

Smart Integration and Business Process Extensions with APIs for SAP Ariba Solutions - ASUG82933

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PUBLIC

**“SAP Ariba is adopting an
API First! Strategy for Customers
and Partners to easily extend the
SAP Ariba Solutions.”**

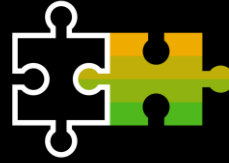
- Darren Koch, SAP Ariba Chief Product Officer

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SAP Ariba APIs

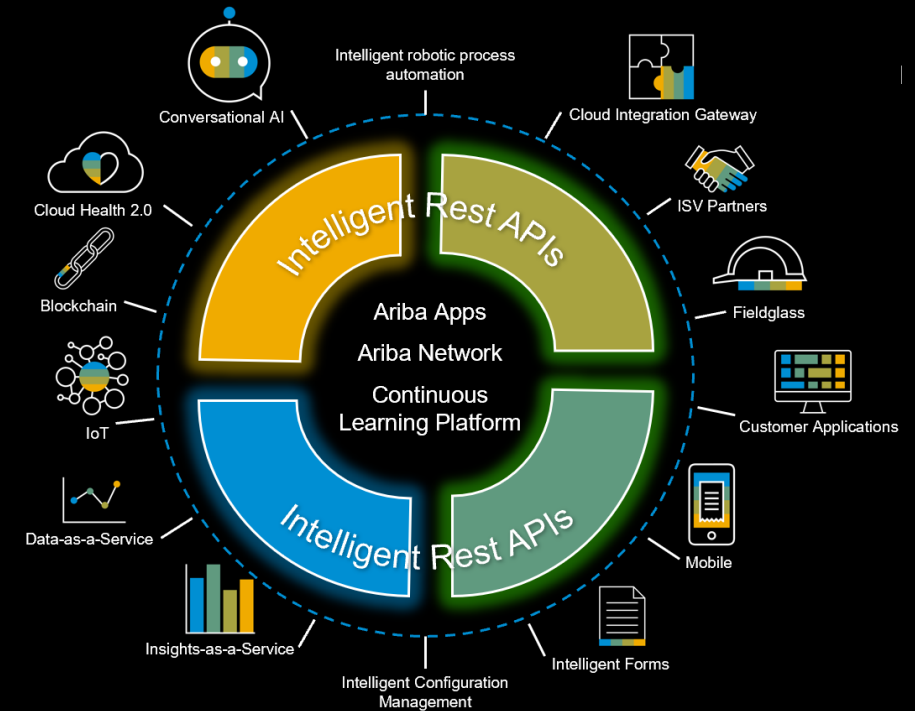


Simple

Scalable

Secure

- **API First!** Culture
- Art of the possible – **Extensibility**
- Faster delivery of smarter and innovative services to customers, partners, and end users
- Build and deploy on the cloud platform of your choice, scale with other enterprise cloud self-service models



What **customers** are **saying**?

