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SAP Document AI

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THE BEST RUN SAP

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1 What Is SAP Document AI?

Automate your document information extraction processes.

The SAP Document AI solution helps you process large numbers of business documents containing a wide variety of content and structures. After you upload a document file to SAP Document AI, it extracts data across different sections and layouts, regardless of how the information is organized within the document.

> → Tip
>
> - See Supported Document Types [page 118] and Supported File Types [page 121].
> - See also Supported Languages [page 125].

> ⓘ Note
>
> Always validate information extracted using SAP Document AI before using it for critical applications. While we strive for the highest possible accuracy and quality, please note that the extraction results provided may not be entirely error-free. This limitation applies to standard and custom document types. It also applies to all available extraction methods – in other words, the SAP Document AI machine learning models, generative AI, and templates.
>
> Note also that the quality of your extraction results depends on a wide range of factors. For more information about how to get the best out of SAP Document AI, see Best Practices (Base Edition and Premium Edition) [page 364].
>
> If you want to allow your confirmed documents to be used to improve the accuracy of SAP Document AI, you can activate the data feedback collection feature. For more information, see Create Configuration [page 159], Confirm Document [page 202], and Data Protection and Privacy [page 437].

With SAP Document AI you can:

- Process more documents efficiently with fewer errors and difficulties
- Increase quality and compliance mechanisms
- Reduce the time required to process a document
- Allow the members of your organization to focus on more relevant tasks that are in their field of expertise

Features

Automate information extraction	Automate the extraction of relevant information from business documents. The Document API takes document files as input and returns extraction results for data found across different sections and layouts.
Automate data enrichment	Match a business document to enrichment data records based on the information extracted from the document. The Enrichment Data API takes document files as input and returns the ID of the matching enrichment data records.

Benefit from multitenancy support	Use this solution in tenant-aware (multitenant) applications. Run them on a shared compute unit that can be used by multiple consumers (tenants).

> **Note**
>
> SAP may continuously improve the core features listed earlier and their functionalities provided as part of SAP Document AI including automation, transaction processing, and machine learning on behalf of the customer.

> **→ Tip**
>
> Use the data feedback collection feature to allow confirmed documents to be used to improve SAP Document AI.
>
> SAP uses the identity and position of the document-specific fields (see Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Extracted Line Items (Base Edition and Premium Edition) [page 402]) as a feedback signal to continuously retrain the SAP Document AI machine learning models. With this approach, SAP is able to reduce errors over time when predicting field values from documents.
>
> This is a platform functionality reused by other applications. SAP reserves the right to reject documents submitted for retraining.
>
> For more information, see Create Configuration [page 159], Confirm Document [page 202] and Data Protection and Privacy [page 437].

Environment

SAP Document AI is available in the following environments:

- Cloud Foundry environment
- Kyma environment

Multitenancy Support

SAP Document AI supports multitenancy. It can be used in tenant-aware applications.

For information on multitenancy support, see Run SAP Document AI in a Multitenant Application [page 139].

Prerequisites

See Initial Setup [page 134].

Technical Constraints

For information on technical limits, see Technical Constraints [page 383].

Regional Availability

Get an overview on the availability of SAP Document AI according to region, infrastructure provider, and release status in the SAP Discovery Center.

Trial Scope

SAP Document AI is available for trial use. A trial account lets you try out SAP Business Technology Platform (SAP BTP) for free and is open to everyone. Trial accounts are intended for personal exploration, and not for productive use or team development. They allow restricted use of the platform resources and services.

To activate your trial account, go to Welcome to SAP BTP Trial.

> **Note**
>
> See also the following information: Trial Accounts and Free Tier.

In the Cloud Foundry environment, you get a free trial account for SAP Document AI with the following constraints: Free Tier Option and Trial Account Technical Constraints [page 385].

2 What's New for SAP Document AI

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-08-20	2025-08-20
SAP Document AI	Cloud Foundry	SAP Document AI, Embedded Edition	The service plan SAP Document AI, embedded edition is now available. It allows you to integrate SAP Document AI with other SAP solutions. See Service Plans [page 104] and AI Features for Embedded Edition [page 114].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-08-05	2025-08-05
SAP Document AI	Cloud Foundry	SAP Document AI Workspace (Embedded Edition)	The SAP Document AI workplace provides a new UI for processing documents, managing schemas and channels, and making configuration settings. See Using the SAP Document AI Workspace (Embedded Edition) [page 327]. Features include email ingestion via configurable inbound channels. You can now set up SAP Document AI to read and automatically process documents from emails using a specified schema at definable intervals. See Create Inbound Channel [page 354].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-08-05	2025-08-05

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Standard Document Types	The service plans embedded edition and premium edition now support additional standard document types, such as **delivery note** and **national ID**. See the complete list of supported document types in Supported Document Types (Embedded Edition and Premium Edition) [page 119].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-08-05	2025-08-05
SAP Document AI	Cloud Foundry	Configurable Retention Period for Subaccounts	You can now configure your own retention period for storing your subaccounts audit data. See Initial Setup [page 134].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-08-05	2025-08-05
SAP Document AI	Cloud Foundry	Rebranding to SAP Document AI	Document Information Extraction has been renamed and is now SAP Document AI. For more information, see the blog post SAP Document AI - Smarter, Faster, and More Efficient Document Processing.	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-07-15	2025-07-15
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-06-27	2025-06-24
SAP Document AI	Cloud Foundry	New Improved ML Model for Purchase Order	We've improved the machine learning model for purchase order documents.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-06-27	2025-06-24

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-06-27	2025-06-16
SAP Document AI	Cloud Foundry	Configuration API	The `removeDotsFromMaterialNumber` configuration key is now available. The default value is **`false`**. Set it to **`true`** to remove dots in the extraction results from the string of the following standard line item fields for purchase order documents: • *customerMaterialNumber* • *supplierMaterialNumber* See Create Configuration [page 159], Configuration Keys [page 161] and Extracted Line Items (Base Edition and Premium Edition) [page 402].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-05-27	2025-05-27
SAP Document AI	Cloud Foundry	New Improved ML Model for Purchase Order	We've improved the machine learning model for purchase order documents.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-05-27	2025-05-27
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-05-15	2025-05-15

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Premium Edition Supported Languages	SAP Document AI now supports additional languages. See Supported Languages (Embedded Edition and Premium Edition) [page 129].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-05-15	2025-05-15
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-04-30	2025-04-30
SAP Document AI	Cloud Foundry	`Swagger UI` Access	The way you access the `Swagger UI` for SAP Document AI has changed. Find all the details in API Reference [page 141].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-04-14	2025-04-14
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-03-31	2025-03-31
SAP Document AI	Cloud Foundry	New Amazon Web Services Region	SAP Document AI is now available in the Amazon Web Services region br10 - Brazil (São Paulo).	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-05-15	2025-03-26
SAP Document AI	Cloud Foundry	New Google Cloud Region	SAP Document AI is now available in the Google Cloud region in30 - India (Mumbai).	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-05-15	2025-03-24

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	More Meaningful Extraction Confidence Ranges for Custom Fields Extracted Using Generative AI (Premium Edition)	SAP Document AI now provides more meaningful extraction confidence ranges for custom header fields for which extraction is handled by generative AI. Formerly, if you extracted information from custom header fields with the setup type auto and no default extractor, SAP Document AI displayed a moderate extraction confidence range until you entered feedback on the results. Now, the service determines the extraction confidence for such fields more accurately by checking whether the data type of the extracted information matches the data type for the respective field in the schema. See View and Edit Extraction Results [page 298].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-03-18	2025-03-18
SAP Document AI	Cloud Foundry	New Improved ML Models for Invoice and Purchase Order	We've improved the machine learning models for the document types invoice and purchase order.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-03-18	2025-03-18

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Support for New Excel File Formats (Premium Edition)	SAP Document AI now supports `businessCard`, `invoice`, `purchaseOrder`, and `custom` documents in the following file types: • CSV • NUMBERS • ODS • TSV • XLAM • XLS • XLSB • XLSM • XLSX • XLT • XLTM • XLTX • XML As already announced, `paymentAdvice` documents in XLS and XLSX file types are also supported. See Supported File Types (Embedded Edition and Premium Edition) [page 122].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-03-18	2025-03-18
SAP Document AI	Cloud Foundry	New Google Cloud Region	SAP Document AI is now available in the Google Cloud region sa30 - KSA (Dammam). ⚠ Caution For now, the large language models (LLMs) used by SAP Document AI are deployed outside of the Google Cloud sa30 region.	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-03-18	2025-03-18

