



SAP Ariba 

Feature at a Glance

Audit Search API (Only available in US and EU datacenters)

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Feature at a Glance

Introducing: Audit Search API

Ease of implementation  High-Touch
Geographic relevance  Global

Customer challenge

Today, SAP Ariba has an audit log to pull some audit information about what is going on in their system, customers need this data to be pulled in mass amounts on a regular basis and sent to external systems to better understand when, why and how users are editing documents and making changes in the system. This information may also be used when a customer is audited to ensure compliance to company and industry regulations and laws.

Solution area

- SAP Ariba APIs
- SAP Ariba developer portal
- SAP Ariba Buying and Invoicing
- SAP Ariba Buying
- SAP Ariba Buying and Invoicing, with the guided buying capability.
- SAP Ariba Buying, with the guided buying capability.

Meet that challenge with SAP Ariba

This feature introduces the Audit Search API to consume the audit data stored in the audit service. Using this REST API customers can retrieve the audit data synchronously or asynchronously from the audit service. They can create a client application on the SAP Ariba Developer Portal and use it to call the API, filter the audit data, and download it.

Implementation information

This feature is automatically on for all customers with the applicable solutions but requires **customer configuration**.

Experience key benefits

With this feature, customers can pull audit data using a synchronous or asynchronous API to better understand when, why, and how users are editing documents and making changes in the system. This will drive their users to be more compliant, and also give them visibility into processes that can be improved to make their overall user experience more efficient.

Prerequisites and Restrictions

- As of the August release, Audit APIs can access Guided Buying and Intelligent Configuration Management data. More data sources will be added in coming releases.
- In order to create an application and request access to use the SAP Ariba APIs relevant to this feature, you must have access to the SAP Ariba developer portal. For details see “Steps to begin using the SAP Ariba APIs” in the help for The SAP Ariba Developer Portal.
- All queries made to this API must be authenticated using OAuth authentication. For details see “Developer Portal Authentication” in the help for The SAP Ariba Developer Portal.

Feature at a Glance

Introducing: Audit Search API – (Synchronous)

Detailed feature information (sample calls below are specific to the US datacenter. Please consult the developer portal to find your appropriate runtime URL for other datacenters.)

Workflow - Synchronous

1. The SAP Ariba solution logs audit data in the audit service.
2. The client application sends a request for audit data, specifying the tenant ID, audit type, start and end date of the search range, and the filter criteria specified in the OData format.
 - Sample GET URL: <https://openapi.ariba.com/api/audit-search/v1/prod/schemas?tenantId=mytestrealm&auditType=Security&searchStartTime=2020-04-30T09:00:00.000+0530>
 - Sample GET URL: <https://openapi.ariba.com/api/audit-search/v1/prod/audits?tenantId=mytestrealm&auditType=GenericAction&searchStartTime=2020-04-30T09:00:00.000+0530>
3. The API call returns the list of audit log entries matching the query parameters in the JSON response.

Feature at a Glance

Introducing: Audit Search API – (Asynchronous)

Detailed feature information (sample calls below are specific to the US datacenter. Please consult the developer portal to find your appropriate runtime URL for other datacenters.)

Workflow - Asynchronous

1. The SAP Ariba solution logs audit data in the audit service.
2. The client application posts a reporting job to the job queue, specifying the audit type and the filter criteria specified in the OData format. It receives a job ID in response.
 - Sample POST URL: <https://openapi.ariba.com/api/audit-search/v1/prod/jobs> (body not included)
3. The client application polls the job status using the job ID in the API until the job is complete.
 - Sample GET URL: <https://openapi.ariba.com/api/audit-search/v1/prod/jobs/1472cbcd-d46d-49a9-9482-c6a6fc71e466>
4. When the job is complete, the output is ready for download.
5. The client application requests the output document, specifying the job ID and the file ID.
 - Sample GET URL: <https://openapi.ariba.com/api/audit-search/v1/prod/jobs/1472cbcd-d46d-49a9-9482-c6a6fc71e466/files/1472cbcd-d46d-49a9-9482-c6a6fc71e466>
6. The downloaded ZIP file contains the output as a CSV or JSON file, depending on what was specified in the reporting job.
7. Optional. The client application requests a list of all submitted reporting jobs for a site, specifying the desired filter.
 - Sample GET URL: <https://openapi.ariba.com/api/audit-search/v1/prod/jobs>

Feature at a Glance

Introducing: **Audit Search API – (Synchronous)**

Detailed feature information – **Endpoints**

1. **GET/audits** – Fetching audit records synchronously
2. **GET/schemas** – Allows the fetching of schemas to understand the structure of various audit message types.