Give me the option to select my own tax engine



Integrate approvals with my own unified approval app



Support BPM audit service



Real-time reporting and insights



Real-time validate and enrich documents

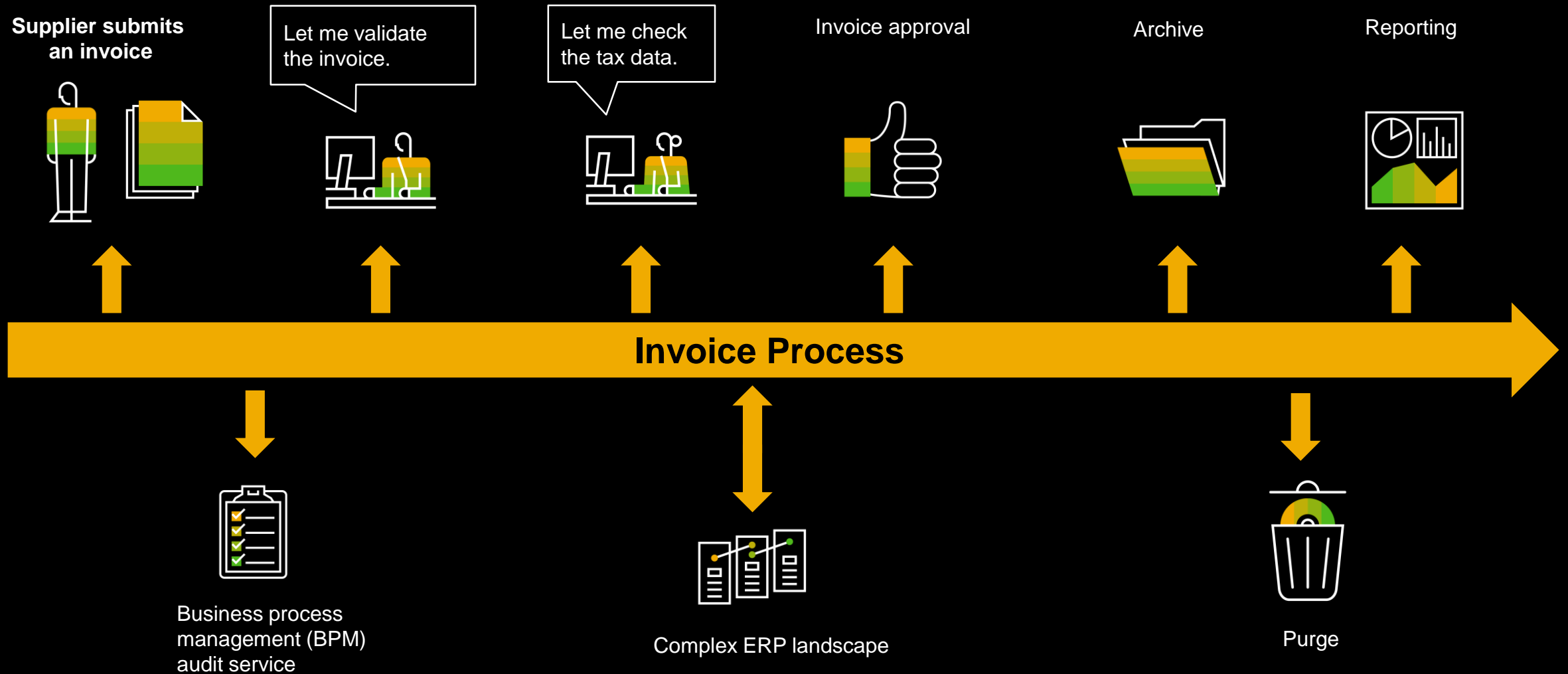


Give me real-time visibility into my shipments



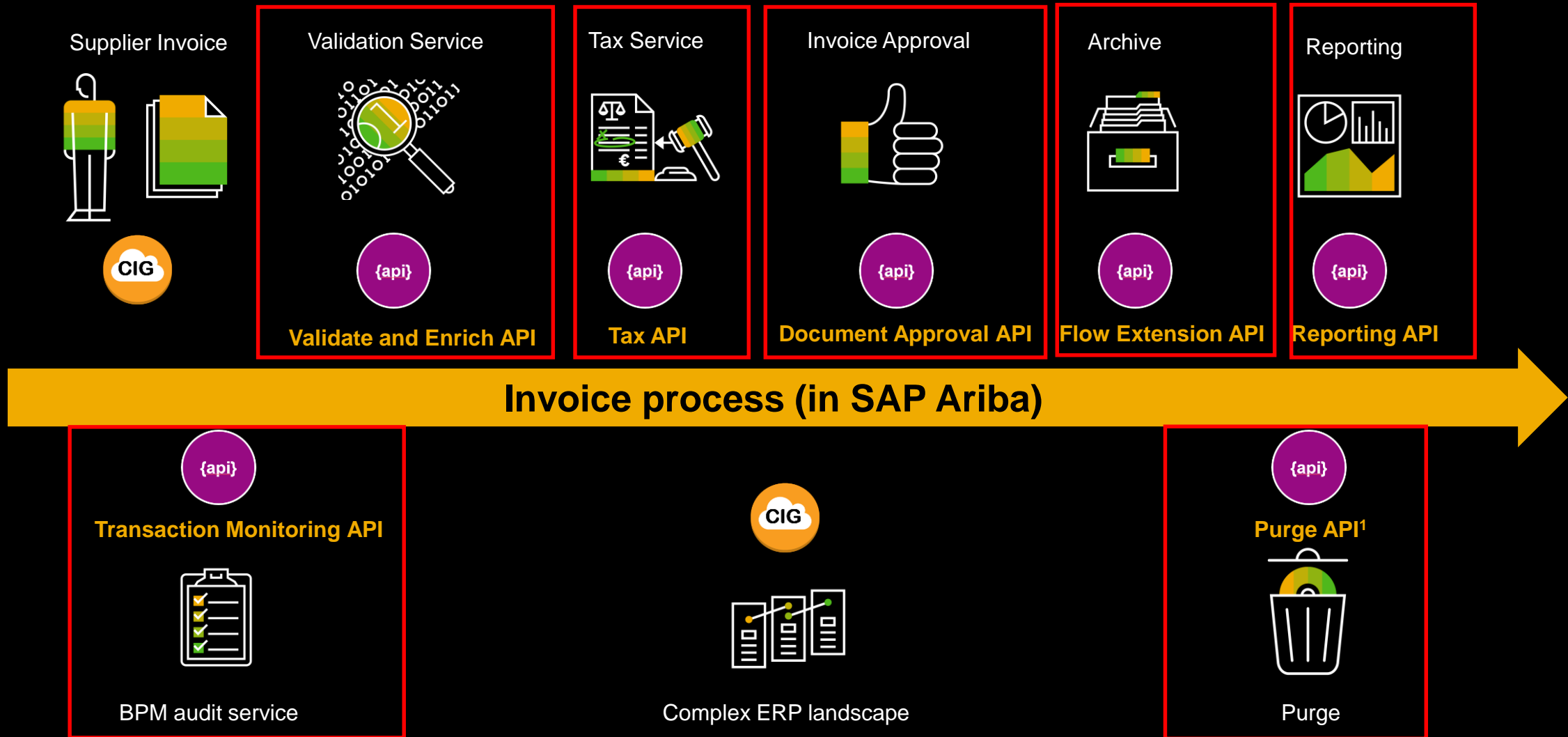
Sample use case

Invoice process flow



Sample use case

Invoice process flow with APIs



1. Coming soon

SAP Ariba APIs

Operational Procurement

- Create and use an external application to obtain **approval, denial, and comments** on **PR and invoices** generated in SAP Ariba Procurement solutions systematically or by presenting the **approval task** to one or more approvers

Document Approval API

- Enable your application to get **custom forms document information** from SAP Ariba Procurement solutions for reporting or sending to an external ERP system

Custom Forms API

- Retrieve header, line item, and other details for procurement transactions (such as PR, PO, INV, IR, and receipts)

Operational Reporting API for Procurement

- Retrieve status of import and export file channel integration events for transaction and master data in SAP Ariba Procurement solutions

Integration Monitoring API for Procurement

Operational Procurement

Catalog API

- Enable export of catalog data like catalog subscriptions, filtered subset of items and attribute-based faceted data

Analytical Reporting API

- Report on analytical data that helps identify trends and insights based on analysis of current and historic data
- Access all facts and dimensions data

Tax API

- Use **third-party tax data providers** to **obtain tax calculations** for PO and invoices in the SAP Ariba Buying, SAP Ariba Buying and Invoicing, and SAP Ariba Invoice Management solutions

Validate & Enrich API

- Export requisition, contract request, and invoice data from SAP Ariba Procurement solutions to an external system for processing. You can validate and enrich data in header, line, and accounting fields

SAP Ariba APIs

Ariba Network

- **Publish** RFx events from a marketplace on SAP Ariba Discovery

Discovery RFx from External Marketplace API

- Publish SAP Ariba Discovery events to Web sites and marketplaces to increase the number of bidders

Discovery RFx to External Marketplace API

- **Monitor** supply chain collaboration transactions across Ariba Network
- High visibility and traceability

Transaction Monitoring API

- **Enrich processes and documents** (including PO, invoice, ASN, OC, and receipts in Ariba Network with information external to SAP Ariba)