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Export and Import Feature for Documents Used with Instant Learning (Premium Edition)	You can now export and import documents that you have edited and confirmed for use with instant learning. Formerly, instant learning could use your feedback to enhance extraction results only in the client or instance in which you originally edited and confirmed documents. If you changed context, you had to reenter your feedback in the new context. This new feature on the SAP Document AI basic UI allows you to quickly and easily export documents along with all information relevant for instant learning and import them for use in another context. As a result, you benefit from improved extraction results across different clients and instances, with no additional manual effort. You can also forward the exported data to your support contact for troubleshooting. See Export/Import Documents [page 305].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-03-04	2025-03-04
SAP Document AI	Cloud Foundry	New Export Document Details Endpoint	The Document API endpoint Export Document Details [page 204] is now available. Use it to export information that is associated with a document, such as ground truth and related instant learning data.	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-03-04	2025-03-04

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Support for SAP Schemas with Instant Learning (Premium Edition)	We've enhanced instant learning to support SAP schemas for standard document types. If you activate instant learning in SAP Document AI the service can now use your feedback about extraction results to select the best model for individual fields in preconfigured SAP schemas for the following standard document types: invoices, payment advices, and purchase orders. See Instant Learning (Premium Edition) [page 301] and Instant Learning (Premium Edition): Best Practices [page 381].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-02-20	2025-02-20

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Invoice Header Fields	The following `invoice` header fields are now available for extraction: • receiverCity • receiverCountryCode • receiverDistrict • receiverExtraAddressPart • receiverHouseNumber • receiverPostalCode • receiverState • receiverStreet • senderCity • senderCountryCode • senderDistrict • senderExtraAddressPart • senderHouseNumber • senderPostalCode • senderState • senderStreet See Extracted Header Fields (Base Edition and Premium Edition) [page 387].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-02-20	2025-02-20
SAP Document AI	Cloud Foundry	Enrichment Data API - Decommissioning of the Endpoint: Delete Enrichment Data (Synchronous)	The Enrichment Data API [page 213] endpoint Delete Enrichment Data (Synchronous) - Decommissioned [page 228] is now decommissioned and is no longer available. Please use the endpoint Delete Enrichment Data (Asynchronous) [page 229] to delete data records.	Required	Deprecated	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-02-20	2025-02-20

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Document API - Deprecation of the Endpoint: Get Request Payload	The Document API [page 171] endpoint Get Request Payload (Deprecated) [page 210] is now deprecated and is scheduled for decommissioning in September 2025. Following that date, the endpoint will no longer be available.	Info only	Deprecated	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-02-20	2025-02-20
SAP Document AI	Cloud Foundry	Support for the Identity Authentication Service	You can now subscribe to the SAP Document AI basic UI using the Identity Authentication service to handle authentication and authorization tasks in SAP BTP. See Subscribing to the SAP Document AI Basic UI With the Identity Authentication Service [page 289].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-01-28	2025-01-28

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Support for New File Types (Premium Edition)	SAP Document AI now supports `businessCard`, `invoice`, `paymentAdvice`, `purchaseOrder`, and `custom` documents in the following file types: • DOC • DOCM • DOCX • DOT • DOTM • DOTX • EML • EMLX • MSG • ODT • OFT • OLM • PAGES • RTF • TXT See Supported File Types (Embedded Edition and Premium Edition) [page 122].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-01-28	2025-01-28

2.1 2024 What's New for SAP Document AI (Archive)

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Google Cloud Region	SAP Document AI is now available in the Google Cloud region ap30 - Australia (Sydney).	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2025-01-28	2024-12-30
SAP Document AI	Cloud Foundry	Premium Edition Supported Languages	SAP Document AI now supports additional languages. See Supported Languages (Embedded Edition and Premium Edition) [page 129].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-23	2024-12-23
SAP Document AI	Cloud Foundry	Supported Languages for Extraction Using Template	SAP Document AI now supports additional languages for extraction using template. See Supported Languages [page 125].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-23	2024-12-23
SAP Document AI	Cloud Foundry	Support for Payment Advice Documents in XLS and XLSX Format	SAP Document AI now supports `paymentAdvice` documents in XLS and XLSX file types. See Supported File Types (Base Edition) [page 121] and Supported File Types (Embedded Edition and Premium Edition) [page 122].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-23	2024-12-23
SAP Document AI	Cloud Foundry	Availability in Google Cloud Regions	SAP Document AI is now available in the following Google Cloud regions: • eu30 - Europe (Frankfurt) • us30 - US Central (IA)	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-13	2024-12-13

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Extraction Method for Templates	When you edit the extraction methods for the header and line item fields on the Template details pane, you now have the following three options: • *Template with AI* • *AI Only* • *Template Only* The *Template with AI* method uses the template and falls back to the pretrained global model if extraction fails. The *AI Only* method uses the pretrained global model. The new *Template Only* method uses the template but doesn't fall back to the pretrained global model if extraction fails. See Add Template [page 321].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-12	2024-12-12
SAP Document AI	Cloud Foundry	Enhancements to Instant Learning	We've improved instant learning to make even better use of your feedback. The feature now uses your feedback to find the best available model for your needs. What's more, if you confirm the same value for a field multiple times in the same document structure, instant learning now uses your feedback to determine the extraction confidence range for that field in that structure. See Instant Learning (Premium Edition) [page 301].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-12	2024-12-12

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Feature for Forcing Deletion of Schemas with Active Versions	If you want to delete version 1 of a schema that has multiple versions, some of which have the status "ACTIVE", you can now force deletion of the schema. As a result, you no longer have to change the status of all versions to "INACTIVE" manually before deleting version 1. See Delete Schema [page 317].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-12	2024-12-12
SAP Document AI	Cloud Foundry	SAP Document AI Basic UI - Document Status "DONE"	The *Document* feature displays now the document status "DONE" instead of "READY" when the header fields and line items defined in the selected schema have been extracted. See Add Document [page 296].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-12	2024-12-12
SAP Document AI	Cloud Foundry	New Improved ML Models for Invoice, Purchase Order, and Payment Advice	We've improved the machine learning models for the document types invoice, purchase order, and payment advice.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-12	2024-12-12
SAP Document AI	Cloud Foundry	New Amazon Web Services Region	SAP Document AI is now available in the Amazon Web Services region ap11 - Asia Pacific (Singapore).	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-12	2024-12-04
SAP Document AI	Cloud Foundry	New Microsoft Azure Region	SAP Document AI is now available in the Microsoft Azure region ap20 - Australia (Sydney).	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-12-12	2024-12-04

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Export/Import Schemas on the SAP Document AI Basic UI	You can now export schemas as JSON files from one client of the SAP Document AI basic UI and import them to another. See Export/Import Schema [page 316].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-26	2024-11-26
SAP Document AI	Cloud Foundry	New Improved ML Models for Invoice, Purchase Order, and Payment Advice	We've improved the machine learning models for the document types invoice, purchase order, and payment advice.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-26	2024-11-26
SAP Document AI	Cloud Foundry	Free Service Plan	You can now use the service plan **Free** (`free`) to try out all premium features, including document information extraction using **generative AI**, Instant Learning (Premium Edition) [page 301], and List of Values Data Type (Premium Edition) [page 313]. See Service Plans [page 104].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-26	2024-11-26

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Extracted Header Fields - *quantity* Deprecation	We updated the list of header fields that you can extract from `purchaseOrder` documents. The *quantity* header field is now deprecated and no longer available for extraction. **Note** The preconfigured SAP schema `SAP_purchaseOrder_schema` still contains the header field *quantity*. If you use it, the extraction result for *quantity* is going to be empty. See Extracted Header Fields (Base Edition and Premium Edition) [page 387].	Info only	Deprecated	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-26	2024-11-26
SAP Document AI	Cloud Foundry	Sort and Filter Extraction Fields for Templates	You can now sort and filter the names of header and line item fields on the *Extraction Fields* tab for templates. As a result, you can list field names in ascending or descending order and use the filter to display only specific fields. See Add Template [page 321].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-14	2024-11-14

