Each NASA Distributed Active Archive Center (DAAC) faces the challenge of dealing with an increasingly diverse number of publishable data products from diverse data producers. Data producers, on the other hand, may experience pain points when interacting with the Earth Observing System Data and Information System (EOSDIS) for the first time or when publishing different data at different DAACs. As a result, there has been a growing need to develop a common software framework that serves as a common interface for data producers, rigorously defines the data publication procedure for DAAC staff, facilitates the management of various data publication processes, and tracks the progress of data publication. This software should also account for the different configurations at different DAACs.

Currently, two primary data publication workflow and tracking tools exist in operation at EOSDIS: Semi-Automated Ingest System (SAuS) and Data Publication workflow Portal (DAPPeR). However, neither tool is cloud-ready. Automated data processing could be managed by Cumulus, an EOSDIS cloud-based data ingest, archive, and management system. However, Cumulus does not support manual tasks or on-premise implementations. We propose to develop the Earthdata Publication Minimum Viable Product (Earthdata Pub MVP) -- a cloud-hosted solution that works with both cloud and on-premise systems and implements the communications and exchange requirements generated by the Earthdata Pub information architecture team.

**Abstract**

Each NASA Distributed Active Archive Center (DAAC) faces the challenge of dealing with an increasingly diverse number of publishable data products from diverse data producers. Data producers, on the other hand, may experience pain points when interacting with the Earth Observing System Data and Information System (EOSDIS) for the first time or when publishing different data at different DAACs. As a result, there has been a growing need to develop a common software framework that serves as a common interface for data producers, rigorously defines the data publication procedure for DAAC staff, facilitates the management of various data publication processes, and tracks the progress of data publication. This software should also account for the different configurations at different DAACs.

**Data Producer Journey**

Meet Investigator Bruce

Bruce wants to archive data

He has created a NASA Earthdata funded dataset and needs help to figure out where and how to archive the data.

**Expectations**

- Obvious location
- Simple and easy
- Clear instructions

**Data Files**

1. Write data management plan
2. Identify where to archive
3. Figure out how to contact archive

**Pre-Submission**

I have no idea where to go.

The documentation wasn’t in order.

I want to see a person.

**Upload**

No. feedback needed. I expect...

This is a great, user-friendly dataset.

**Monitor and Review**

12. Monitor progress
13. Review dataset
14. Notify when published

**Future Work**

<table>
<thead>
<tr>
<th>No.</th>
<th>Development Tasks</th>
<th>Module</th>
<th>No.</th>
<th>Development Tasks</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data Provider Forms (Interest and Questionnaire)</td>
<td>Forms</td>
<td>8</td>
<td>Workflow Engine</td>
<td>Workflow</td>
</tr>
<tr>
<td>2</td>
<td>API and Access Control</td>
<td>API</td>
<td>9</td>
<td>Metrics Capture Design</td>
<td>Metrics</td>
</tr>
<tr>
<td>3</td>
<td>Database and Ancillary File Storage</td>
<td>Database</td>
<td>10</td>
<td>Information Pages</td>
<td>Documentation</td>
</tr>
<tr>
<td>4</td>
<td>Notification Service</td>
<td>Communication</td>
<td>11</td>
<td>Common Metadata Repository Integration</td>
<td>Publish</td>
</tr>
<tr>
<td>5</td>
<td>Actions System</td>
<td>Communication</td>
<td>12</td>
<td>Cumulus Integration</td>
<td>Cumulus</td>
</tr>
<tr>
<td>6</td>
<td>Dashboard, Views, Administration Pages</td>
<td>Dashboard</td>
<td>13</td>
<td>Plugin System, Extensibility, and Independently Testable Modules Architecture</td>
<td>Extensions</td>
</tr>
<tr>
<td>7</td>
<td>Metadata Editor Metadata</td>
<td>Metadata</td>
<td>14</td>
<td>Open Source Governance Plan and Review Board Procedures</td>
<td>Governance</td>
</tr>
</tbody>
</table>