



openIDL ND Uninsured Motorist POC

Quick Start Guide

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Document Control

Date	Description	Author
2022-08-29	Initial	Ken Sayers

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)

Expectations

This section provides an overview of what to expect during the POC from the different perspectives of the carrier, department of insurance and the department of transportation. AAIS will be guiding you through the process. AAIS and Chainyard will setup the network and manage all infrastructure. There are no IT setup requirements from the DOI, DOT or carriers.

Carrier Expectations

As a carrier, you will be participating in the POC in two ways.

Submitting Insured VINs

You will submit your data by loading a file through the Upload UI. You will have permissions to log into the system and use an upload function to upload a file. The file will follow the format described in the Data Submission Guide.

Participating in the Data Calls

We will have one or two test data calls, then three POC data calls.

Your role in the data call is to review the contents of the data call, to like it and then to consent. You will be able to review the extraction pattern as well. You will have permissions to log into the system.

Reviewing the Report

You may choose to review the report once it is published. You will have permissions to log into the system.

Department of Transportation Expectations

Submitting Registered VINs

As the DOT, you will submit the registered VINs using the Upload UI. You will have permissions to log into the system and use an upload function to submit the file. The file will follow the format described in the Data Submission Guide.

Reviewing the Report

You may choose to review the report once it is published. You will have permissions to log into the system.



Department of Insurance

Managing the Data Call

As the DOI, you will create, update and issue the data call. You will have permissions to log into the system.

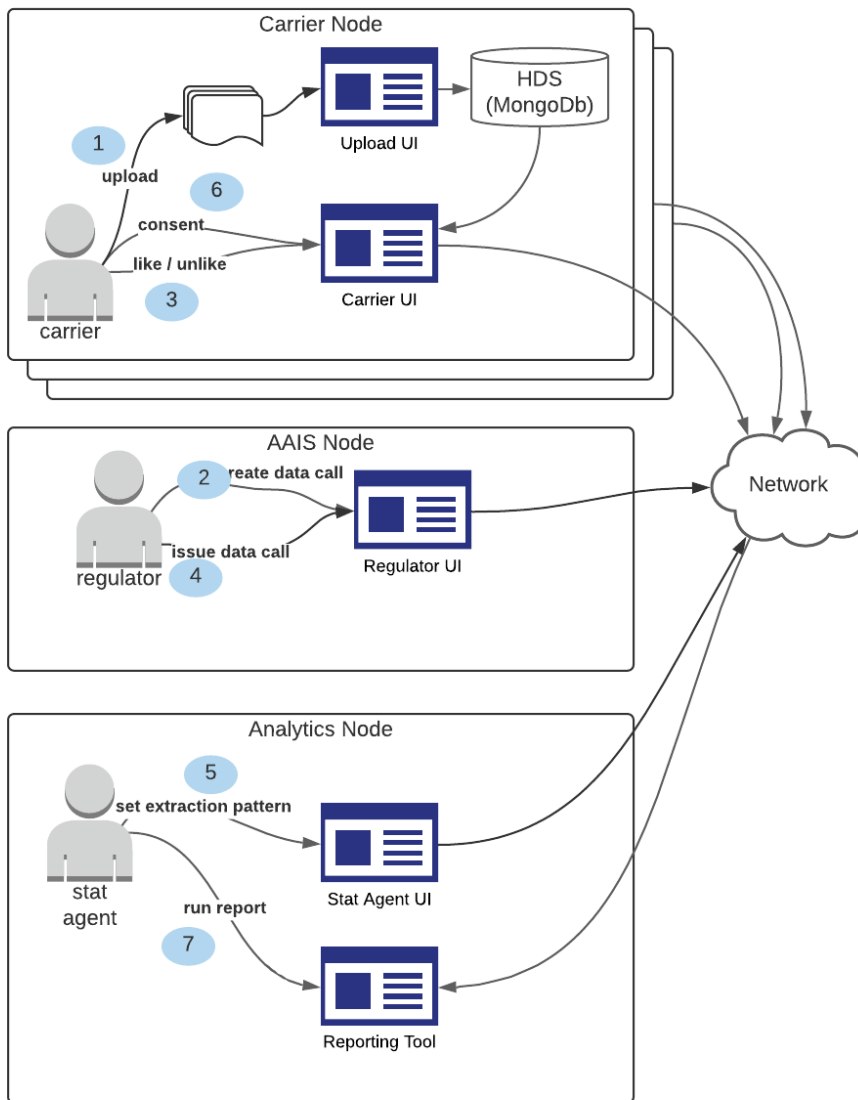
Reviewing the Report

You may choose to review the report once it is published. You will have permissions to log into the system.