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Use Setup Types *auto* and *manual* with Copies of SAP Schemas and Old Custom Schemas	If you copy SAP schemas or old custom schemas that include fields with the setup type *default*, the copied fields and any new fields that you add now also support the setup types *auto* and *manual*. If you use the service plan premium edition, you can therefore include data fields that use generative AI as extraction method in copies of these kinds of schema. See Setup Types [page 311].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-14	2024-11-14
SAP Document AI	Cloud Foundry	New Improved ML Models for Invoice, Purchase Order, and Payment Advice	We've improved the machine learning models for the document types invoice, purchase order, and payment advice.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-14	2024-11-14
SAP Document AI	Cloud Foundry	Improved Underlying Infrastructure for LLM-usage (Premium Edition)	The underlying infrastructure for LLM-usage in SAP Document AI has been improved for better service performance.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-05	2024-10-30

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Create and Manage Schema Versions on the SAP Document AI Basic UI	You can now use the SAP Document AI basic UI to create and manage versions of schemas. Using schema versions means that you no longer have to copy or adapt existing schemas for broadly similar use cases that differ only slightly in terms of the data fields involved and the associated settings. After configuring, saving, and activating a new schema, you can create additional versions by adding and removing fields and changing settings, as needed. These changes don't affect the original schema, which remains as version 1. See Use Schema Versions [page 318].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-30	2024-10-30
SAP Document AI	Cloud Foundry	Select Schema Version When Adding Documents or Creating Templates on the SAP Document AI Basic UI	When you add a document or create a template on the SAP Document AI basic UI, you now have the option of selecting a version of the schema. See Add Document [page 296] and Add Template [page 321].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-30	2024-10-30

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Schema API Endpoint - Update Schema Version	You can now update the descriptions of schema versions using the new Schema API [page 231] endpoint Update Schema Version [page 245].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-22	2024-10-22
SAP Document AI	Cloud Foundry	Extracted Line Items	You can now extract the line item *globalTradeItemNumber* from `purchaseOrder` documents. See Extracted Line Items (Base Edition and Premium Edition) [page 402].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-22	2024-10-22
SAP Document AI	Cloud Foundry	New Improved ML Models for Invoice, Purchase Order, and Payment Advice	We've improved the machine learning models for the document types invoice, purchase order, and payment advice.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-22	2024-10-22

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Changes to the SAP Document AI Basic UI	We've made a number of enhancements to the SAP Document AI basic UI. • When you upload a document and choose it on the *Documents* screen, you now see the extraction results for header fields and line items alongside the document preview, without first having to click *Extraction Results*. • In the extraction results, you can now use the filters at the top of the *Edit* pane to set which extraction confidence ranges to display. You can select either a single range or all of them. • When using the *Template* feature, you can now edit and confirm extraction results for the associated document by choosing it on the details page for the template you've created. • Also on the *Template* details page, you can now set an extraction method for individual fields or for all fields your template. The available methods are *Template* and *AI*. See View and Edit Extraction Results [page 298], Add Documents and Activate/Deactivate Template [page 322], and Add Template [page 321].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-08	2024-10-08

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Factur-X and ZUGFeRD Standards - Support for Version 2.3	SAP Document AI now supports the version 2.3 of e-invoice document files in Factur-X and ZUGFeRD standards.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-08	2024-10-08
SAP Document AI	Cloud Foundry	New Schema Import and Schema Export Endpoints	You can now import and export schemas using the following new Schema API [page 231] endpoints: • Import Schema [page 238] • Export Schema [page 259]	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-08	2024-10-08
SAP Document AI	Cloud Foundry	New Instant Learning for Information Extraction Using Generative AI (Premium Edition)	SAP Document AI now allows you to enhance extraction with generative AI by using your edited extraction results to enrich the prompt to large language models (LLMs) with user feedback. If you use an appropriately configured schema, SAP Document AI learns from your feedback as soon you commit documents with edited extraction results. As a result, information extraction is improved for relevant fields in all subsequent documents. To use this feature, you must first activate it using the configuration key `enableInstantLearning`. See Instant Learning (Premium Edition) [page 301] and Configuration Keys [page 161].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-22	2024-10-08

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New List of Values Data Type for Schemas (Premium Edition)	With SAP Document AI you can now use the data type *list of values* to extract header or line item fields with the setup type *auto*. The new data type allows you to define multiple values for fields. For example, if your company handles three different types of invoice, you can define these as list values. As a result, only these values are extracted for *Invoice Type* fields in your documents. See List of Values Data Type (Premium Edition) [page 313].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-10-08	2024-10-08
SAP Document AI	Cloud Foundry	Availability in Microsoft Azure Regions	SAP Document AI is now available in the following Microsoft Azure regions: • eu20 - Europe (Netherlands) • us21 - US East (VA)	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-09-16	2024-09-16

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Payment Advice Documents in Excel Format	You can now directly use the Document API [page 171] to process `paymentAdvice` documents in Excel format. You can optionally use the preconfigured SAP schema `SAP_paymentAdvice_schema` or your own custom schema for `paymentAdvice` documents when you Upload Document [page 172]. ⚠ Caution From now, you can't use the Identifier API (Deprecated) [page 154] to process `paymentAdvice` documents in Excel format.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-09-16	2024-09-16
SAP Document AI	Cloud Foundry	Changes to Metering and Pricing for Premium Edition	The field count used in calculating prices for blocks for 100 for SAP Document AI now includes categories added to a schema. Each category is counted as one field. See Blocks of 100 Documents for Premium Edition [page 111].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-09-09	2024-09-09
SAP Document AI	Cloud Foundry	Combine Different Setup Types for Line Items in Schema (Premium Edition)	With SAP Document AI you can now use different extraction methods for line item fields in the same schema. Formerly, this was possible only for header fields. See Setup Types [page 311].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-09-09	2024-09-09

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	More Accurate Identification of Date Format in Template-Based Extraction	Date formatting during template-based extraction now relies on the date in the associated document to accurately identify the date format. To enable SAP Document AI to extract dates correctly, and to prevent confusion between month and day, ensure that the date in documents associated with templates is greater than the 12th of the month. See Add Documents and Activate/Deactivate Template [page 322]	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-08-23	2024-08-23
SAP Document AI	Cloud Foundry	SAP Document AI Basic UI Document Feature Enhancements	We've made a number of enhancements to the Document feature of the SAP Document AI basic UI. • When you view extraction results for a document, the colors of bounding boxes in the page preview now match the colors of the extraction confidence ranges. • The tooltip displayed when you hover over a bounding box now shows the field name and field value separated by a horizontal line. • The *Assign Field* dialog now includes a toggle switch that allows you to quickly and easily select either *Header* or *Line Item* as the field type. See View and Edit Extraction Results [page 298].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-09-09	2024-08-23

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Improved ML Models for Invoice, Purchase Order, and Payment Advice	We've improved the machine learning models for the document types invoice, purchase order, and payment advice.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-08-23	2024-08-23
SAP Document AI	Cloud Foundry	Improved Performance of Template-Based Extraction for Larger Schemas	We've improved the performance of template-based extraction. If your schemas include many templates, extraction is now faster than it was in the past.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-29	2024-07-29
SAP Document AI	Cloud Foundry	Extracted Header Fields	You can now extract the *invoiceReferenceNumber* header field from `invoice` documents. The *invoiceReferenceNumber* header field is only relevant for e-invoices from India and is extracted from a barcode in the documents. See Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Barcode Extracted Fields in Invoice Documents [page 400].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-29	2024-07-29
SAP Document AI	Cloud Foundry	Purchase Orders - Unit of Measure Mapping	The mapping of unit of measure specifications to standard codes in `purchaseOrder` documents has been improved.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-29	2024-07-29

