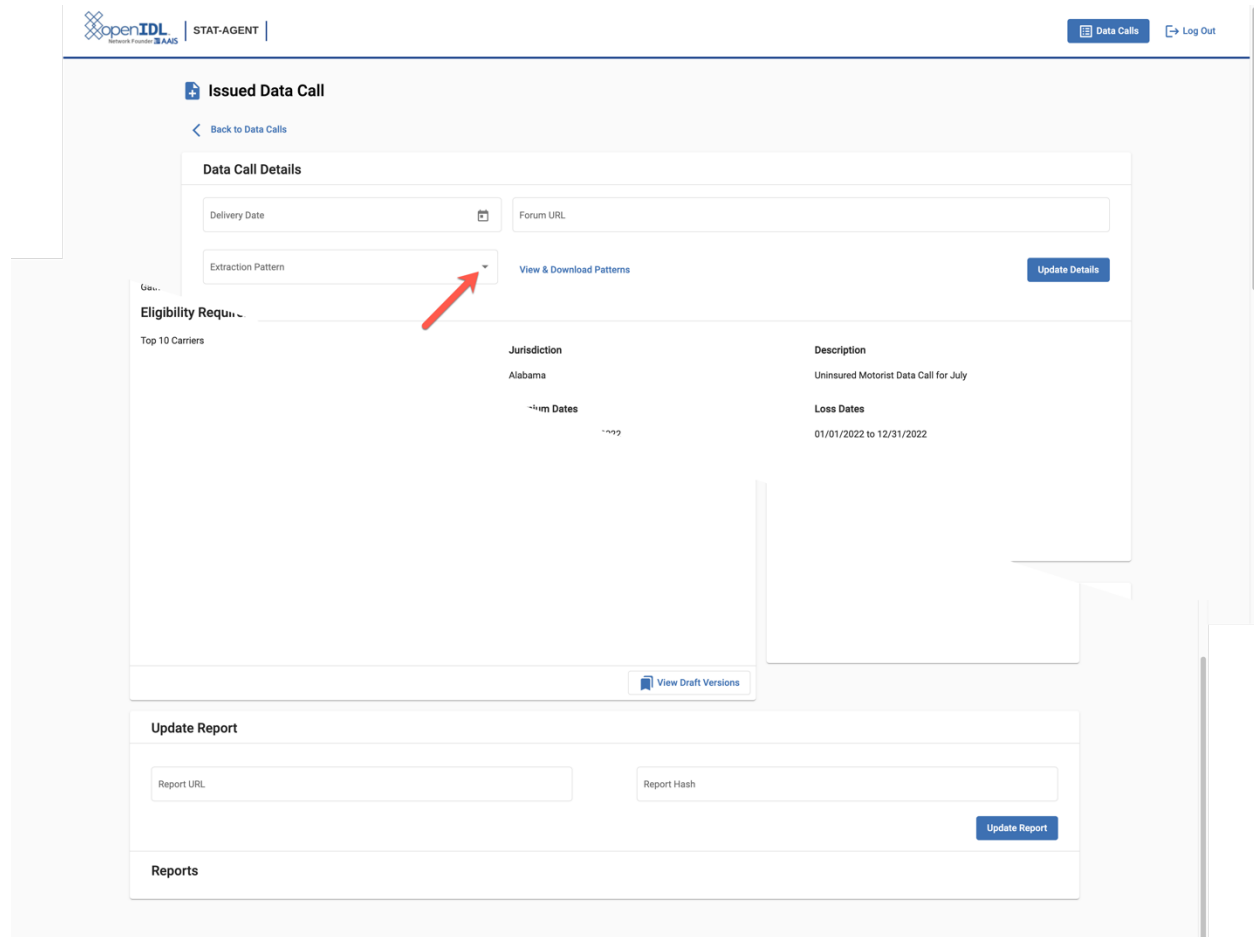
Name	Deadline	Jurisdiction	Line Of Business	Version No.	Consents	Report Status	Updated Date
t2	12/30/2022	Alabama	Auto: Commercial	1	0	Awaiting	06/23/2022
ND_TEST_01_December	10/31/2022	Alabama	Auto: Personal	1	1	Awaiting	07/22/2022
ND Demo - KS - 2022-07-24 01	07/24/2022	Alabama	Auto: Personal	1	0	Awaiting	07/24/2022
adnan-test-july21-expattern5-1	07/20/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/21/2022
adnan-test-jul20-expattern5-1	07/19/2022	Alabama	Auto: Commercial	1	2	Awaiting	07/20/2022
ken-test-jul20	07/19/2022	Alabama	Auto: Commercial	1	2	Awaiting	07/20/2022
Adnan-july19-expattern5-1	07/18/2022	Alabama	Auto: Commercial	1	0	Awaiting	07/19/2022
adnan-july15-expattern3	07/14/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/15/2022
adnan-july15-expattern4-2	07/14/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/15/2022
adnan-july15-expattern5-1	07/14/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/15/2022
adnan-july15-expattern3-1	07/14/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/15/2022

Upload the Extraction Pattern into the System

The stat-agent uses a separate API to load the extraction pattern into the system. It will then become available to select for the data call.