The Flow

The following diagram shows the flow of a data call using openIDL.



1. Carriers Upload Data into Harmonized Data Store using the Upload UI
2. A regulator creates a data call
3. Carriers Like/Unlike the data call
This could lead to multiple drafts of the data call
4. The regulator issues the data call
5. Stat agent (in this case) develops an "Extraction Pattern" to query HDS data and transform it into input for the report. The extraction pattern is attached to the data call.
6. Carriers review the data call and the extraction pattern. If satisfied, they consent.
7. The system executes the extraction pattern which sends the result to the analytics node.
The system runs and delivers the report when the data call matures

Walkthrough

Loading Data into the HDS (Carrier)

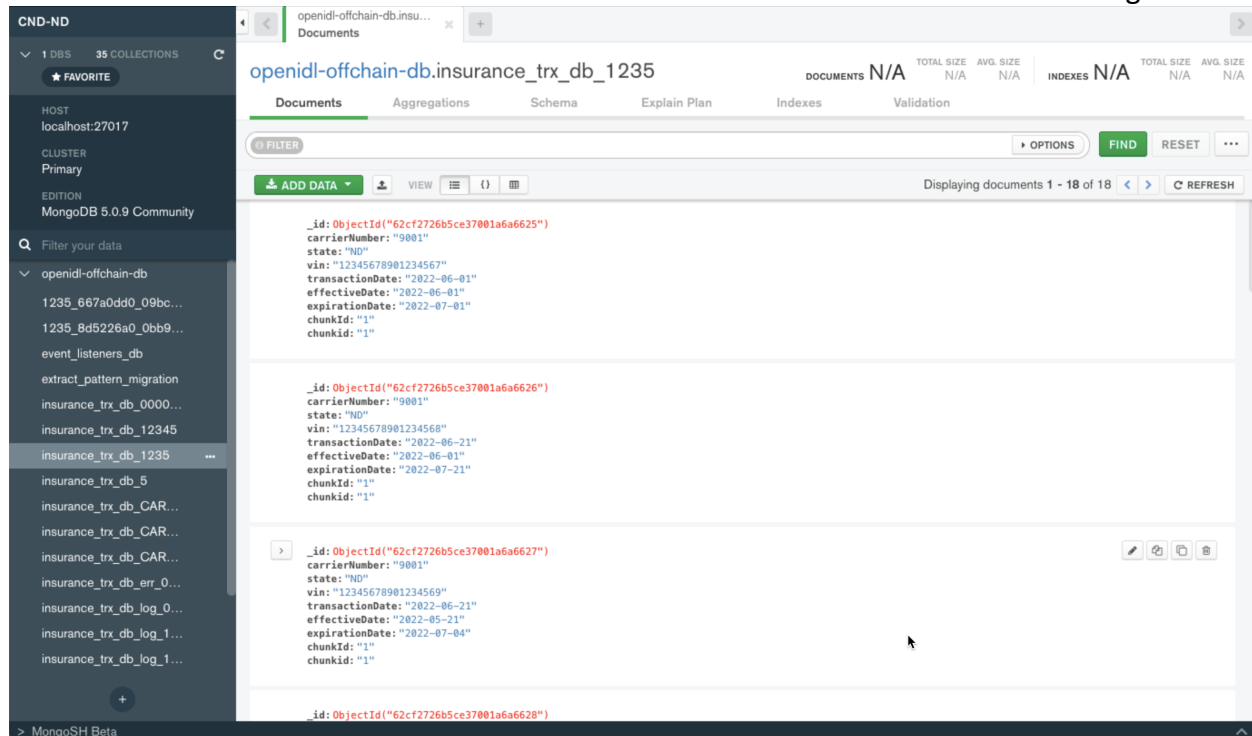
The first thing required is for the insured VINs to be loaded into the harmonized data store. This is done by using the Load UI. You can open this URL by following the link provided in your onboarding package.

