

IN THE PIPELINE

INTRODUCING

Dennis Stevens is our new OSDU
Forum Director. He brings
extensive experience from The
Open Group Open Process
Automation™ Forum and FACE™
consortium, and we are excited to
have his experience, ideas, and
passion in the OSDU Forum!



OVERVIEW

CALLING ALL DEVELOPERS

The Developer Ready OSDU Release 2 (R2) code-base will be available soon, and PMC Vice-Lead, Joe Nieten, AWS, shares an OSDU data platform overview.

RELEASE 2 FOR DEVELOPERS

The OSDU community is continuously learning, and looking to improve and grow. This edition of *In the Pipeline* looks forward to OSDU Release 2, and looks back at R0 & R1 to learn from where we have been. We are also taking a moment to feature Halliburton in our member spotlight!

- 1. Calling All Developers: R2 What you need to
- 2. OSDU Lookback: R0 & R1
- 3. Member Spotlight: Halliburton

If you or your company develop software for the Energy domain, you can soon start to explore developing on, or integrating with, the new, open source, digital technology platform: the OSDU data platform, Release 2.

Most applications are focused on solving a particular problem, using a particular process to solve that problem. As such, applications need to deliver data, and ingest data. The OSDU data platform allows data exchanges from different applications within the Energy domain, while keeping all data in a single compute environment to maximize performance and reliability and minimizing total cost of ownership. Application developers will need to be able to:

- Search for the data they need to deliver from the OSDU data platform
- Deliver data from the OSDU data platform
- Push the data they ingest into the OSDU data platform

The OSDU data platform provides <u>REST endpoints</u> for each of these required capabilities. Search will enable an application to search for all the data files associated with a particular trajectory, wellbore and well. The Search service will return Records that provide the consuming application with the information needed to deliver data from the OSDU data platform via the data delivery services. In addition, the OSDU data platform provides services to store data and metadata in the OSDU data platform.

The OSDU Forum will also host <u>virtual Application Developer Bootcamps</u>. These onboarding and training sessions will walk you step-by-step through integrating with the OSDU REST endpoints that you will need to Search, Deliver and Ingest via the OSDU data platform.

After OSDU R2 publication, all cloud service providers (CSP) will work to host accessible OSDU test environments, and can also help you setup your own instance of the OSDU R2 data platform within your own cloud development environment (subject to some terms and conditions). We encourage all application developers to reach out to one, or all cloud providers for hands-on guidance on the services you will need to integrate. In addition to a published Reference architecture, the OSDU Forum will also provide unified documentation for developers to self-deploy.

The R2 delivery team has worked long and hard to make sure they deliver a high quality product. As always, there are challenges with a new software system. The delivery team will be addressing any found issues as quickly as possible in the weeks immediately following the R2 Release date. We highly encourage all developers to take advantage of the learning opportunities of Release 2 and begin working with the OSDU data platform. Your experience and feedback will help build the strength of our <u>open source community</u>. And of course as an open source initiative; you will get out of it what you put into it. Please attend the developer bootcamps for onboarding, and work with your cloud providers to get started on your integration journey!

At the end of Q1 2020, over <u>140</u> <u>members</u> have joined The OSDU Forum!

OSDU LOOKBACK: R0/R1

We are proud of the remarkable accomplishments and work of the OSDU Release 1 Tiger Team and we want to do even better as we go forward. In our desire for continuous improvement, we held a lookback session to identify challenges we faced in R1 and ways we can continue to improve.

ASSUMED CODING CONVENTIONS

Challenge: While testing in R0 we learned that each of our contributing companies have outlined company-specific development and coding conventions (e.g.; use of capitalization, commas), but these don't commonly align across the industry. This lead to rework to realign assumptions and expectations.

Remediation: Early in the R2 team formation, we discussed R2 assumptions up front and aligned on a common approach.



CHALLENGES OF WORKING REMOTELY

Challenge: R0 and R1 were primarily worked virtually making development alignment difficult.

Remediation: For R2, Schlumberger donated space at their Houston Galleria office for a War Room. This has already helped immensely in alignment and our ability to work together better, and faster.

INDEPENDENTLY MANAGED BACKLOGS

Challenge: During R0 and R1 each company managed their own backlogs in their own systems. It wasn't visible what each team was working on.

Remediation: We moved to a common backlog to increase visibility and spot issues or gaps earlier. For the future, we are looking to improve visibility of the independent pieces that cloud providers need to build for their specific implementations.

MEMBER SPOTLIGHT: **Halliburton**

It is a little known fact, but the idea of Open Subsurface Data Universe™ (OSDU) Forum germinated at the OpenEarth® Community (OEC) founders meetings in 2018 amongst other gatherings that brought the oil and gas operators together. Halliburton joined the OSDU Forum as an active member in December of 2018.



Chandra Yelashwarapu



"For any community to grow and be successful requires active participation from not just a few but most of its members. The OSDU Forum is no different and it's amazing to see a passionate and growing community of over 140 participating companies."

HALLIBURTON'S COMMITMENTS TO THE OSDU FORUM

As one of the industry's largest ISV's, Halliburton Landmark is an active and committed member of The Open Group Open Subsurface Data Universe™ Forum. At the first face-to-face meeting of the OSDU Forum in 2019, Halliburton made a commitment to the community:

- 1. OSDU compliant cloud native microservices, workflows and services; plans that all products and solutions from Halliburton Landmark will be OSDU compliant.
- 2. OSDU will be available in OEC projects to write more OSDU compliant applications and microservices. This will enable the community of developers on OEC to develop more applications and services on the OSDU data platform.
- 3. Halliburton Landmark will create an OSDU reference implementation and work to optimize it for performance and scale and contribute changes to the OSDU data platform.

For more information, see Chandra's blog post here.