Flow Extension API

Strategic Sourcing

Operational Reporting API for Sourcing

- Retrieve transactional sourcing data for operational decisions for documents such as User, Organization, Sourcing Project, RFXItemValue, RFX Document, AuditEntry and so on

Integration Monitoring API for Sourcing

- Retrieve status of import and export file channel integration events for transaction and master data in SAP Ariba Sourcing solution

External Approval API

- Create and use an external application to obtain approval, denial, and comments on sourcing and supplier management approvable

Supplier Data API with Pagination

- Access supplier data on a read-only basis for integration to a third-party tool
- Example: Get a list of all suppliers with registered, qualified, and preferred status for a category, region, and BU
- Only available for suppliers in SLP and SIPM

Calling **External API**

- **Ability to load APIs developed externally**

- Must be a REST API
- Support for both headers and URL query parameters
- Basic and OAuth 2.0 authentication supported
- Provide Swagger file to document the API

- **Current use case: Custom Forms**

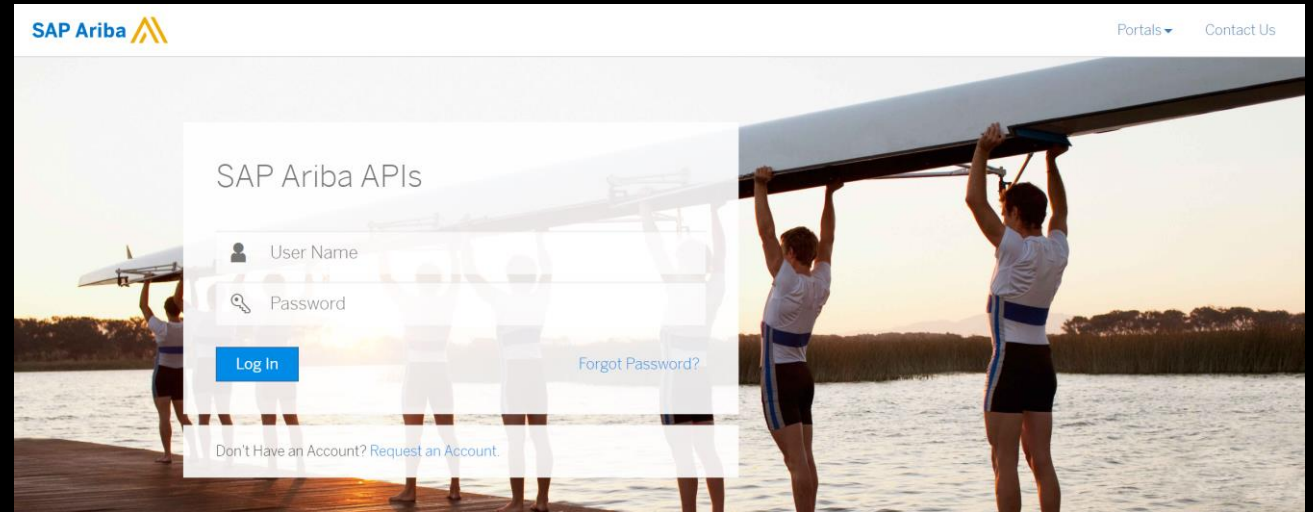
- Send and receive data to and from external systems real-time
- Business process flow automation and custom validations using your own APIs
- Custom forms to call external API upon:
 - Load
 - Submit
 - Post
 - Approval completion
 - Certain widget data changes
- Easy mapping of form fields to API response field (and vice-versa)

Developer Portal



Developer Portal

Central repository, to discover, learn and also consume the SAP Ariba **REST APIs**.




The developer portal includes

- **Tools** - manage developer onboarding, application registration
- **Developer resources** - API guides and API catalog
- **Sandbox business environment** – enables rapid development
- **OAuth 2.0 Authorization framework** - secure pipeline to validate API calls


Developer Portal **Login**


1. Choose your regions dropdown

SAP Ariba 

Portals ▾ Contact Us

SAP Ariba APIs

 User Name

 Password

[Request an Account](#) [Forgot Password?](#)

[Log In](#)

Don't Have an Account? [Request an Account.](#)

- US Portal
- EU Portal ✓
- RU Portal
- CN Portal
- KSA Portal
- UAE Portal

Developer Portal Access

Customers

If you are a Designated Support Contact(DSC), please submit the form to get the registration process started. A service request will be created on your behalf and a confirmation email will be sent to you. If you are not a DSC, please ask your DSC to submit the form.

Request an Account

Thank you for your interest in the SAP Ariba APIs.

Customers

If you are a Designated Support Contact(DSC), please submit the form below to get the registration process started. A service request will be created on your behalf and a confirmation email will be sent to you. If you are not a DSC, please ask your DSC to submit the form below

SAP Employees

Please submit the form below to get the registration process started.

Thank you,
SAP Ariba APIs Team

Corporate Email



You expressly agree and understand that your data entered into this system will be transferred to Ariba, Inc. and the Ariba hosted computer systems (currently located primarily in the U.S.), in accordance with the [Ariba Privacy Statement](#) and applicable law.

☐ I agree

Cancel

Submit

Discover SAP Ariba REST APIs

Go to Discover to find out all of the RESTful SAP Ariba APIs available.

Select the appropriate tab on the top.

Then select the appropriate API on the left. You can then read about how this API works.

SAP Developer Portal - US

Discover APIs

Help Thomas English

SAP Ariba APIs

ANALYTICS ARIBA NETWORK CATALOG PROCUREMENT STRATEGIC SOURCING SUPPLIER MANAGEMENT

Discover

REST

▼ Analytical Reporting

- Analytical Reporting - View Management API
- Analytical Reporting - Job Submission API
- Analytical Reporting - Job Results API
- Analytical Reporting - Synchronous API

Analytical Reporting - View Management API

Version v1 ▼

The Analytical reporting APIs enable you to create a client application that extracts reportable data from reporting facts and dimensions such as you would select in the user interface when creating an analytical report. For example, you could use these APIs to extract and report on the analytical data that you need to import to a customer's warehouse or create dashboards for trend assessment.