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.

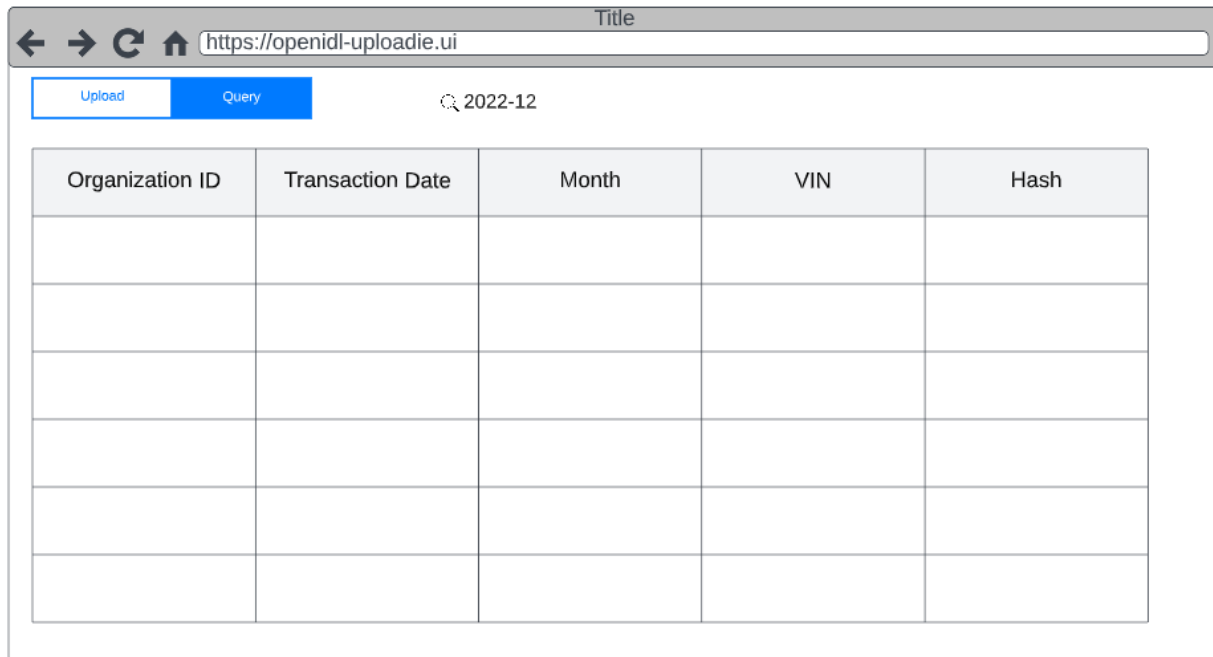
Once the file is uploaded, the data will arrive in the HDS. You won't be able to see it unless you have administrative access to the data base. The data in the database looks something like this:



The screenshot shows the MongoDB Compass interface. On the left, a sidebar lists databases and collections. The main area displays a document from the 'insurance_trx_db_1235' collection. The document contains the following fields:

```
{
  "_id": ObjectId("62cf2726b5ce37001a6a6625"),
  "carrierNumber": "9001",
  "state": "ND",
  "vin": "12345678901234567",
  "transactionDate": "2022-06-01",
  "effectiveDate": "2022-06-01",
  "expirationDate": "2022-07-01",
  "chunkId": "1",
  "chunkid": "1"
}
```

