Signals Notebook is the cloud-based electronic lab notebook (ELN) and scientific collaboration platform for today’s scientists. Signals Notebook features native ChemDraw support for all chemistry workflows, drag and drop capture of a wide variety of electronic data files, lightning-fast data entry and search, and a modern, highly responsive design. Signals Notebook supports the needs of biologists with support for FASTA sequence, plasmid circular maps, HELM notation, and plate reading. Signals Notebook is quickly becoming the preferred cloud based ELN for discerning chemists, biologists, and all areas of scientific discovery.

There are three different Signals Notebook product releases offered with different release cadences as shown in the table below, Figure 1:

- Signals Notebook Standard
- Signals Notebook Enhanced Enterprise Edition (E3)
- Signals Notebook Private Cloud

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Configurable business rules</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Application deployment</td>
<td>Shared</td>
<td>Shared</td>
<td>Isolated</td>
</tr>
<tr>
<td>Data isolation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Release cadence, Update frequency</td>
<td>Agile, when ready</td>
<td>Deferred, Scheduled 3x / year</td>
<td>Optionally Agile, when ready or Deferred, Scheduled 3x / year</td>
</tr>
<tr>
<td>Provisioned tenants</td>
<td>1 Production (additional sandbox for purchase)</td>
<td>1 Production, 1 Staging, 1 Sandbox (SANB Standard)</td>
<td>3 Production, 3 Staging, 1 Sandbox (SANB Standard)</td>
</tr>
<tr>
<td>Validation ready (IO, IO, go live &amp; ongoing delta)</td>
<td>No</td>
<td>Yes</td>
<td>Available</td>
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*Figure 1: Signals Notebook Version Releases*
For the Signals Notebook Standard Edition (Agile releases as shown in the table above), accompanying documentation is provided via the “What's New”. The deferred releases occur three times per year on a defined annual schedule with documentation provided via dedicated release notes. Validated customers get a Sandbox when SNB (Signals Notebook) Standard customers get their production tenant. The agile release for validated customers is their Sandbox for early access as it is critical that they use this Sandbox to prepare their ongoing validation plans.

Figure 2: Signals Notebook Release Cadence

Figure 2, illustrates the release cadence of the three products. The first bar across the tops illustrates the agile software release (agile “release when ready”, are frequent releases on an undefined schedule). Releases that serve as production tenant releases for Signals Notebook standard customers, serve as Sandbox Releases for early access validation for the E3 and Private Cloud customers. The vertical bars across the top grey bar illustrate the deferred releases which are an aggregation of the three prior agile releases and include all hotfixes. These are deployed to staging first and then released to production one month later. This permits a month-long validation period as highlighted in the light blue color.

Signals Notebook Standard is designed to provide scientists with the tools they need to design, record, and share their experimental data. Signals Notebook provides organizations with confidence, supporting security, configurability, and administrative capabilities demanded by today’s leading research and industrial organizations. Organizations have control over sharing of experiments both throughout their enterprise and external to their organization, such as allowing controlled access to external partners. Administrators can define metadata to be captured along with experiments, and the access rules based upon them such as setting up project or auto-numbering rules for experiments. Organizations also retain ownership of the data when researchers move on.

Signals Notebook Standard is a multi-customer environment on an agile release schedule (approximately 10 releases per year) with one production tenant only (although customers can purchase additional non-production tenants if desired).
Signals Notebook Enhanced Enterprise Edition (E3) is a multi-customer environment that provides the same capabilities as the Standard version but with a deferred, less frequent release schedule (3 times per year). The E3 offering provides three tenants - a production tenant (multi-customer deferred), a staging tenant (multi-customer deferred), and a sandbox tenant (multi-customer agile). The deferred release permits time for optional validation. Customers have access to a staging environment and standard notebook environment to test functionality before it becomes live in production (multi-tenant).

Signals Notebook Private Cloud provides the Signals Notebook capabilities in a dedicated environment with dedicated infrastructure so that the customer is the only one with tenants in that environment. This single customer environment can be on either the agile or deferred software release schedule. The Private Cloud product offering provides for three tenants in a single customer production environment: three tenants in a single customer staging environment and one tenant in multi-customer sandbox agile.

Validation Support

Signals Notebook Enhanced Enterprise Edition (E3) and Signals Notebook Private Cloud delivers support validation. Once the customer has documented their processes and completed their validation activities, these SaaS (Software as a Service) solutions are considered validated.

Validation Activities:

- Runs verification on every standard release for each deferred release (there are multiple standard releases within each deferred release that are delivered to E3 and Private Cloud customers on the deferred release cycle)
- Runs verification on the deferred release itself
- Runs IQ (Installation Qualification) and provides customers with a report of each successful IQ
- Runs OQ (Operational Qualification) covering baseline out-of-the-box, non-configured workflows
- Produces documentation to assist customer validation documentation