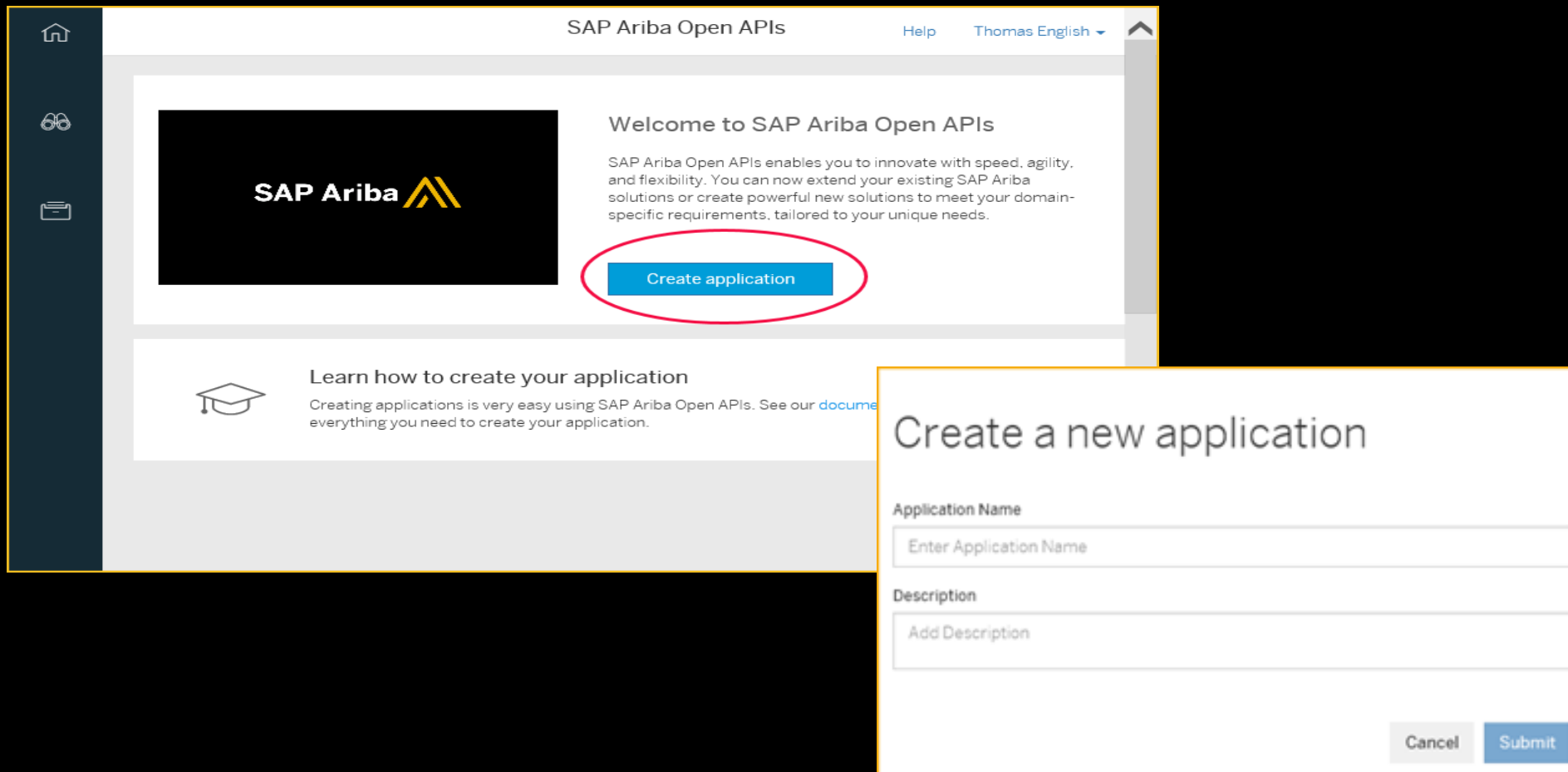
The View management API for analytics allows you to work with reporting view templates, which are used to specify the filters that determine what data will be returned in response to an API request using the Analytical reporting API. A reporting view template specifies the type of records to report on, the reporting fields to be included in the API response, and selection filters to select relevant records for inclusion.

For more detailed help, see the [help for the Analytical reporting API](#).

Environment Details

Environment	Description	Value
Runtime URL Production	Production environment for Cloud Business Applications	https://openapi.ariba.com/api/analytics-reporting-view/v1/prod

Create an **Application**



The image shows a screenshot of the SAP Ariba Open APIs dashboard. The dashboard has a dark blue sidebar on the left with icons for home, a list, and a folder. The main content area has a header with 'SAP Ariba Open APIs', 'Help', and 'Thomas English'. Below the header, there is a 'Welcome to SAP Ariba Open APIs' section with a black box containing the 'SAP Ariba' logo and a blue 'Create application' button. Below this, there is a 'Learn how to create your application' section with a graduation cap icon and text. A modal form titled 'Create a new application' is overlaid on the right side of the dashboard. The modal form has two input fields: 'Application Name' with a placeholder 'Enter Application Name' and 'Description' with a placeholder 'Add Description'. At the bottom right of the modal are 'Cancel' and 'Submit' buttons.

SAP Ariba Open APIs

Help Thomas English

Welcome to SAP Ariba Open APIs

SAP Ariba Open APIs enables you to innovate with speed, agility, and flexibility. You can now extend your existing SAP Ariba solutions or create powerful new solutions to meet your domain-specific requirements, tailored to your unique needs.

Create application

Learn how to create your application

Creating applications is very easy using SAP Ariba Open APIs. See our [documentation](#) for everything you need to create your application.

Create a new application

Application Name

Enter Application Name

Description

Add Description

Cancel Submit

Application Flow

Application key is automatically created.

View the 'What's Next' section to see the progress of this application.