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



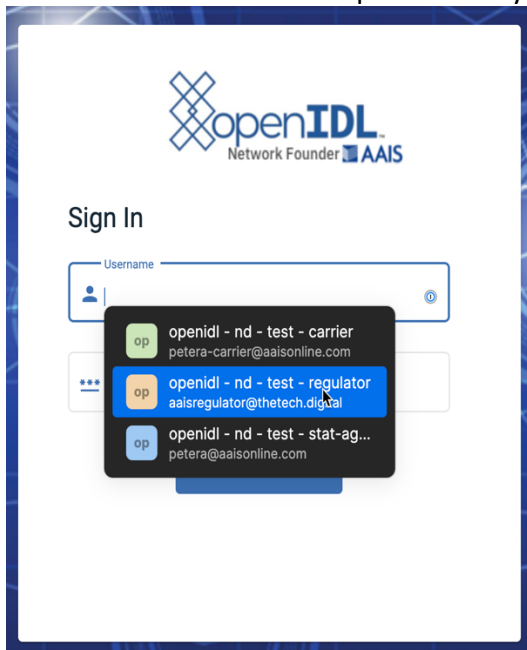
Organization ID	Transaction Date	Month	VIN	Hash

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.

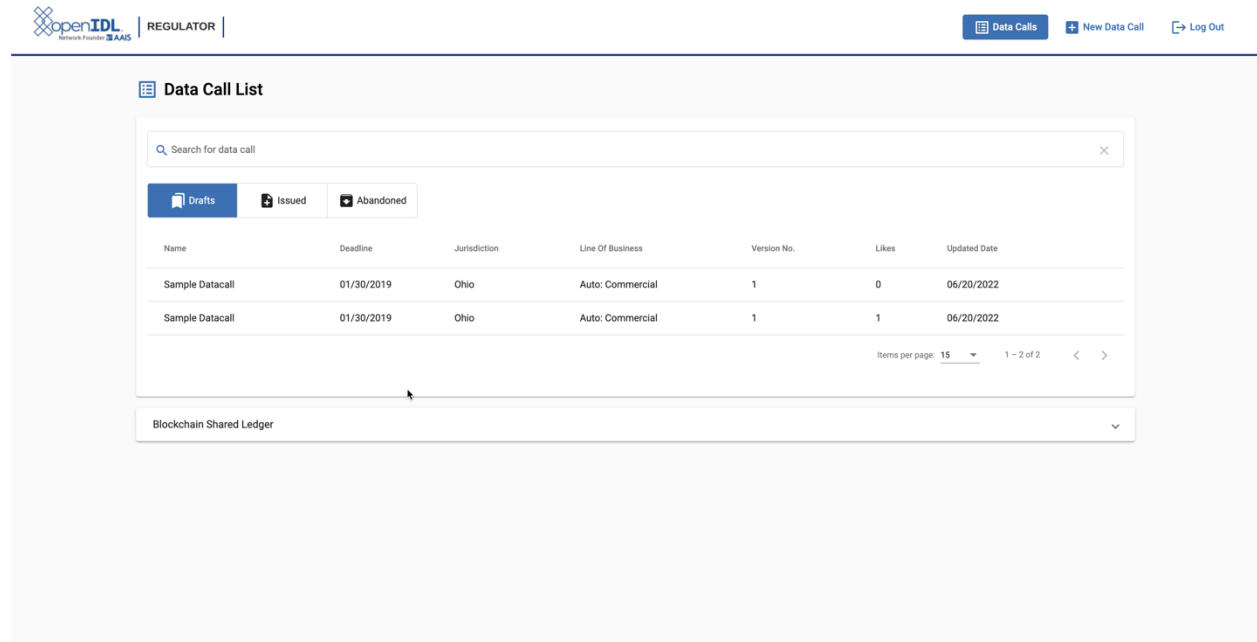


View the Data Call List Page

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.

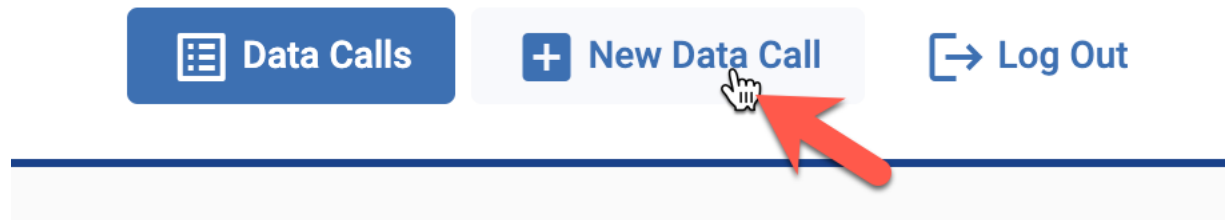
For the POC, we will let you know which data calls we'll be using.