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Schema Description in the Prompt for Document Processing with LLMs (Premium Edition)	You can now use the schema description value to get better results for extractions with generative AI. The schema description value is now used in the prompt for document processing with large language models (LLMs). **⚠ Restriction** This option is available for schemas with the service plan premium edition **only**. See Service Plans [page 104] and Metering and Pricing [page 108]. See Create Schema [page 232] (API documentation), Create Schema [page 307] (UI documentation), and Extraction Using Generative AI (Premium Edition): Best Practices [page 379].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-15	2024-07-15
SAP Document AI	Cloud Foundry	Schema Field Categories	You can now create categories, which you can use to group data fields in schemas. If your schemas include many data fields, using categories helps avoid long lists of field names, making it easier to find specific fields. To use the *Schema Field Categories* feature, you must first enable it under *UI Settings*. See Use Schema Field Categories [page 314] and Activate Features [page 292].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-15	2024-07-15

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Panels for Creating, Viewing, Editing, and Deleting Data Fields in Schemas	When you create data fields for schemas, you now make your entries on a panel. This panel replaces the dialog used to date. The *Field Name* entries under *Header Fields* and *Line Item Fields* are now links. To view the details of a field, simply click on the link. A panel appears, where you can also edit or delete the field by choosing the respective button. See Add Data Fields [page 309].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-15	2024-07-15
SAP Document AI	Cloud Foundry	Improved Extraction of Line Items Directly above Document Footers	We've fixed an issue with the extraction of line items. If the line spacing between the final line item and the document footer is the same as the line spacing in the line items, SAP Document AI no longer extracts the footer text as part of the final line item.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-08	2024-07-08
SAP Document AI	Cloud Foundry	Schema Description and Schema Field Description	We've increased the maximum length of the following strings to 500 characters: • `schemaDescription` • schema field `description` See Create Schema [page 232] and Add Fields to Schema Version [page 249].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-08	2024-07-08

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Improved ML Models for Invoice, Purchase Order, and Payment Advice.	We've improved the machine learning models for the document types invoice, purchase order, and payment advice.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-07-01	2024-07-01
SAP Document AI	Cloud Foundry	New SAPUI5 Version for the SAP Document AI Basic UI	The SAP Document AI basic UI now uses SAPUI5 Version 1.122. Notable changes include resizable panels in the document viewer.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24
SAP Document AI	Cloud Foundry	Line-Item Matching in Templates	We've improved line-item matching in templates by lowering a threshold for the overlap between bounding boxes and content.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24
SAP Document AI	Cloud Foundry	Separator for 1000 and Decimal Separator in Templates	We've improved the template logic for determining whether a comma is a 1000 separator or a decimal separator in numerical values.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24
SAP Document AI	Cloud Foundry	Extraction Using Template	We've fixed an issue with extracting information using templates. Adding multiple documents to a template and annotating different fields across these documents no longer prevents SAP Document AI from extracting information using that template.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Improved ML Models for Invoice, Purchase Order, and Payment Advice.	We've improved the machine learning models for the document types invoice, purchase order, and payment advice.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24
SAP Document AI	Cloud Foundry	Identifier API	The Identifier API (Deprecated) [page 154] and its endpoints are now deprecated and scheduled for decommissioning in September 2025. Following that date, the Identifier API and the following endpoints will no longer be available: • Create Identifier (Deprecated) [page 155] • Get Identifier (Deprecated) [page 157] • Delete Identifier (Deprecated) [page 158] Please use the Schema API [page 231] to process `paymentAdvice` documents in Excel format.	Recommended	Deprecated	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Tooltips with Enrichment Metadata on the SAP Document AI Basic UI	If you use the enrichment feature when adding documents to SAP Document AI, you can now view enrichment metadata on the SAP Document AI basic UI. This metadata shows you the enrichment method, allowing you to debug any issues with your master data more easily. To display the metadata, simply hover your cursor over the relevant entry in the *Enrichment* section in the pane where you see extraction results for a document.	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24
SAP Document AI	Cloud Foundry	Simplified Document Upload on the SAP Document AI Basic UI	When you add documents to the SAP Document AI basic UI, it's now mandatory to include a schema. As a result, you no longer have to review fields for extraction before confirming the document upload – making for quicker and easier uploads.	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Upload Document - Options Payload - New Option: `schemaName`	When uploading a document to SAP Document AI, you can now add `schemaName` to the *Options Payload*. Previously, only the `schemaId` option was available. You can also use `schemaName` (instead of schemaId) to add one of the following preconfigured SAP schemas to the *Options Payload*: • `SAP_OCROnly_schema` • `SAP_invoice_schema` • `SAP_purchaseOrder_schema` • `SAP_paymentAdvice_schema` See Upload Document [page 172].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24
SAP Document AI	Cloud Foundry	Template API	When creating metadata for a template, you can now add to the payload the options `extraction` and `isLineItemField` to provide extraction model information for a field. See Create Template Metadata [page 274] and Get Template Metadata [page 275].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-06-24	2024-06-24

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Enrichment Data API - Deprecation of the Endpoint: Delete Enrichment Data (Asynchronous)	The Enrichment Data API [page 213] endpoint Delete Enrichment Data (Synchronous) - Decommissioned [page 228] is now deprecated and scheduled for decommissioning in February 2025. Following that date, the endpoint will no longer be available. Please use the endpoint Delete Enrichment Data (Asynchronous) [page 229] to delete data records.	Recommended	Deprecated	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-11-14	2024-05-13
SAP Document AI	Cloud Foundry	Better Models for the Extraction of Standard Document Types	The machine learning models for the extraction of `invoice`, `paymentAdvice`, and `purchaseOrder` documents have been improved.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-05-13	2024-05-13
SAP Document AI	Cloud Foundry	Better Extraction of `rawValue` for Standard Document Types and Fields	The extraction of the `rawValue` response field has been improved for the standard document types and fields. See Get Result [page 183].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-05-13	2024-05-13
SAP Document AI	Cloud Foundry	Extracted Line Items	You can now extract purchase order numbers that are available on line-item field level from `invoice` documents. See Extracted Line Items (Base Edition and Premium Edition) [page 402].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-03-11	2024-03-11

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Configuration API	You can now use the `client` scope configuration for the `dataFeedbackCollection` configuration key. See Configuration Keys [page 161].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-03-11	2024-03-11
SAP Document AI	Cloud Foundry	Post Catalog	You can now filter documents based on `schemaId`. See Post Catalog [page 179].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-03-11	2024-03-11
SAP Document AI	Cloud Foundry	New Invoice Supported Language - Japanese	SAP Document AI now supports the Japanese language for `invoice` documents. See Supported Languages [page 125].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-03-11	2024-03-11
SAP Document AI	Cloud Foundry	Better Models for the Extraction of Standard Document Types	The machine learning models for the extraction of `invoice`, `paymentAdvice`, and `purchaseOrder` documents have been improved.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2024-03-11	2024-03-11
SAP Document AI	Cloud Foundry	Better Extraction of Line Items from Multipage Documents with Template	The template algorithm has been enhanced. SAP Document AI now delivers better results when extracting line items from multipage documents with a table header that appears only on the first page.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2024-02-20	2024-02-20

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Combine Different Setup Types When Adding Data Fields to Schemas	You can now combine header fields with different setup types in the same schema. You can add header fields with the following setup types to a schema created for a **standard document type**: • *auto* (with and without a default extractor) • *manual* You can add header fields with the following setup types to a schema created for a **custom document type**: • *auto* (without a default extractor) • *manual* **Restriction** The setup type *auto* is available without default extractor (extraction using generative AI) for schemas with the service plan premium edition **only**. See Service Plans [page 104] and Metering and Pricing [page 108]. See also Add Fields to Schema Version [page 249], Add Data Fields [page 309], and Setup Types [page 311].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-20	2024-02-20