Developed by	Joanne Gammon
Organization	SAP Internal Org
Summary	External Document Approval
Last updated	Aug 1, 2018
Application key	8060c384fb164e3ab3507373e2a6e9a9

What's Next?

```
graph LR; A((New application)) --> B((Ask your admin to request API access for your application)); B --> C((Your admin requests API access for your application)); C --> D((Ariba needs to approve the API access request for your application)); D --> E((Your admin needs to generate the OAuth Secret for your application));
```

New application

Ask your admin to request API access for your application

Your admin requests API access for your application

Ariba needs to approve the API access request for your application

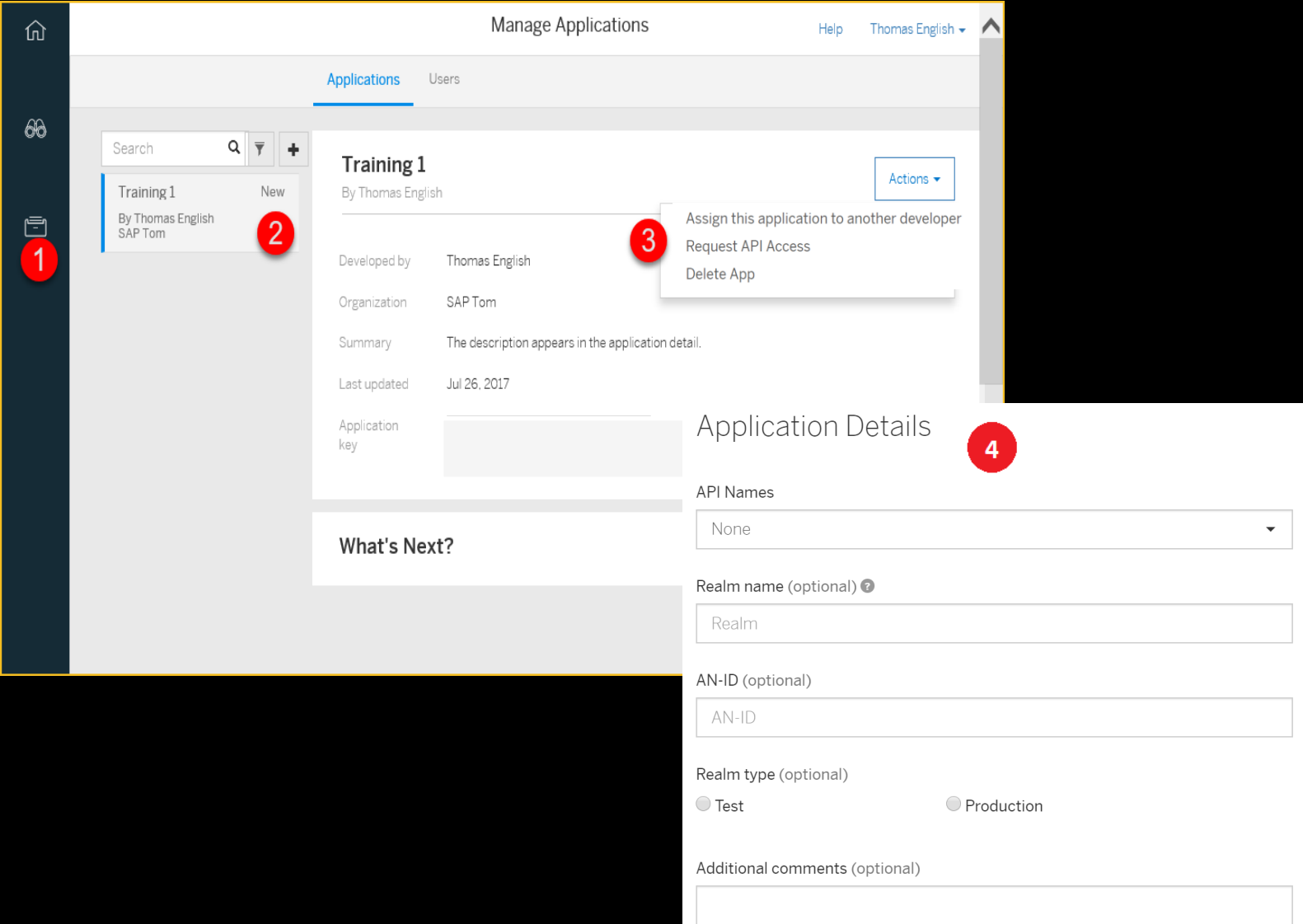
Your admin needs to generate the OAuth Secret for your application

In progress

Request API access for your application

Organization Admin requests API access for the application by selecting the 'Request API Access' option under the Actions menu

Once the Application gets approved, the OAuth Client ID gets generated and the Application status goes to 'Active'.