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 jurisdiction of 'Ohio'. The first row has 0 likes and the second has 1 like. Both were updated on '06/20/2022'. At the bottom, there is a dropdown menu currently showing 'Blockchain Shared Ledger'. In the top right corner of the interface, there are buttons for 'Data Calls', '+ New Data Call', and 'Log Out'.

Create a New Data Call

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



This image shows a close-up of the top navigation bar. It contains three buttons: 'Data Calls' (dark blue), '+ New Data Call' (light blue), and 'Log Out' (white with blue text). A red arrow points to the '+ New Data Call' button, which has a hand cursor icon over it.

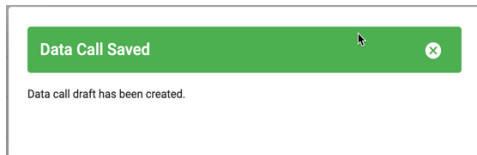
Fill in Data Call

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"/>	
<input type="button" value="Save as Draft"/> <input type="button" value="Issue"/>	

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)

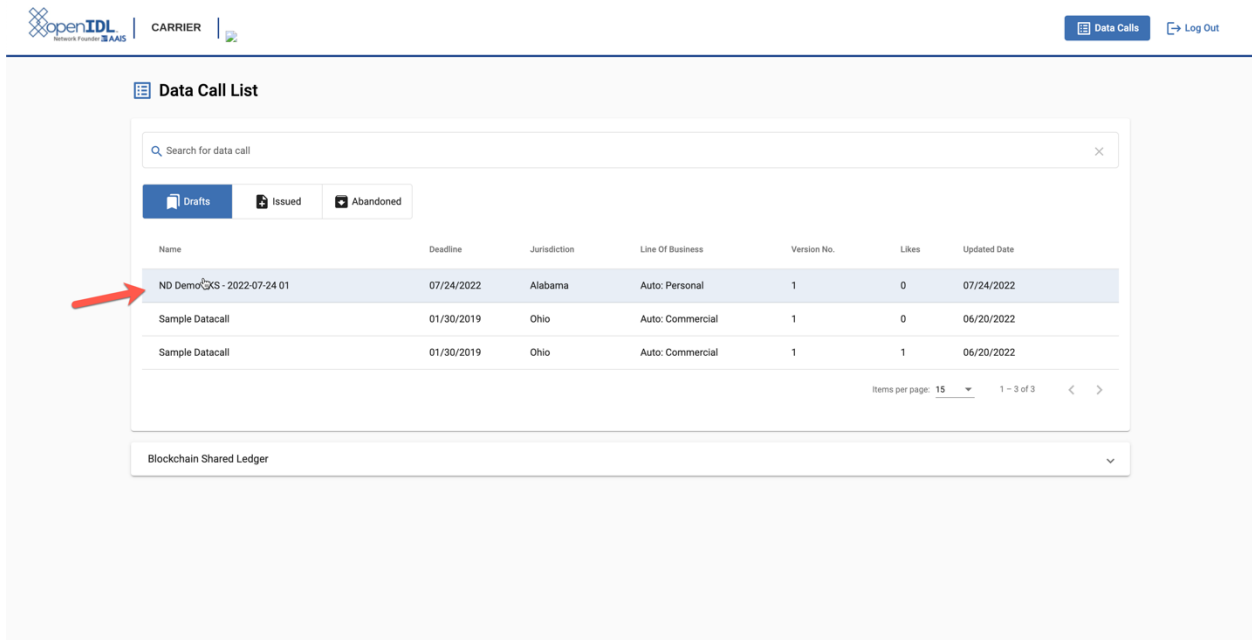
The Carrier Logs into the Carrier Node

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
Current Version 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	 View Organizations

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

Success✕

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

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

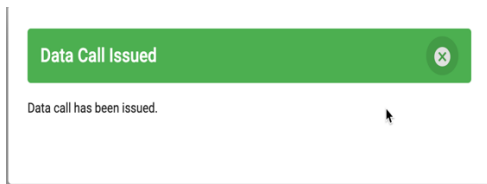
[Back to Data Calls](#)