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Invoices - Conversion of Country Specific Unit of Measure Values to ISO Format	The conversion of country specific unit of measure values to ISO format for `invoice` documents has been improved.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-20	2024-02-20
SAP Document AI	Cloud Foundry	Support for `businessCard` Documents in AWS region Australia (Sydney)	The `businessCard` documents are now supported in the AWS region Australia (Sydney). See Supported Document Types [page 118].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-20	2024-02-20
SAP Document AI	Cloud Foundry	Download Troubleshooting Data for Documents	You can now download data about documents added to the SAP Document AI basic UI for use in troubleshooting any issues. See Download Troubleshooting Data [page 297].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05
SAP Document AI	Cloud Foundry	Model Used for Extraction	The Document API now includes information about the model used for extraction. As a result, you can see whether SAP Document AI used a template or AI to extract information from a particular field. See Get Result [page 183].	Info only	General Availability	New	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05
SAP Document AI	Cloud Foundry	New Location for Schema Configuration Feature on UI	You now call up the Schema Configuration feature of the SAP Document AI basic UI directly from the navigation bar on the left of the screen. See Create Schema [page 307].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Extraction of Descriptions from Columns	We've fixed an issue with extracting description values from columns. SAP Document AI now extracts the complete content of large column cells containing descriptions of numbers or quantities, for example.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05
SAP Document AI	Cloud Foundry	Extraction of Line Items	We've fixed an issue with extracting line items. If the template returns the extraction result invalid, but the AI returns the extraction result valid for the same line item, the final result is now valid when SAP Document AI merges the two results.	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05
SAP Document AI	Cloud Foundry	Get Templates Endpoint	The `limit` parameter of the Get Templates endpoint is now independent of the `order` parameter. To apply the `limit` parameter, you no longer need to specify a value for `order`. See Get Template [page 263].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Display Description for Fields in Extraction Results for a Document	You can now display the description text for fields in the pane where you see extraction results for a document on the SAP Document AI basic UI. To view the description, in the pane where you see extraction results for a document, hover over the name of a header field or line item. A tooltip appears, which includes the description text. See View and Edit Extraction Results [page 298].	Info only	General Availability	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Extracted Line Items - *materialNumber* and *senderMaterialNumber* Deprecation in `SAP_purchaseOrder_schema`	The line items *materialNumber* and *senderMaterialNumber* were replaced by *supplierMaterialNumber* and *customerMaterialNumber* respectively in the list of fields that you can extract from `purchaseOrder` documents when using the `SAP_purchaseOrder_schema`. The legacy line items *materialNumber* and *senderMaterialNumber* are now deprecated and no longer available for `purchaseOrder` documents. **Note** The preconfigured SAP schema `SAP_purchaseOrder_schema` still contains the line items *materialNumber* and *senderMaterialNumber*. If you use it, the extraction results for *materialNumber* and *senderMaterialNumber* are going to be empty. See Extracted Line Items (Base Edition and Premium Edition) [page 402].	Info only	Deprecated	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Extracted Line Items - *currencyCode* Deprecation	We updated the list of line items that you can extract from `purchaseOrder` documents. The *currencyCode* line item is now deprecated and no longer available for extraction. **Note** The preconfigured SAP schema `SAP_purchaseOrder_schema` still contains the *currencyCode* line item. If you use it, the extraction result for *currencyCode* is going to be empty. See Extracted Line Items (Base Edition and Premium Edition) [page 402].	Info only	Deprecated	Changed	Intelligent Technologies	Not applicable	SAP Business Technology Platform	2024-02-05	2024-02-05

2.2 2023 What's New for SAP Document AI (Archive)

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of

SAP Document AI	Cloud Foundry	Prefilled Setup Types for Schema Fields	When you add data fields to schemas, the service now prefills the *Setup Type* field with default values.
			Depending on whether you use the service plan premium edition or base edition, the default values are as follows:
			• Premium edition:
			  • Schemas for standard and custom document types: *auto*
			• Base edition:
			  • Schemas for standard document types: *auto*
			  • Schemas for custom document types: *manual*
			See Setup Types [page 311].
				Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-12-11	2023-12-11

SAP Document AI	Cloud Foundry	Support for X.509 Authentication	The SAP Document AI APIs now support X.509 authentication. See Enable X.509 Authentication [page 137].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-12-11	2023-12-11
SAP Document AI	Cloud Foundry	Auditing and Logging Information	New client related events have been created. See Auditing and Logging Information [page 440].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-12-11	2023-12-11
SAP Document AI	Cloud Foundry	Template API	From now, you can't download documents that are part of the template export package but haven't been malware-scanned during upload. You can download malware-scanned documents only. See Export Template [page 273].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-12-11	2023-12-11

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	SAP Document AI Basic UI	There have been several security improvements on the SAP Document AI basic UI. See Using the SAP Document AI Basic UI (Base Edition and Premium Edition) [page 285].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-12-11	2023-12-11
SAP Document AI	Cloud Foundry	New Service Plan: Premium Edition	The service plan premium edition is now generally available. The new service plan allows you to use **generative AI** to automate use cases for business document processing with **large language models (LLMs)**. Use **generative AI** to process business documents in more than 40 languages, and implement new business document use cases with shorter time to value. You can also use an SAP BTP trial account to try out the document information extraction using **generative AI**. Follow the tutorial: Use Trial to Extract Information from Custom Documents with Generative AI and SAP Document AI. See Service Plans [page 104] and Metering and Pricing [page 108]. See also Supported Languages (Embedded Edition and Premium Edition) [page 129], Add Fields to Schema Version [page 249], Setup Types [page 311], and Extraction Using Generative AI (Premium Edition): Best Practices [page 379].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-12-06	2023-12-06

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Template API	The Template API [page 261] is now generally available. You can now use the Template API endpoints to create, reuse, edit, and delete templates based on schemas and document types.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-11-27	2023-11-27
SAP Document AI	Cloud Foundry	Machine Translation available for the SAP Document AI SAP Help Portal Documentation	For your convenience, machine translation from the original and official English language is now available for the SAP Document AI documentation on SAP Help Portal in the following languages: • Chinese Simplified • French • German • Italian • Japanese • Korean • Portuguese • Spanish	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-11-27	2023-11-27
SAP Document AI	Cloud Foundry	Configuration API and Notifications	In addition to the already available `instance` and `tenant` scopes, you can now also use the `activateDocumentNotifications` configuration key on `client` scope level to enable the Notifications [page 278] functionality and get notifications about the status of your processed documents. See Configuration Keys [page 161].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2024-01-08	2023-11-27

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `invoice` Documents	The machine learning model for the extraction of `invoice` documents has been improved. The improvements include better extraction results for currency, country and date fields. Additionally, now the service supports the following countries/regions for `invoice` documents (and their corresponding languages): • Hungary (Hungarian) • Romania (Romanian) • Türkiye (Turkish) See Supported Languages [page 125].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-11-27	2023-11-27
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `paymentAdvice` Documents	The machine learning model for the extraction of `paymentAdvice` documents has been improved. The improvements include better extraction results for currency and country fields.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-11-27	2023-11-27
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `purchaseOrder` Documents	The machine learning model for the extraction of `purchaseOrder` documents has been improved. The improvements include better extraction results for currency, country and date fields. Additionally, the service now supports the extraction of quantities with multipliers, for example, "2x5".	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-11-27	2023-11-27

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Enrichment Data API	The `orderby` parameter was replaced by `order` in December 2022. The legacy `orderby` parameter is now deprecated and no longer available. See List Data-Persistence Jobs [page 221].	Info only	Deprecated	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-11-27	2023-11-27
SAP Document AI	Cloud Foundry	New Generative AI Tutorial	The tutorial Use Trial to Extract Information from Custom Documents with Generative AI and SAP Document AI is now available. Learn how to use SAP Document AI with generative AI to automate the extraction of information from custom document types using large language models (LLMs).	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-11-10	2023-11-10
SAP Document AI	Cloud Foundry	Data Feedback Collection for Model Improvement	You can now use the feedback collection feature in the SAP Document AI basic UI to consent to the use of confirmed documents to retrain the solution's machine learning models. See Confirm Documents [page 301].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-11-05	2023-11-05
SAP Document AI	Cloud Foundry	SAP Document AI Basic UI	The look and feel of the SAP Document AI basic UI has been updated to provide the latest SAP Fiori user experience.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-11-29	2023-11-05

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Edit Template	You can now edit templates. In addition to changing the name and description, you can choose a different schema for the template. Changing the schema makes a new set of extraction fields available for the template. If you've already edited extraction results for sample documents associated with your template, these edits are preserved following the change of schema if the relevant fields appear in both the old and the new schema. See Edit Template [page 323].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-11-29	2023-10-23
SAP Document AI	Cloud Foundry	Field Label	In *Schema Configuration*, you can now optionally enter a field label in the *Add Data Field* dialog. These labels enable you to give user-friendly names to some or all of the header fields and line item fields that you add to schemas. Field labels that you define in this way are displayed instead of the technical field names in the pane where you see extraction results for a document in the *Document* feature of the SAP Document AI basic UI. See Add Data Fields [page 309].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-10-23	2023-10-23
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `invoice` Documents	The machine learning model for the extraction of `invoice` documents has been improved. The improvements include better extraction results for date fields.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-10-23	2023-10-23