Generate OAuth Secret

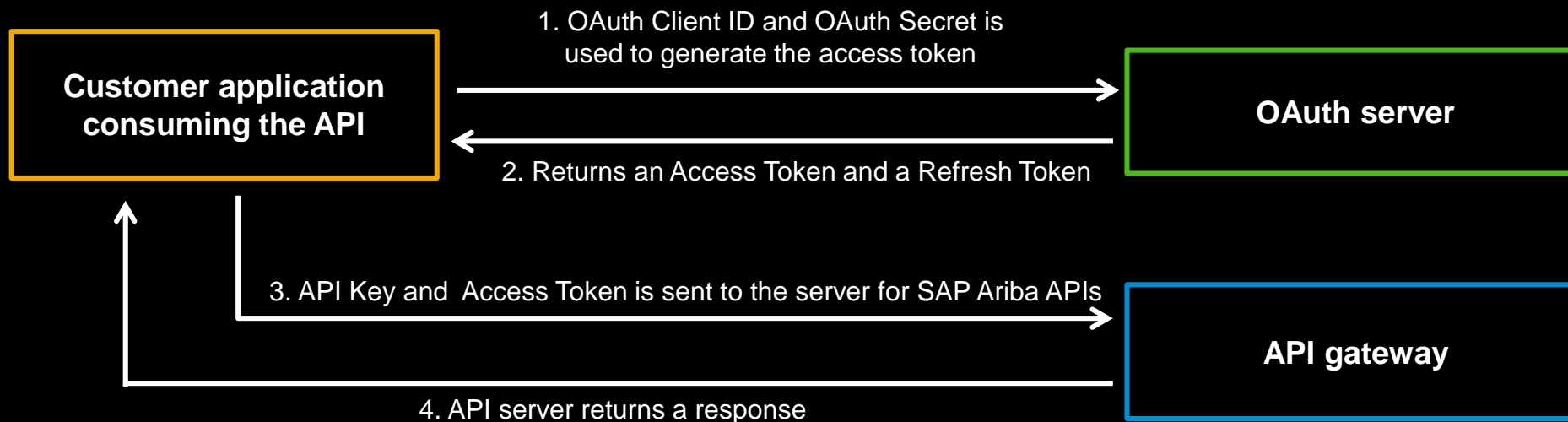
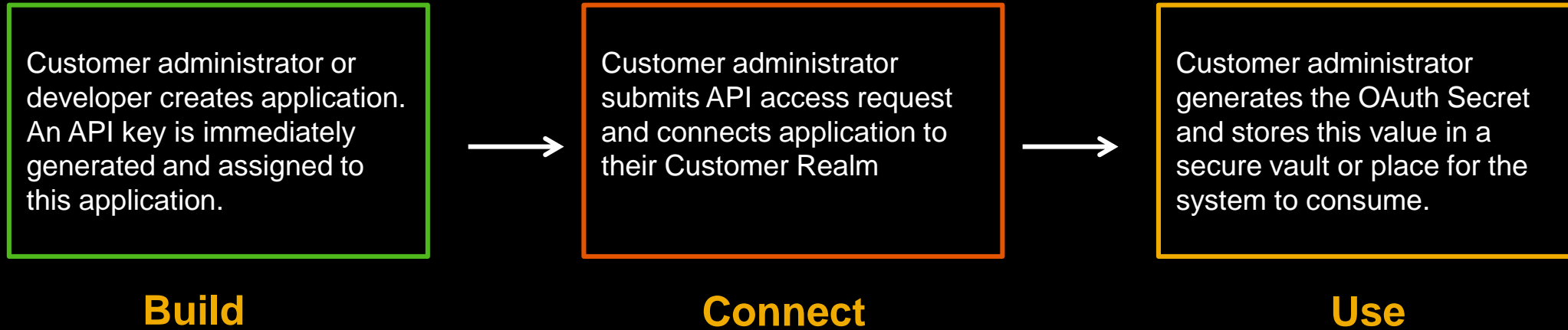
Once Application is Active, the Organization Admin can then generate the OAuth Secret.

Not stored in our system. Organization Admin is responsible to store the secret in a secure store/vault.

Overwritten if generated again.

The screenshot displays the 'Manage Applications' interface in SAP. The left sidebar contains navigation icons, with a red circle '1' highlighting the 'Applications' icon. The main content area shows a list of applications under the 'Applications' tab, with a red circle '2' highlighting 'Training API 1' (By Thomas English, Ariba Internal, Active). The details for 'Training API 1' are shown on the right, with a red circle '3' highlighting the 'Actions' dropdown menu. The 'Actions' menu is open, showing options: 'Assign this application to another developer', 'Generate OAuth Secret' (highlighted with a red circle '4'), and 'Delete App'. A modal dialog is displayed in the foreground, indicating the secret generation process. It features a green checkmark icon and text: 'The secret will be displayed only once, and will be changed every time you regenerate secret. Select, copy and save this in your secure storage. Use this secret in your application.' Below this, it shows 'OAuth Secret: ' followed by a text box, and 'Base64 Encoded Client and Secret:' followed by another text box. An 'OK' button is at the bottom of the modal.

Developer Portal – Process flow



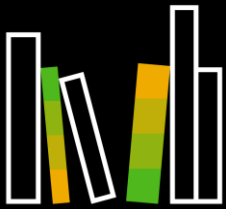
Developer Portal **Roles**

Roles	Action
Organization Admin	Create New User Account Create Application Request API access Generate OAuth secret
Developer	Create Application

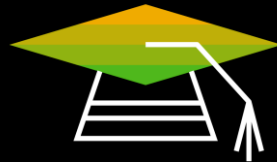
Training



SAP Ariba **API Training**



- First training delivered in Q1
- Online courses with labs starting in Q3 for partners and customers
- Partner office hours



Certification program

- Provide a certification program for APIs in Q3



Monthly platform Webinars

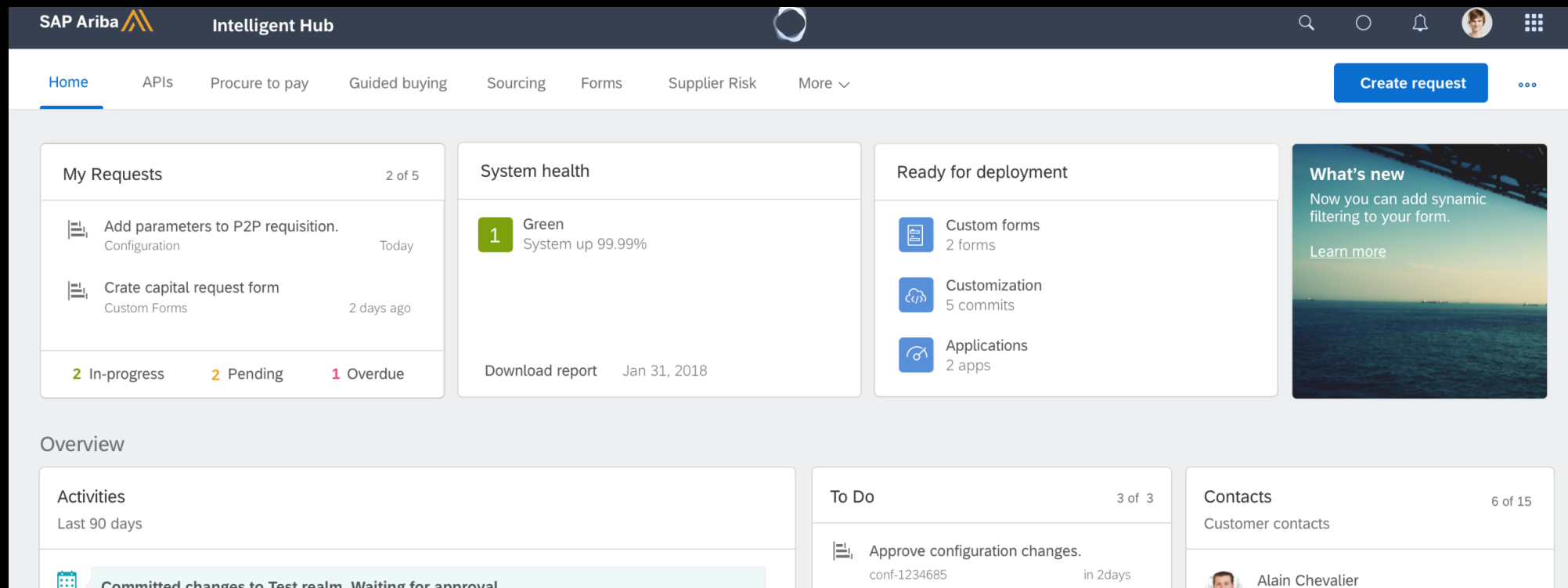
- Cover various platform topics on a monthly basis
- [API Session Replay](#)