Current Version | 7/24/2022 | 08:31 PM 1

Available Versions	Name ND Demo - KS - 2022-07-24 01	Jurisdiction Alabama
Current Version 7/24/2022 08:31 PM	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"/>	
	Comment (Mandatory for saving a new data call draft)	

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

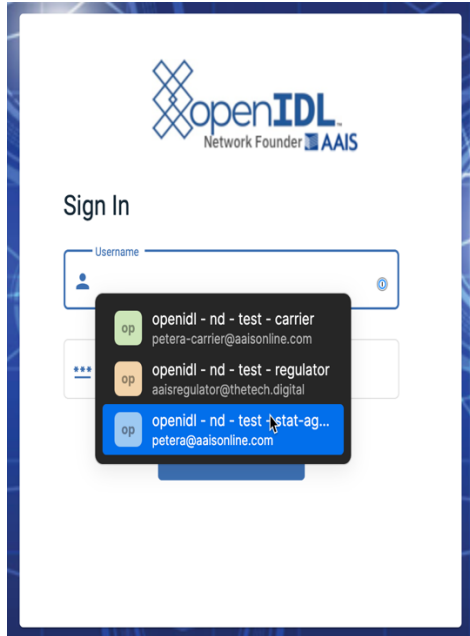
The Data Call is Issued



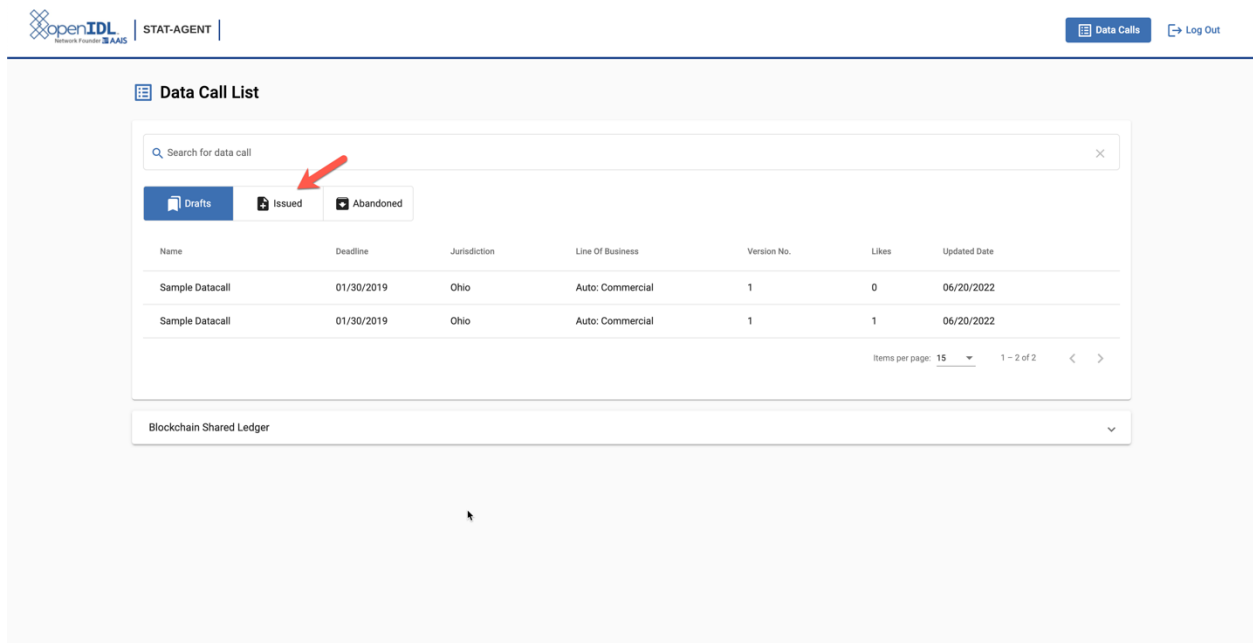
Update the Extraction Pattern (Stat-Agent)

