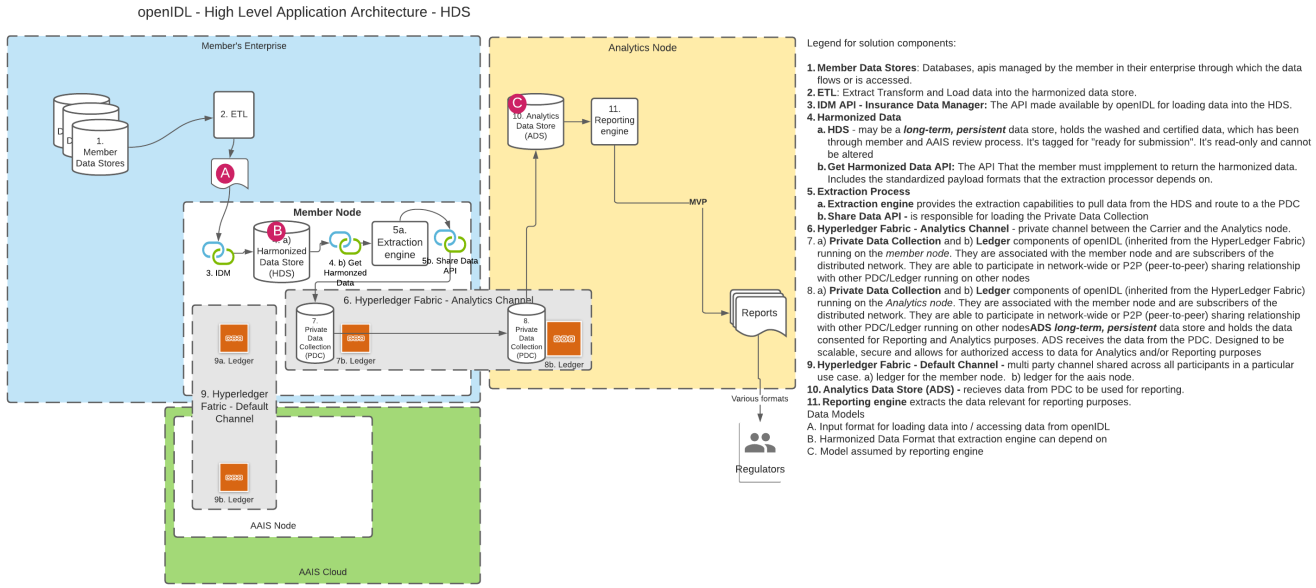
openIDL V1 - Architecture - Application

Overall Application Architecture

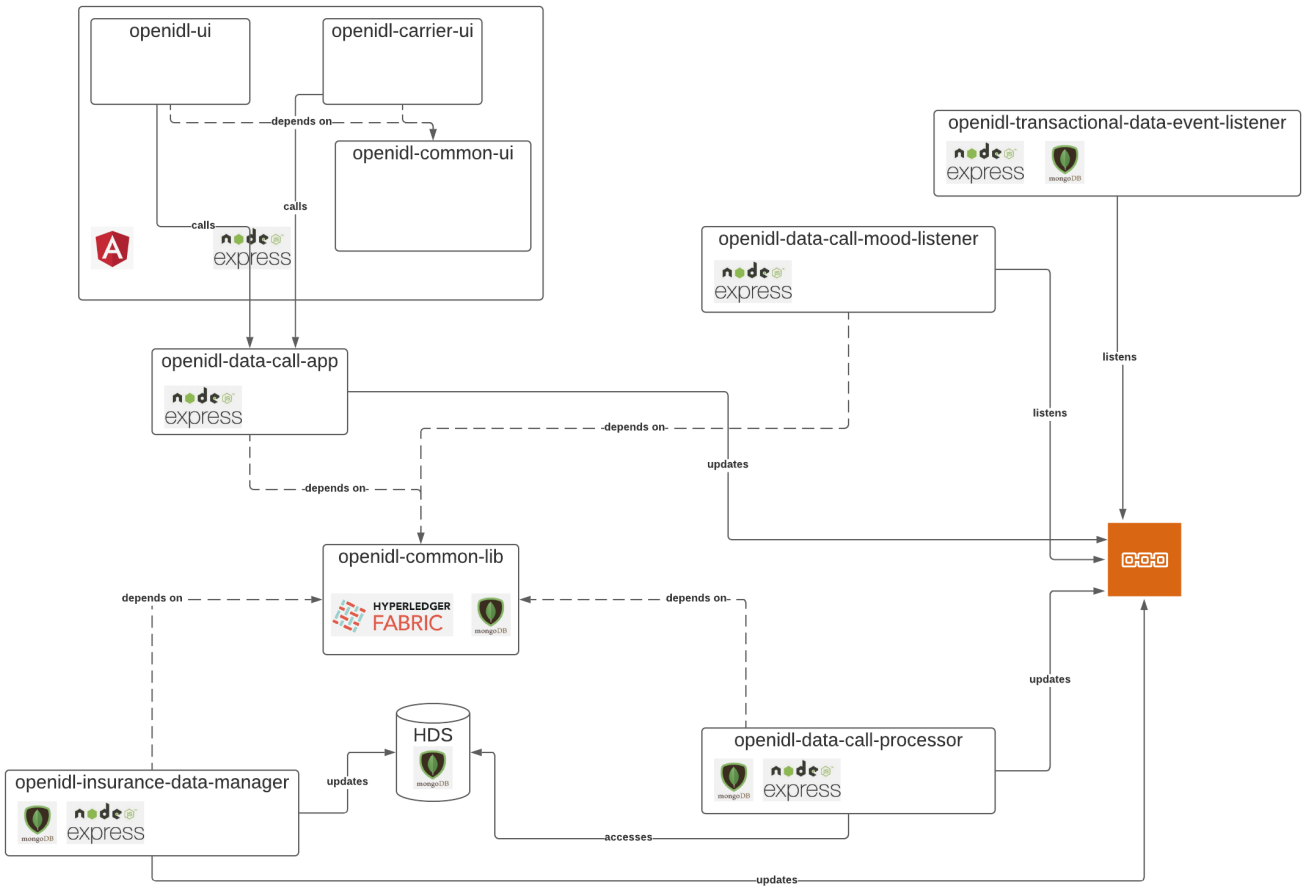
This section covers current and target designs.

