## **NIEM API 2.0 AND NIEM TOOLBOX – 1**

Transition legacy NIEM tools into updated open source products. Move key functionality out of tools into the API for reusability.

Feature	NIEM API	NIEM Toolbox
(Background)	<ul><li>Java / Spring Boot and PostgreSQL database</li><li>Hosted via GTRI</li></ul>	<ul><li>Nuxt (JS) SPA</li><li>Hosted via GitHub Pages (free)</li></ul>
Transforms	<ul> <li>Transform models into other formats</li> <li>Inputs – CMF or NIEM XSD</li> <li>Outputs – CMF, XSD, JSON Schema, or OWL</li> <li>Leverages the CMF tool</li> </ul>	<ul> <li>Form to upload file and set options</li> <li>API request</li> <li>Download results</li> </ul>
Validation	<ul> <li>XSD – Validate and check NDR conformance</li> <li>XML – Validate against provided schema</li> <li>CMF – Validate against schema (NTAC)</li> <li>IEPD catalog – Validate against schema (NTAC)</li> <li>XML catalog – Validate against schema (OASIS)</li> </ul>	<ul> <li>Form to upload file and set options</li> <li>API request</li> <li>Download and view results</li> </ul>
Migration	<ul> <li>Migrate from one supported model version to a more recent version</li> <li>Can iterate over multiple versions in one call</li> <li>Accepts input and generates results as CMF</li> </ul>	<ul> <li>Form to upload file and set options</li> <li>API request</li> <li>Download and view results</li> </ul>



Done

In progress

## **NIEM API 2.0 AND NIEM TOOLBOX – 2**

Transition legacy NIEM tools into updated open-source products. Move key functionality out of tools into the API for reusability.

Feature	NIEM API	NIEM Toolbox
Model data	<ul> <li>Return information about models, versions, namespaces, properties, classes, datatypes, and facets</li> <li>Supports NIEM and published community models</li> <li>NIEM data 1.0 – 5.2 currently available</li> </ul>	<ul> <li>Browse model data</li> <li>View information about components</li> <li>View information about curated list of common components</li> </ul>
Search	<ul> <li>Search properties, types, and codes</li> <li>Supports fuzzy searching, including tokens and substrings</li> <li>Filter results by namespace</li> <li>Component-specific search fields</li> </ul>	<ul> <li>Search models</li> <li>View results</li> <li>View information about components</li> </ul>
Model management	<ul> <li>Add, edit, and delete model content</li> <li>Model and component QA</li> <li>Load change request spreadsheets</li> <li>Generate release artifacts</li> <li>Generate model stats</li> </ul>	