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

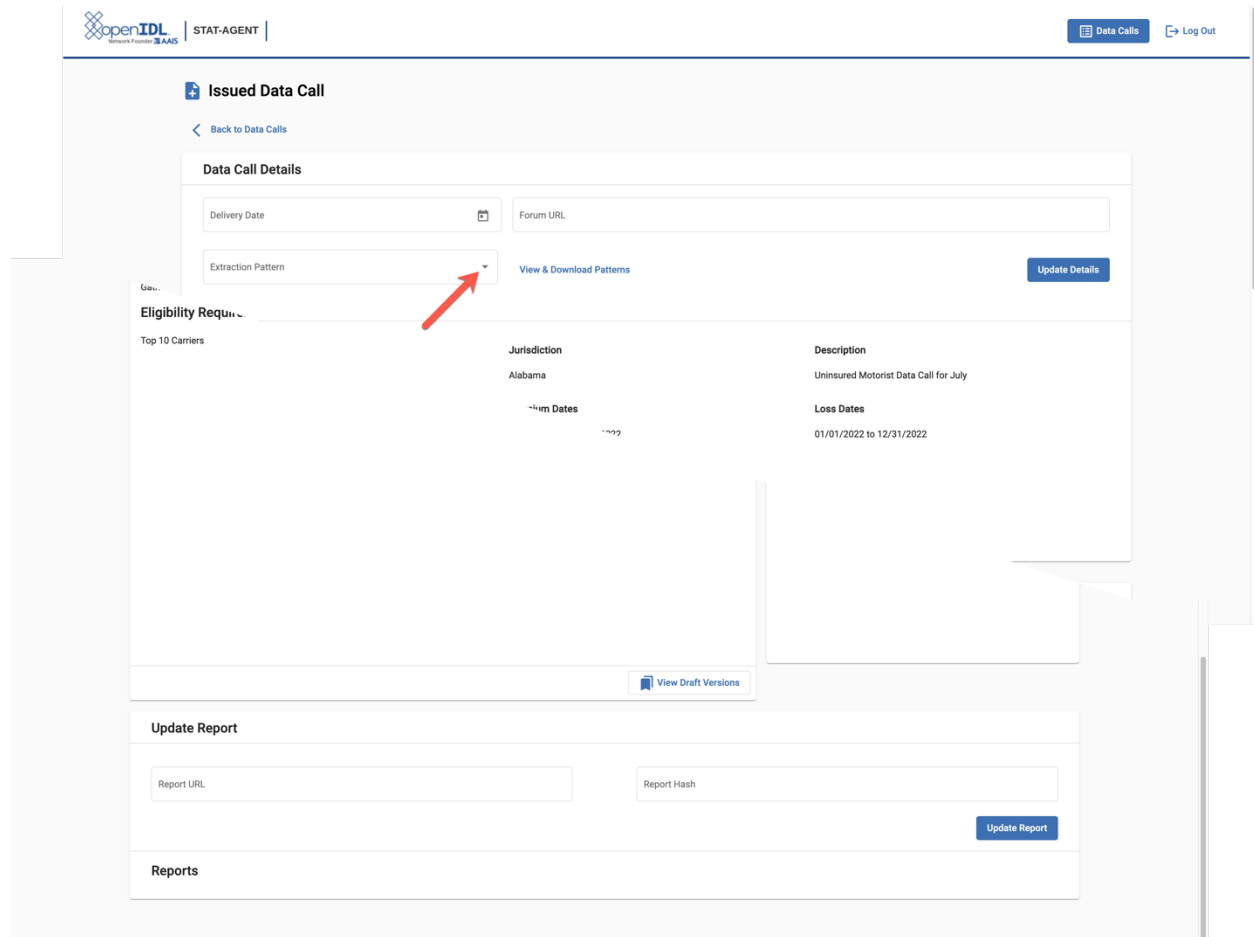
Name	Deadline	Jurisdiction	Line Of Business	Version No.	Consents	Report Status	Updated Date
t2	12/30/2022	Alabama	Auto: Commercial	1	0	Awaiting	06/23/2022
ND_TEST_01_December	10/31/2022	Alabama	Auto: Personal	1	1	Awaiting	07/22/2022
ND Demo - KS - 2022-07-24 01	07/24/2022	Alabama	Auto: Personal	1	0	Awaiting	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	View & Download Patterns