Current architecture with the HDS db.



Application Components

Here we discuss the software components developed for the openIDL system.



User Interface Components

openIDL Common Lib

folder: openidl-common-lib

This is a common component used by other components.

Dependencies

@openidl-org/openidl-common-lib@0.5.8
@cloudant/cloudant@4.2.1
@ibm-functions/iam-token-manager@1.0.5
@sendgrid/mail@7.4.5
fabric-ca-client@2.2.9
fabric-network@2.2.9
ibmcloud-appid@6.1.1
log4js@4.3.2
mongodb@3.7.2
node-vault@0.9.22
passport@0.4.1
passport-cognito@0.2.2
request-promise@4.2.6
safe-eval@0.4.1

openIDL Data Call App

folder: openidl-data-call-app

This component serves as the api for the data call ui.

Dependencies

app@1.0.1

 @openidl-org/openidl-common-lib@0.5.8
 @sendgrid/mail@7.4.7
 body-parser@1.19.0
 config@2.0.2
 cookie-parser@1.4.5
 cors@2.8.5
 express@4.17.1
 express-session@1.17.2
 helmet@3.21.2
 http-errors@1.6.3
 js-yaml@3.14.1
 lodash@4.17.21
 log4js@4.5.1
 moment@2.29.1
 node-fetch@2.6.5
 swagger-ui-express@3.0.10
 uuid@3.4.0

openIDL Data Call Mood Listener

folder: openidl-data-call-mood-listener

This component listens for events on the ledger.

Dependencies

openidl-data-call-mood-listener@1.0.1
 @openidl-org/openidl-common-lib@0.5.8
 @sendgrid/mail@7.4.5
 config@2.0.2
 express@4.16.4
 log4js@4.5.1
 sinon@7.5.0
 uuid@3.4.0

openIDL Data Call Processor

folder: openidl-data-call-processor

This component listens for the consent event and runs the extraction pattern.

Dependencies

openidl-data-call-processor@1.0.1
 @cloudant/cloudant@3.0.2
 @openidl-org/openidl-common-lib@0.5.8
 @sendgrid/mail@7.4.6
 aws-sdk@2.474.0
 config@2.0.2
 cron@1.8.2
 express@4.16.4
 log4js@4.5.1
 moment@2.29.1
 mongodb@3.6.11
 object-sizeof@1.6.1
 sleep@6.3.0
 uuid@3.4.0

openIDL Insurance Data Manager

folder: openidl-insurance-data-manager

This component provides an API to load data into the Harmonized Data Store.

Dependencies

app@1.0.1
 @openidl-org/openidl-common-lib@0.5.8
 @sendgrid/mail@7.4.6
 body-parser@1.19.0
 config@2.0.2
 cookie-parser@1.4.5
 cors@2.8.5
 crypto@1.0.1
 express@4.16.4
 express-session@1.17.2
 helmet@3.21.2
 http-errors@1.6.3
 js-yaml@3.14.1
 log4js@4.5.1
 node-fetch@2.6.1
 sort-json-array@0.1.7
 swagger-ui-express@3.0.10
 uuid@3.4.0

openIDL Transactional Data Event Listener

folder: openidl-transactional-data-event-listener

This component listens for data arriving on the analytics node and starts the reporting process.