Update the Extraction Pattern and Delivery Date

On the detail page for the data call, select the extraction pattern and set the delivery date.



**Issued Data Call**

[Back to Data Calls](#)

**Data Call Details**

Delivery Date  Forum URL

Extraction Pattern  [View & Download Patterns](#) [Update Details](#)

**Eligibility Requirements**

Top 10 Carriers	Jurisdiction	Description	Loss Dates
	Alabama	Uninsured Motorist Data Call for July	01/01/2022 to 12/31/2022

[View Draft Versions](#)

**Update Report**

Report URL  Report Hash

[Update Report](#)

**Reports**

Click the **Update** button to make the changes stick.

### Issued Data Call

[Back to Data Calls](#)

**Data Call Details**

Delivery Date 7/24/2022	Forum URL
Extraction Pattern ND Demo	<a href="#">View &amp; Download Patterns</a>

[Update Details](#)

<b>Name</b> ND Demo - KS - 2022-07-24 01	<b>Jurisdiction</b> Alabama	<b>Description</b> Uninsured Motorist Data Call for July
<b>Line of Business</b> Auto: Personal	<b>Premium Dates</b> 01/01/2022 to 12/31/2022	<b>Loss Dates</b> 01/01/2022 to 12/31/2022
<b>Expected Public Circulation?</b> Yes	<b>Add list of participants to summary report</b> Yes	

**Purpose**  
Determine Uninsured Motorists in ND

**Detailed Criteria**  
Gather insured VINs from carriers and compare them against registered VINs from the DOT

**Eligibility Requirement**  
Top 10 Carriers

[View Draft Versions](#)

**Carrier Consents**  
[View Carriers](#)

**Organization Likes**  
[View Organizations](#)

**History**

- Data Call Issued.  
7/24/2022 08:36 PM

**Update Report**

Report URL	Report Hash
------------	-------------

[Update Report](#)

**Reports**

**Success**

Data Call have been successfully updated.



## Consent to the Data Call (Carrier)

Log in and select the Data Call

As the carrier, log into the carrier node and select the data call from the **Issued** list.

The screenshot displays the 'Data Call List' interface. At the top, there is a search bar and three tabs: 'Drafts', 'Issued', and 'Abandoned'. The 'Issued' tab is selected. Below the tabs is a table with the following columns: Name, Deadline, Jurisdiction, Line Of Business, Version No., Consents, Report Status, and Updated Date. The table contains several rows of data calls. The row 'ND Demo - KS - 2022-07-24 01' is highlighted in red, and a red arrow points to the 'Consent' column for this row.

Name	Deadline	Jurisdiction	Line Of Business	Version No.	Consents	Report Status	Updated Date
t2	12/30/2022	Alabama	Auto: Commercial	1	0	Awaiting	06/23/2022
ND_TEST_01_December	10/31/2022	Alabama	Auto: Personal	1	1	Awaiting	07/22/2022
ND Demo - KS - 2022-07-24 01	07/24/2022	Alabama	Auto: Personal	1	0	Awaiting	07/24/2022
adnan-test-july21-expattern5-1	07/20/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/21/2022
adnan-test-jul20-expattern5-1	07/19/2022	Alabama	Auto: Commercial	1	2	Awaiting	07/20/2022
ken-test-jul20	07/19/2022	Alabama	Auto: Commercial	1	2	Awaiting	07/20/2022
Adnan-july19-expattern5-1	07/18/2022	Alabama	Auto: Commercial	1	0	Awaiting	07/19/2022
adnan-july-15-expattern3	07/14/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/15/2022
adnan-july-15-expattern4-2	07/14/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/15/2022
adnan-july-15-expattern5-1	07/14/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/15/2022
adnan-july-15-expattern3-1	07/14/2022	Alabama	Auto: Commercial	1	1	Awaiting	07/15/2022

## Consent to the Data Call

Click on the **Consent** button to allow the extraction to occur.