[Update Details](#)

Name ND Demo - KS - 2022-07-24 01	Jurisdiction Alabama	Description Uninsured Motorist Data Call for July
Line of Business Auto: Personal	Premium Dates 01/01/2022 to 12/31/2022	Loss Dates 01/01/2022 to 12/31/2022
Expected Public Circulation? Yes	Add list of participants to summary report 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 labeled 'Search for data call'. Below the search bar are three tabs: 'Drafts', 'Issued', and 'Abandoned'. The 'Issued' tab is currently selected. The main content 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. A red arrow points to the row with the name 'adnan-test-july21-expattern5-1'.

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-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

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

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

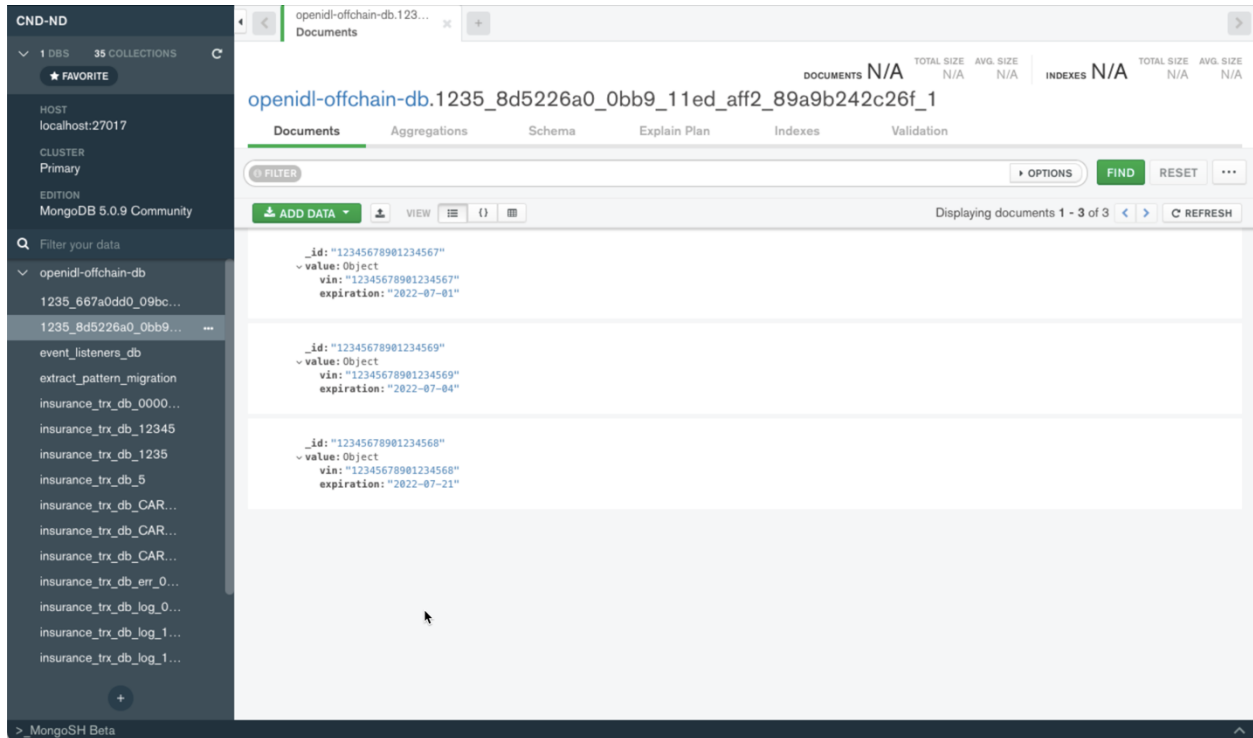
Purpose Determine Uninsured Motorists in ND	Carrier Consents
Detailed Criteria Gather insured VINs from carriers and compare them against registered VINs from the DOT	Organization Likes View Organizations
Eligibility Requirement Top 10 Carriers	History <ul style="list-style-type: none">Report Delivery Date Updated. 7/24/2022 08:40 PMData 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.