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `paymentAdvice` Documents	The machine learning model for the extraction of `paymentAdvice` documents has been improved. The improvements include better extraction results for date fields, and amount fields in line items.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-10-23	2023-10-23
SAP Document AI	Cloud Foundry	Built-In Support	You can now use the integrated Built-In Support tool to quickly find answers to your support-related questions. Built-In Support is an embedded digital assistant that allows you to search for support-related information without leaving the UI. If you have an s-user ID and the associated authorizations, Built-In Support also allows you to report issues, review cases, and chat with an expert or a chatbot. See Built-In Support [page 294].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-10-09	2023-10-09
SAP Document AI	Cloud Foundry	Configuration API	The `enrichmentConfidenceThreshold` configuration key is now available. You can now adjust the similarity confidence threshold for the enrichment. See Create Configuration [page 159], Configuration Keys [page 161], and Enrichment Data API [page 213].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-10-09	2023-10-09

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Autosave Feature for Editing Extraction Results	You can now have the SAP Document AI basic UI save your edits to extraction results. When you choose *Autosave* on the *Edit* pane in the *Document* feature, the service saves your work automatically at 10-second intervals. See View and Edit Extraction Results [page 298].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-10-09	2023-10-09
SAP Document AI	Cloud Foundry	New Schema Field Setup Types	The setup types *auto* and *manual* are now available when you add data fields to new schemas. See Add Fields to Schema Version [page 249] and Add Data Fields [page 309].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-10-09	2023-10-09
SAP Document AI	Cloud Foundry	Technical Constraints	You can now associate a maximum of 5 documents with a template. See Technical Constraints [page 383], Free Tier Option and Trial Account Technical Constraints [page 385] and Add Documents and Activate/Deactivate Template [page 322].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-10-09	2023-10-09

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Associated Confirmed Documents with Templates	You can now associate documents that have the status "CONFIRMED" with templates. If you edit the extraction results for a document and then confirm the document, you can use the *Add to Document* feature to associate the document with a template. See Add Documents and Activate/Deactivate Template [page 322].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-10-09	2023-10-09
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `purchaseOrder` Documents	The machine learning model for the extraction of `purchaseOrder` documents has been improved. The improvements include better extraction results for date fields and better formatting of amounts.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-10-09	2023-10-09
SAP Document AI	Cloud Foundry	Role Collections	The role collection `Document_Information_Extraction_UI_Admin_User` has been deprecated. To create or delete schemas and templates, use the role collection `Document_Information_Extraction_UI_Templates_Admin`. See Role Collections [page 287].	Info only	Deprecated	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-10-09	2023-10-09

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Use Generative AI to Extract Information from Standard and Custom Document Types	You now have the option of using generative AI to extract information from standard and custom document types. To use generative AI, select the setup type *auto* without a default extractor when adding data fields to a schema for a standard or custom document type. **Restriction** This option is currently available in SAP BTP trial accounts only. If you don't want to use generative AI with standard or custom document types, select the setup type *manual* when adding fields to schemas. With standard document types, you can also avoid using generative AI by selecting *auto* with a suitable default extractor. See Add Fields to Schema Version [page 249] and Setup Types [page 311].	Info only	Restricted Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-11-10	2023-10-05

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Schema API - Add Schema Fields	You can now optionally use the `label` property to enter field labels. These labels enable you to give user-friendly names to some or all of the `headerFields` and `lineItemFields` that you include in the Add Fields to Schema Version [page 249] `payload`. Field labels that you define in this way are displayed instead of the technical field names in the pane where you see extraction results for a document in the *Document* feature of the SAP Document AI basic UI.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-09-04	2023-09-04
SAP Document AI	Cloud Foundry	Free Tier Option and Trial Account Technical Constraints	Free tier and trial account users can now: • Upload up to 50 document pages per tenant in a rolling period of 30 days. • Create up to 1000 schemas per client. See Free Tier Option and Trial Account Technical Constraints [page 385].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-09-04	2023-09-04
SAP Document AI	Cloud Foundry	Extraction Results Saved Automatically when Documents Associated with Templates	You no longer need to save extraction results manually before associating documents with templates. The SAP Document AI basic UI now saves these results automatically.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-08-18	2023-08-18

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Schema API	The Schema API [page 231] is now generally available. You can now use the Schema API endpoints to create, list, update, and delete schemas and schema versions.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-08-18	2023-08-18
SAP Document AI	Cloud Foundry	Technical Constraints	The maximum total number of header fields and line items you can add per schema is now 500. See Technical Constraints [page 383].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-08-18	2023-08-18
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `invoice` Documents	The machine learning model for the extraction of `invoice` documents has been improved. The improvements include better extraction results for bank account numbers, amounts with non-standard formats and numerical dates with whitespaces.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-08-18	2023-08-18
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-08-18	2023-08-18
SAP Document AI	Cloud Foundry	Delete Bounding Boxes	When editing extraction results with the SAP Document AI basic UI, you can now delete bounding boxes together with their coordinates. See View and Edit Extraction Results [page 298].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-07-26	2023-07-26

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Display and Edit Bounding Boxes	When editing extraction results with the SAP Document AI basic UI, you can now open the *Assign Field* dialog for bounding boxes by choosing the relevant tooltip in the page preview pane.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform		2023-07-26
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-07-26	2023-07-26
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-07-17	2023-07-17
SAP Document AI	Cloud Foundry	Technical Constraints	The maximum number of templates you can create has been increased from 1000 templates per tenant to 1000 templates per schema. See Technical Constraints [page 383].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-06-30	2023-06-30
SAP Document AI	Cloud Foundry	Support for Country Code Conversion in Template	The Template [page 320] feature now supports country code conversion.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-06-22	2023-06-22
SAP Document AI	Cloud Foundry	New Data Type *country/region* for Schema Fields	The new data type *country/region* is now available for schema fields. See Add Data Fields [page 309].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-06-22	2023-06-22

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-06-13	2023-06-13
SAP Document AI	Cloud Foundry	Issues with Units of Measure in `purchaseOrder` Documents Corrected	Some issues with codes for units of measure in `purchaseOrder` documents have now been resolved.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-06-13	2023-06-13
SAP Document AI	Cloud Foundry	Support for Bounding Boxes around Parts of Fields	When you edit extraction results, you can now draw bounding boxes around parts of header field entries, instead of around the entire entry. As a result, you can eliminate unwanted or irrelevant elements, such as punctuation, from strings and ensure that they include only the values that you need. See View and Edit Extraction Results [page 298].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-06-30	2023-06-13
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `paymentAdvice` Documents	The machine learning model for the extraction of `paymentAdvice` documents has been improved.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-06-13	2023-06-13
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-05-23	2023-05-23

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	*Setup Type* field on *Add Data Field* dialog for schemas	The *Add Data Field* for schema configuration now includes a new field: *Setup Type*. See the updated procedure in Add Data Fields [page 309].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-05-08	2023-05-08
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-05-08	2023-05-08
SAP Document AI	Cloud Foundry	Response Field `clientId` in Get Result Endpoint	The Document API endpoint Get Result [page 183] includes a new response field: `clientId`. You can now identify the client that submitted the extraction request using the Upload Document [page 172] endpoint.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-05-08	2023-05-08
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-04-20	2023-04-20
SAP Document AI	Cloud Foundry	Fixed Values in Template Extraction Fields	You can now include fixed values for selected extraction fields in a template. If you intend to use a template with documents from only one supplier, for example, you can define the supplier's name as the fixed value for the *senderName* field. See Add Template [page 321].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-04-04	2023-04-04