Feature at a Glance

Introducing: Audit Search API – (Asynchronous)

Detailed feature information – Endpoints

1. **POST /jobs** – submit a job request to get audit information asynchronously
2. **GET /jobs/{jobId}** – Query the status of submitted job
3. **GET /jobs/{jobId}/files/{fileId}** – Request one file at a time for completed jobs by specifying {fileId}.
4. **GET /jobs** – List the audit search jobs that have been submitted

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Introducing: Audit Search API

Detailed feature information – Query Parameters

Query Parameters

1. **tenantId** – Id representing the realm.
2. **searchStartTime** – Start date till which audit records need to be fetched. The expected format is [yyyy-MM-dd'T'HH:mm:ssZ].
3. **auditType** – options for auditType include: **Security, DataAccess, DataModification, ConfigurationModification, and GenericAction**
4. **searchEndTime** – End date till which audit records need to be fetched. The expected format is [yyyy-MM-dd'T'HH:mm:ssZ]. If this value is not passed, the API uses the current time.
5. **\$filter** – Query criteria to be given in OData format on audit fields. **Example: \$filter=realUser eq 'John' and action eq 'booked' and isSystem eq false**
6. **\$orderby** – Comma separated field names based on which synchronous audit search results are ordered. **Example: \$orderby=realUser, ip**
7. **\$skip** – The number of audit records to be skipped from the beginning. **Example: \$skip=10**
8. **\$top** – The number of audit records to be returned in the response. Maximum value is 5000. **Example: \$top=20**

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Introducing: Audit Search API – (Synchronous)

Detailed feature information – Audits Sample Output

```
1  {
2  "contents": [
3  {
4    "nodeName": "C1-UI2",
5    "traceId": "1234",
6    "effectiveUser": "user2",
7    "clientId": "ID_123",
8    "notes": "notes",
9    "documentType": "ContractDoc",
10   "ip": "127.0.0.1",
11   "auditType": "GenericAction",
12   "serviceName": "S4",
13   "param3": "2020-01-03T10:00:45+0530",
14   "param1": "2020-01-01T10:00:45+0530",
15   "param2": "2020-01-02T10:00:45+0530",
16   "isSystem": false,
17   "realUser": "user1",
18   "tenantId": "p2pTeSap-2",
19   "createdTime": "2020-02-28T01:48:40-0800",
20   "action": "Download",
21   "documentId": "Doc33",
22   "documentStatus": "Approved",
23   "uniqueId": "LvX0"
24  },
```

Feature at a Glance

Introducing: Audit Search API – (Synchronous)

Detailed feature information – Schemas Sample Output

```
1  {
2  "name": "Security",
3  "type": "record",
4  "fields": [
5  {
6  "name": "uniqueId",
7  "type": "string"
8  },
9  {
10 "name": "createdTime",
11 "type": "string"
12 },
13 {
14 "name": "auditType",
15 "type": "string"
16 },
17 {
18 "name": "serviceName",
19 "type": "string"
20 },
21 {
22 "name": "customerId",
23 "type": "string"
24 },

```

```
1  {
2  "name": "ConfigurationModification",
3  "type": "record",
4  "fields": [
5  {
6  "name": "uniqueId",
7  "type": "string"
8  },
9  {
10 "name": "createdTime",
11 "type": "string"
12 },
13 {
14 "name": "auditType",
15 "type": "string"
16 },
17 {
18 "name": "serviceName",
19 "type": "string"
20 },
21 {
22 "name": "customerId",
23 "type": "string"
24 },

```

```
1  {
2  "name": "GenericAction",
3  "type": "record",
4  "fields": [
5  {
6  "name": "uniqueId",
7  "type": "string"
8  },
9  {
10 "name": "createdTime",
11 "type": "string"
12 },
13 {
14 "name": "auditType",
15 "type": "string"
16 },
17 {
18 "name": "serviceName",
19 "type": "string"
20 },
21 {
22 "name": "tenantId",
23 "type": "string"
24 },

```

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Introducing: **Audit Search API**

Potential Use-Cases

- Customers may choose to gather audit data using an API in order to understand where their users are not complying with company policies. They can load the data into a data warehouse for analysis to gather trends.
- Partners, such as Celonis, may leverage the Audit Search API to gather all audit data for process mining. This will help them understand who is making edits to documents, deleting approvers, or making changes in their realms in order to optimize their processes to ensure improved experiences.
- Companies are often audited for compliance – if users are making changes that they should not be doing based on industry regulations, a company can chose to use the Audit Search API to track these changes and change what permissions that user has.

Feature at a Glance

Introducing: **Audit Search API**

SAP Ariba Extensibility Community

- Have questions about an API? The below link provides a forum for customers, partners, and SAP Ariba to:
 - Discuss potential use cases
 - Idea share
 - Ask and answer questions
 - View documentation on SAP Ariba APIs (as well as other extensibility features)
 - View and listen to videos and podcasts about SAP Ariba extensibility (APIs)
 - Find out more information on becoming an SAP Ariba Partner
 - Find out more about what types of extension applications partners are offering today
- <https://community.sap.com/topics/ariba-extensibility>