Roadmap



SAP Ariba Intelligent Hub

- **Persona-based application** for Customer Administrators and Developers
- Easily **manage** your **environments** and **migrations** between environments
- Easily **Configure** application features
- **Analyze** and **audit** changes to and security events within your environments
- Easily build, manage, deploy your Applications **using APIs**



API Roadmap Highlights

Operational Procurement

- Catalog Lookup API
- Reporting API metadata enhancements

Strategic Procurement

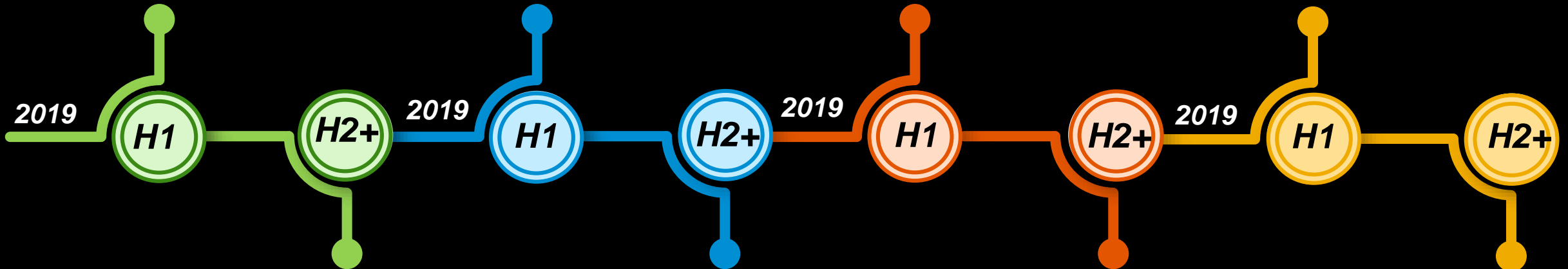
- Custom fields and facts support in Analytical Reporting API

Ariba Network

- Supplier Inventory Status API

Platform

- Operational Reporting API for Procurement – SAP Process Mining by Celonis



Operational Procurement

- Purge API
- Validate and Enrich API for receipts and buyer mobile app
- Requisition and Order Management API

Strategic Procurement

- Support high-volume Analytical Reporting API requests for Spend Visibility
- D&B integration APIs for SLP
- Contract APIs:
 - Create, read and transfer CW content
 - Additional eSignature integration options

Ariba Network

- AN Operational Reporting API
- Quality Review API
- Purchase Order Status API
- Forecast API
- Invoice API

Platform

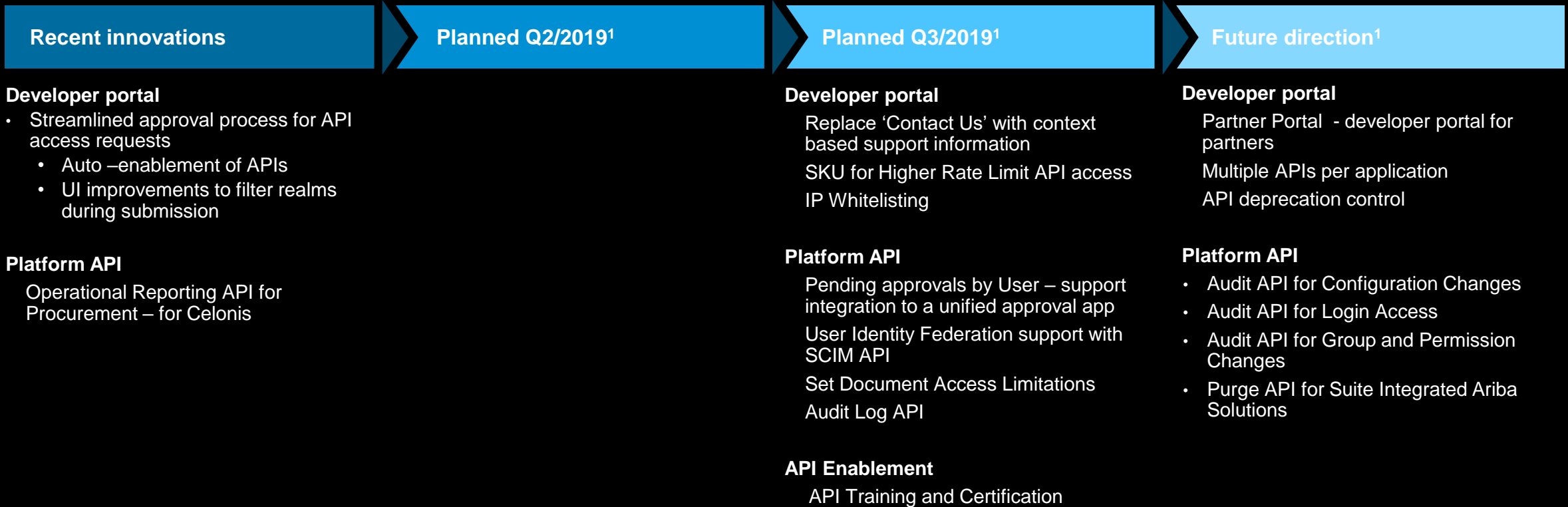
- Pending Approvals by User
- User Identity Federation support with SCIM API
- Set Document Access Limitations
- Audit Log API

*This is the current state of planning and may be changed by SAP at any time without notice