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Scene Text Recognition Schema	You can now extract text from images using the OCR engine for scene text recognition. When you create a schema with the document type *Custom*, you can choose between two types of OCR engine (*Document* or *Scene Text*), depending on whether the text you wish to extract is in an image or not. See Schema Configuration [page 306] and Create Schema [page 307].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-04-04	2023-04-04
SAP Document AI	Cloud Foundry	Filtering, ordering, and pagination	The new Document API endpoint Post Catalog [page 179] is now available. You can use the following catalog options to get a list with all document processing jobs in a JSON file: • Filtering • Ordering • Pagination The SAP Document AI basic UI also supports document filtering, ordering, and pagination.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-04-04	2023-04-04
SAP Document AI	Cloud Foundry	Configuration API and Notifications	The `activateDocumentNotifications` configuration key is now available. You can now enable the Notifications [page 278] functionality to get notifications about the status of your processed documents. See Create Configuration [page 159].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-04-04	2023-04-04

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Procedure for Associating Documents with Templates	There's now a new procedure for adding documents to templates on the SAP Document AI basic UI. In the past, you selected these documents when creating the template or added them later using the *Template* feature. Now, you select documents using the new *Add to Template* function in the *Document* feature. See Add Documents and Activate/Deactivate Template [page 322] and View and Edit Extraction Results [page 298].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-04-04	2023-04-04
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `invoice` Documents	The machine learning model for the extraction of `invoice` documents has been improved.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-04-04	2023-04-04
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-04-04	2023-04-04
SAP Document AI	Cloud Foundry	Get Templates Endpoint	The new Document API endpoint Get Templates Associated with Document [page 211] is now available. You can get all the templates associated with the specified document ID.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-03-14	2023-03-14

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Template Feature Supported Language - Greek	The SAP Document AI basic UI Template [page 320] feature now supports the Greek language. See Supported Languages [page 125].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-03-14	2023-03-14
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `purchaseOrder` Documents	The machine learning model for the extraction of `purchaseOrder` documents has been improved.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-03-14	2023-03-14
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-03-14	2023-03-14
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements. The performance of the Template [page 320] feature has been improved.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-03-01	2023-03-01
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-02-17	2023-02-17
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code, security, and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2023-02-06	2023-02-06

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Barcode Header Field Symbology	You can now see in the response from Get Result [page 183], in the `symbology` response field, the type of the extracted barcode header fields.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2023-01-30	2023-01-30

2.3 2022 What's New for SAP Document AI (Archive)

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Configuration API	The `coordinateFormat` configuration key is now available. You can now choose the format of the bounding box coordinates in the extraction results. See Create Configuration [page 159].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-12-19	2022-12-19

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Enrichment Data API	The `orderby` parameter has been replaced by `order`. **Note** The legacy `orderby` parameter will still be supported for a limited amount of time. Please start using the new parameter (`order`) as soon as possible. See List Data-Persistence Jobs [page 221].	Recommended	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-12-19	2022-12-19
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-12-19	2022-12-19
SAP Document AI	Cloud Foundry	SAP Document AI Basic UI	The SAP Document AI basic UI and associated in-app help are now available in the following new languages: • Chinese Simplified • Chinese Traditional • French • Italian • Japanese • Korean • Portuguese • Russian • Spanish See Set Screen Language [page 293].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-12-07	2022-12-07

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Enrichment Data Method	You can now see in the response from Get Result [page 183], in the `method` response field, the match strategy used for each matched enrichment data record.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-12-07	2022-12-07
SAP Document AI	Cloud Foundry	Change Service Instance by Name	You can now change instances on the SAP Document AI basic UI by entering the service instance name. See Subscribing to the SAP Document AI Basic UI [page 285].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-12-07	2022-12-07
SAP Document AI	Cloud Foundry	Better Model for the Extraction of `purchaseOrder` Documents	The machine learning model for the extraction of `purchaseOrder` documents has been improved.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-12-07	2022-12-07
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-12-07	2022-12-07
SAP Document AI	Cloud Foundry	SAP Document AI Basic UI	The SAP Document AI basic UI and associated in-app help are now available in German. See Set Screen Language [page 293].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-11-15	2022-11-15

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	SAP Schemas	The preconfigured SAP schema `SAP_OCROnly_schema` is now available for custom documents and OCR (Optical Character Recognition) output only. See Upload Document [page 172], Get Result [page 183], and Add Document [page 296].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-11-09	2022-11-09
SAP Document AI	Cloud Foundry	Configuration API	You can now use the `client` scope configuration for the `documentRetentionTimeDays` configuration key. You can now use the optional parameters `clientId` and `tenantId` to create, get and delete configurations. See Create Configuration [page 159].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-11-09	2022-11-09
SAP Document AI	Cloud Foundry	Free Service Plan	The Template [page 320] feature is now also available to Free service plan users.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-11-09	2022-11-09
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-11-09	2022-11-09
SAP Document AI	Cloud Foundry	Role Collections	The role collection `Document_Information_Extraction_UI_Templates_Admin` now includes permissions for reading and writing documents. See Role Collections [page 287].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-10-04	2022-10-04

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-10-04	2022-10-04
SAP Document AI	Cloud Foundry	Enrichment Data API	The following `paymentAdvice` fields now support enrichment: • *taxId* • *senderAddress* • *senderName* See Extracted Header Fields (Base Edition and Premium Edition) [page 387].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-09-13	2022-09-13
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-09-13	2022-09-13
SAP Document AI	Cloud Foundry	Role Collections	The role collection `Document_Information_Extraction_UI_Document_Viewer` is now available. This new collection allows users to read documents in the UI application. See Role Collections [page 287].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-08-30	2022-08-30
SAP Document AI	Cloud Foundry	Client Segregation	You can now restrict user access to specified clients. See Create Configuration [page 159] and Add Document [page 296].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-08-30	2022-08-30

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Free Service Plan	The Free service plan is now available for SAP Document AI. See Service Plans [page 104], Tutorials (Base Edition and Premium Edition) [page 140] and Free Tier Option and Trial Account Technical Constraints [page 385].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-08-30	2022-08-30
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-08-30	2022-08-30
SAP Document AI	Cloud Foundry	Extracted Header Fields	You can now extract the following header fields from `paymentAdvice` documents: • *senderAddress* • *taxId* See Extracted Header Fields (Base Edition and Premium Edition) [page 387].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-08-04	2022-08-04
SAP Document AI	Cloud Foundry	New Business Card Supported Language: Hebrew	SAP Document AI now supports `businessCard` documents in Hebrew. See Supported Languages [page 125].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-08-04	2022-08-04
SAP Document AI	Cloud Foundry	Accessibility Features	Documentation on Accessibility Features in SAP Document AI [page 445] is now available.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-08-04	2022-08-04

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-08-04	2022-08-04
SAP Document AI	Cloud Foundry	Technical Constraints	The maximum number of clients you can create in one API call has increased from 10 to 5000. The maximum number of schemas per client and templates per tenant has increased from 100 to 1000. See Technical Constraints [page 383].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-06-23	2022-06-23
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-06-23	2022-06-23
SAP Document AI	Cloud Foundry	Handwriting Detection	The handwriting detection feature is now available. For now, it detects only handwriting in English. See Optical Character Recognition (OCR): Best Practices [page 364].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-06-23	2022-06-23
SAP Document AI	Cloud Foundry	Barcode Extracted Fields in Invoice Documents	It's now available the list of extracted fields for barcodes in `invoice` documents. See Barcode Extracted Fields in Invoice Documents [page 400].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-06-03	2022-06-03

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	New Supported Countries/ Regions for Invoice Documents	SAP Document AI now supports the following new countries/regions for `invoice` documents: • Austria • Belgium • Czech Republic • Denmark • Finland • Norway • Poland • Portugal • Slovakia • Slovenia • Sweden See Supported Languages [page 125]. **Note** To support the new languages, the machine learning models have been extended. Consequently, predictions (field extractions and corresponding confidence scores) may differ from previous releases.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-06-03	2022-06-03
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-06-03	2022-06-03
SAP Document AI	Cloud Foundry	Document API	You can now see all matched enrichment data records in the Get Result [page 183] response.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-05-06	2022-05-06

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Enrichment Data API	The Create Data Activation [page 226] endpoint now includes the optional parameters `type` and `subtype`.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-05-06	2022-05-06
SAP Document AI	Cloud Foundry	Deskew	The service now automatically rotates document images to compensate for skewing. See Supported File Types [page 121].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-05-06	2022-05-06
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-05-06	2022-05-06
SAP Document AI	Cloud Foundry	Document API	The Upload Document [page 172] endpoint now includes a `schemaId` parameter. This parameter is required in payloads that include `templateId`.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-04-22	2022-04-22
SAP Document AI	Cloud Foundry	Enrichment Data API	You can now use variants to create multiple versions of the same data record. See Create Enrichment Data [page 214], Data Variants [page 219] and Data Duplicates [page 220].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-04-22	2022-04-22
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-04-22	2022-04-22