Dependencies

transactional-data-event-listener@1.0.1
 @cloudant/cloudant@3.0.2
 @openidl-org/openidl-common-lib@0.5.8
 @sendgrid/mail@7.4.6
 aws-sdk@2.474.0
 config@2.0.2
 express@4.16.4
 log4js@4.5.1
 mongodb@3.6.11
 object-sizeof@1.4.0

openIDL User Interface

folder: openidl-ui-workspace

This component holds all the UI components for openIDL in an angular workspace.

The dependencies are shared across all projects which are in the projects subfolder.

Dependencies

openidl-ui-workspace@0.0.0
 @angular/animations@12.1.5
 @angular/cdk@12.1.4
 @angular/common@12.1.5
 @angular/compiler@12.1.5
 @angular/core@12.1.5
 @angular/forms@12.1.5
 @angular/material@12.1.4
 @angular/platform-browser@12.1.5
 @angular/platform-browser-dynamic@12.1.5
 @angular/router@12.1.5
 @openidl-org/openidl-common-lib@0.5.8
 config@3.3.6
 cookie-parser@1.4.5
 cors@2.8.5
 express@4.17.1
 express-session@1.17.2
 helmet@3.23.3
 ibmcloud-appid@6.1.1
 log4js@4.5.1
 moment@2.29.1
 nconf@0.11.3
 ngx-csv@0.3.2
 nocache@2.1.0
 node-fetch@2.6.1
 passport@0.4.1
 request-promise@4.2.6
 rxjs@6.6.7
 tslib@2.3.1
 zone.js@0.11.4

openIDL UI

folder: openidl-ui-workspace/projects/openidl-ui

This component provides access to the system for the AAIS and Analytics nodes.

openIDL Carrier UI

folder: openidl-ui-workspace/projects/openidl-carrier-ui

This component provides access to the system for the Carrier nodes.

openIDL Common UI

folder: openidl-ui-workspace/projects/openidl-common-ui

This component provides common code for the UI components.

Dependencies

Dependency	Description	Discussion
@angular	UI Framework	
@cloudant	This is the official Cloudant library for Node.js.	This library is now deprecated and will be end-of-life on Dec 31 2021.
@sendgrid /mail	Twilio SendGrid NodeJS mail service	Can be removed
aws-sdk	AWS SDK for JavaScript	
body-parser	Node.js body parsing middleware.	
config	Configuration control for production node deployments	
cookie-parser	Parse Cookie header and populate req.cookies with an object keyed by the cookie names. Optionally you may enable signed cookie support by passing a secret string, which assigns req.secret so it may be used by other middleware.	

cors	Node.js CORS middleware	
cron	cron for node.js	
crypto		Deprecated! This package is no longer supported and has been deprecated. To avoid malicious use, npm is hanging on to the package name. It's now a built-in Node module. If you've depended on crypto, you should switch to the one that's built-in.
express	Fast, unopinionated, minimalist web framework	
express-session	Simple session middleware for Express	
helmet	Helmet helps you secure your Express apps by setting various HTTP headers. It's not a silver bullet, but it can help!	
http-errors	Create HTTP errors for Express, Koa, Connect, etc. with ease.	
ibmcloud-appid	Node.js SDK for the IBM Cloud App ID service	
js-yaml	YAML 1.2 parser and serializer	
lodash	The Lodash library exported as Node.js modules. Lodash is A modern JavaScript utility library delivering modularity, performance & extras.	
log4js	This is a conversion of the log4js framework to work with node.	
moment	A JavaScript date library for parsing, validating, manipulating, and formatting dates.	
mongodb	The official MongoDB driver for Node.js.	
nconf	Hierarchical node.js configuration with files, environment variables, command-line arguments, and atomic object merging.	
ngx-xac	Helper library for create CSV file in Angular2+	
nocache	This Express middleware sets some HTTP response headers to try to disable client-side caching.	
node-fetch	Instead of implementing XMLHttpRequest in Node.js to run browser-specific Fetch polyfill, why not go from native http to fetch API directly? Hence, node-fetch, minimal code for a window.fetch compatible API on Node.js runtime.	
object-sizeof	Get size of a JavaScript object in Bytes	
passport	Passport is Express-compatible authentication middleware for Node.js.	
request-promise	The simplified HTTP request client 'request' with Promise support. Powered by Bluebird.	Deprecated! We need to replace this.
rxjs	Reactive Extensions Library for JavaScript.	
sinon	Standalone and test framework agnostic JavaScript test spies, stubs and mocks (pronounced "sigh-non", named after Sinon, the warrior).	Should be a development dependency
sleep	Add sleep(), msleep() and usleep() to Node.js, via a C++ binding.	
sort-json-array	Sort an array of JSON objects by a property	
swagger-ui-express	This module allows you to serve auto-generated swagger-ui generated API docs from express, based on a swagger.json file. The result is living documentation for your API hosted from your API server via a route.	
tslib	Runtime library for TypeScript helper functions	
uuid	For the creation of RFC4122 UUIDs	
zone.js	Implements Zones for JavaScript, inspired by Dart.	