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Platform

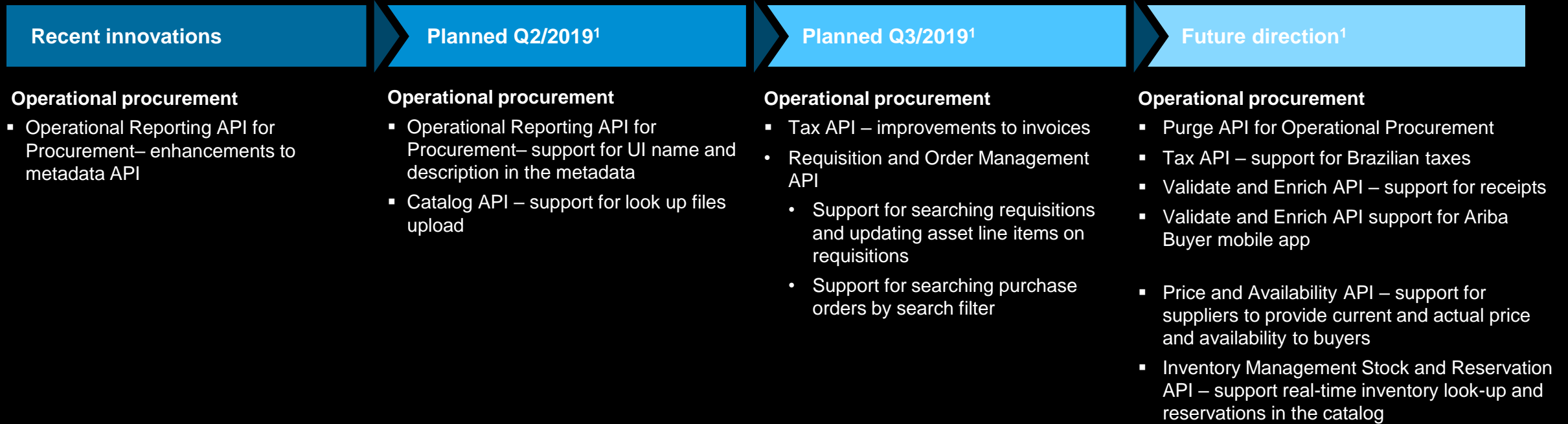
Developer Portal and Platform APIs



1. This is the current state of planning and may be changed by SAP at any time without notice.

Technology - APIs

Operational Procurement



1. This is the current state of planning and may be changed by SAP at any time without notice.

Technology - APIs

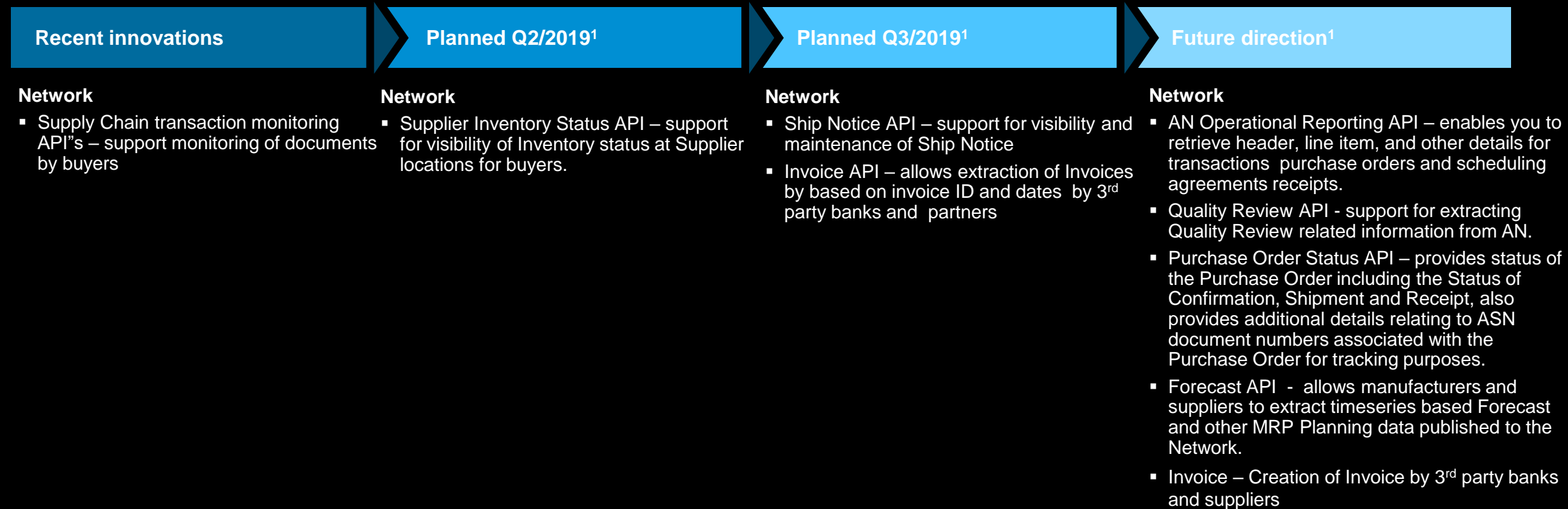
Strategic Procurement



1. This is the current state of planning and may be changed by SAP at any time without notice.

Technology - APIs

Ariba Network



1. This is the current state of planning and may be changed by SAP at any time without notice.

Summary and **Key Takeaways**

- 1 **Think big** – Adopt API strategy to drive faster transformation
- 2 **Invest** – Learn about SAP Ariba APIs to gain faster business benefits
- 3 **Scale fast** – Speed up innovations with SAP Ariba APIs

Take the **Session Survey**

We want to hear from you! Be sure to complete the session evaluation on the SAPPHIRE NOW and ASUG Annual Conference mobile app.



Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

<http://info.asug.com/2019-ac-slides>

Q&A

For questions after this session, contact us at
arundhati.kumar@sap.com

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#ASUG



Thank you.

Arundhati Kumar

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Appendix



API assets

Current initiatives:

- [API Datasheet](#)
- [API Webinar Session Replay](#)
- [SAP Ariba REST API Documentation on Connect](#)
- [Q2 2019 Roadmap](#)



What's coming up:

- Videos (solution specific and customer references)
- Detailed white papers
- Increased social media presence
- Blogs