### Issued Data Call

[Back to Data Calls](#)

Data Call Details		
<b>Name</b> ND Demo - KS - 2022-07-24 01	<b>Jurisdiction</b> Alabama	<b>Description</b> Uninsured Motorist Data Call for July
<b>Line of Business</b> Auto: Personal	<b>Premium Dates</b> 01/01/2022 to 12/31/2022	<b>Loss Dates</b> 01/01/2022 to 12/31/2022
<b>Expected Public Circulation?</b> Yes	<b>Add list of participants to summary report</b> Yes	<b>Proposed Delivery Date</b> 07/24/2022
<b>Extraction Pattern</b> <a href="#">View &amp; Download</a> ND Demo		

[View Draft Versions](#) [View Reports](#) [Consent to the Report](#)

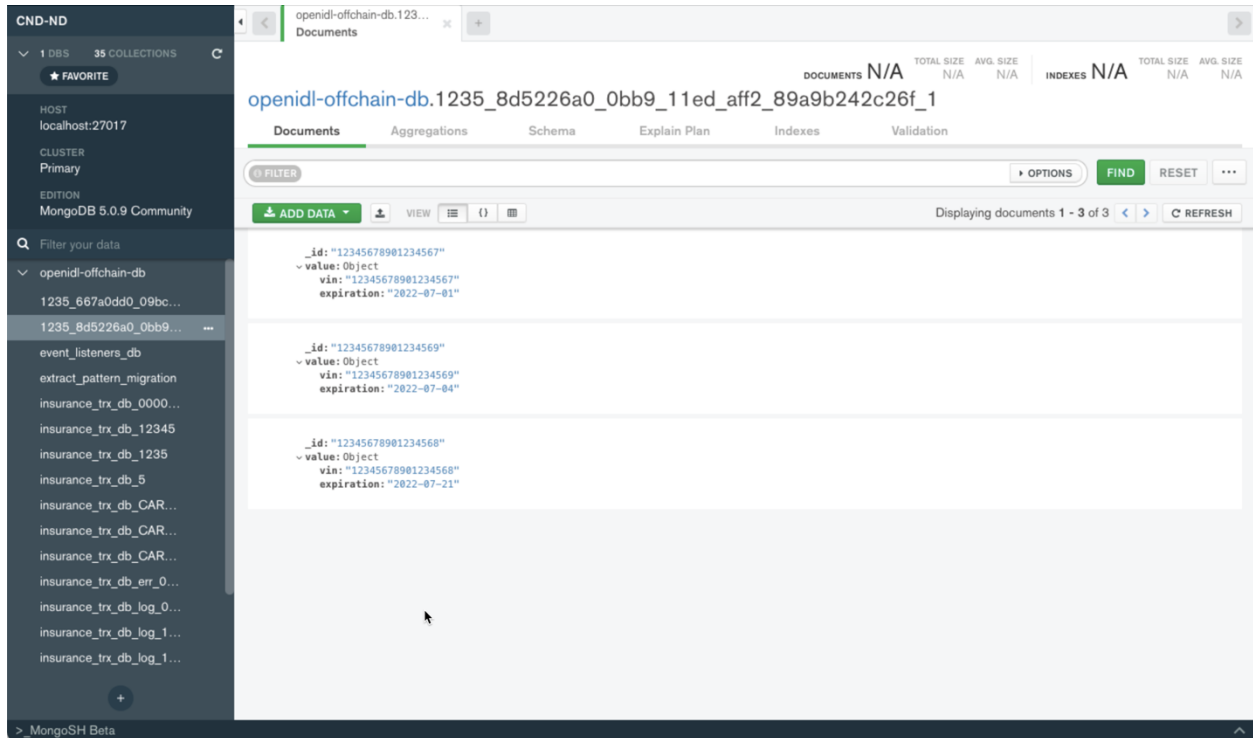
<b>Purpose</b> Determine Uninsured Motorists in ND	<b>Carrier Consents</b> 
<b>Detailed Criteria</b> Gather insured VINs from carriers and compare them against registered VINs from the DOT	<b>Organization Likes</b> <a href="#">View Organizations</a>
<b>Eligibility Requirement</b> Top 10 Carriers	<b>History</b> Report Delivery Date Updated. 7/24/2022 08:40 PM Data Call Issued. 7/24/2022 08:36 PM

The consent succeeds and the extraction pattern is run

**Consent Recorded**

Your consent has been recorded. The consent count will be updated shortly.

The extraction will occur immediately, and the result data will be sent to the analytics node. The results are also visible in the HDS on the carrier node. If you have access to the HDS, you can see the data there.



### The Report is Generated

When the delivery date is hit, the data call has **matured**. At this point the results from all the carriers are expected and can be combined to create the report.

The results have been delivered to the analytics node during the extraction process. All results from all carriers are combined into one large result. The report processor compares the hashes of the registered VINs with the hashes of the results which are already hashed. For each registered VIN a report line is generated with a **yes** in the covered column if it matched an insured VIN, otherwise a **no**.

### The Report is Connected to the Data Call (Stat-Agent)

The stat-agent logs in, and updates the data call with the URL for the report.