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Template	You can now use templates to extract multiple tables from the same page, provided the tables all have a standard structure and the same table headers. See General Recommendations and Limitations [page 371].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-03-31	2022-03-31
SAP Document AI	Cloud Foundry	Global Accounts	You can now move subaccounts between your global accounts. See Initial Setup [page 134].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-03-31	2022-03-31
SAP Document AI	Cloud Foundry	Trial Account Technical Constraints	The Free Tier Option and Trial Account Technical Constraints [page 385] documentation has been updated.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-03-31	2022-03-31
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-03-31	2022-03-31
SAP Document AI	Cloud Foundry	Support for Multiple Service Instances	If you create more than one service instance, the SAP Document AI basic UI now allows you to change between instances. See Subscribing to the SAP Document AI Basic UI [page 285].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-03-17	2022-03-17
SAP Document AI	Cloud Foundry	Document Feature	You can now select folders containing multiple documents for upload. The SAP Document AI basic UI now displays thumbnails of documents and allows you to rename documents before uploading them. See Add Document [page 296].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-03-17	2022-03-17

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements. Metering and pricing details for the Compute Hours for Base Edition [page 109] have been updated.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-03-17	2022-03-17
SAP Document AI	Cloud Foundry	Document Extraction Results	You can now download extraction values before and after you edit and save them. See View and Edit Extraction Results [page 298].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-02-03	2022-02-03
SAP Document AI	Cloud Foundry	Document Extraction Results	You can now view the raw values for extraction results. Raw values are the original field values before postprocessing, which can differ from the corresponding extraction results. See View and Edit Extraction Results [page 298].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-02-03	2022-02-03
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code and stability improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-02-03	2022-02-03
SAP Document AI	Cloud Foundry	SAP Schemas	The SAP schemas for standard document types now have the status ACTIVE. As a result, you no longer need to create copies of these schemas before using them to upload documents or create templates. See Schema Configuration [page 306].	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-01-18	2022-01-18

Technical Component	Environment	Title	Description	Action	Lifecycle	Type	Line of Business	Modular Business Process	Product	Latest Revision	Available as of
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-01-18	2022-01-18
SAP Document AI	Cloud Foundry	Enrichment Data API	The new Enrichment Data API endpoint List Data-Persistence Jobs [page 221] is now available. The new enrichment data entity type Product [page 219] is now available.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-01-10	2022-01-10
SAP Document AI	Cloud Foundry	Configuration API	The `performPIICheck` sub-configuration is now available. See Create Configuration [page 159].	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-01-10	2022-01-10
SAP Document AI	Cloud Foundry	Mass Deletion of Documents	The Document [page 295] feature has been enhanced: you can now select multiple documents for simultaneous deletion.	Info only	General Availability	New	Technology	Not applicable	SAP Business Technology Platform	2022-01-10	2022-01-10
SAP Document AI	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	General Availability	Changed	Technology	Not applicable	SAP Business Technology Platform	2022-01-10	2022-01-10

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Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-12-06
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-11-23
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Template Feature	Improved template extraction results for header fields in multipage documents. See Template [page 320].	Info only	Changed	2021-11-23
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Using the SAP Document AI Basic UI	Documentation updated: now includes requirement to use a schema when creating templates based on document extraction results. See Document [page 295] and Template [page 320].	Info only	Changed	2021-11-23

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Tutorials	The following tutorial missions are now available for SAP Document AI: • Shape Machine Learning to Process Standard Business Documents • Shape Machine Learning to Process Custom Business Documents See Tutorials (Base Edition and Premium Edition) [page 140].	Info only	New	2021-11-23
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-11-05
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Enrichment Data API	The matching accuracy for the `bankAccount` `businessEntity` key has been improved. See BusinessEntity [page 217] and Data Enrichment: Best Practices [page 376].	Info only	Changed	2021-11-05
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Technical Constraints	The 3510 x 3510 pixels maximum limit for the file size of single-page JPEG, PNG and TIFF documents has been removed. You can now upload to the service documents with any resolution as long as the file size is not higher than 50 MB. See Optical Character Recognition (OCR): Best Practices [page 364] and Technical Constraints [page 383].	Info only	Deleted	2021-11-05

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-10-15
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New AWS Region	SAP Document AI is now available in the AWS region Australia (Sydney).	Info only	New	2021-10-15
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Support for Business Card Documents	SAP Document AI now supports, at API level only, businessCard as one of the standard document types. See Supported Document Types [page 118], Supported File Types [page 121], Supported Languages [page 125], and Extracted Header Fields (Base Edition and Premium Edition) [page 387].	Info only	New	2021-10-15
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-09-30

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Role Collections	The role collection `Document_Information_Extraction_UI_Admin_User` is now available. This new collection provides access to all the features of the UI application. See Role Collections [page 287].	Info only	New	2021-09-30
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Best Practices	Best practices covering all stages of processing documents in the SAP Document AI UI are now available. See Document: Best Practices [page 375], Template: Best Practices [page 370], and Schema Configuration: Best Practices [page 365].	Info only	New	2021-09-30
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-09-10
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Template Feature	You can now: • Import and export templates • Create templates from extracted documents See Template [page 320].	Info only	New	2021-09-10

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Supported File Types	Single-page document files in TIFF format are now supported. See Supported File Types [page 121] and Technical Constraints [page 383].	Info only	New	2021-09-10
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-08-31
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Technical Constraints	The technical constraints for the number of schemas are now available. See Technical Constraints [page 383] and Free Tier Option and Trial Account Technical Constraints [page 385].	Info only	Changed	2021-08-31
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-08-12

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Document API	The Get Result [page 183] endpoint returns now two new response fields: • `languageCodes` • `pageCount`	Info only	New	2021-08-12
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Configuration API	All Configuration API [page 159] keys have now tenant scope by default. Service instance scope is now also available for the `dataFeedbackCollection` and `documentRetentionTimeDays` keys. The `documentRetentionTimeDays` configuration key is now available. See Create Configuration [page 159].	Info only	New	2021-08-12
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Python Client Library	A Python client library is now available for SAP Document AI. It provides easy access to the REST API, UI application, and facilitates the service onboarding process. Go to Python Client Library .	Info only	New	2021-07-26
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Barcode Header Field	Decoded information is now available for *barcode* fields from India invoices. See Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Barcode Header Field in Invoice Documents [page 399].	Info only	New	2021-07-26

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Template Feature	The Template [page 320] feature is now also available to all SAP BTP Trial users. See Free Tier Option and Trial Account Technical Constraints [page 385].	Info only	Changed	2021-07-26
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements. The Service Guide documentation has been updated: • Capabilities API [page 143] • Save Ground Truth [page 199] • Extracted Header Fields (Base Edition and Premium Edition) [page 387] • Extracted Line Items (Base Edition and Premium Edition) [page 402]	Info only	Changed	2021-07-26
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Template Feature	The Template [page 320] feature is now generally available to all SAP Document AI UI application users.	Info only	New	2021-07-20
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Extension Capabilities Service Plan	The new Compute Hours for Base Edition [page 109] service plan is now available.	Info only	New	2021-07-20

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	New	2021-07-07
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Document API	You can now use the Get Document File [page 205] endpoint to get the original document file you uploaded to the service.	Info only	New	2021-07-07
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Security Guide	Auditing and logging information is now available in the Security [page 437].	Info only	New	2021-07-07
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Schema Feature and Support for Custom Documents and Fields	The Schema Configuration [page 306] feature is now available in the SAP Document AI UI application. SAP Document AI now supports `custom` documents and fields. See Supported Document Types [page 118].	Info only	New	2021-06-28

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Support for Purchase Order Documents	SAP Document AI now supports `purchaseOrder` documents for all users. The list of line items you can extract from `purchaseOrder` documents has been updated. See Extracted Line Items (Base Edition and Premium Edition) [page 402]. See also Supported Document Types [page 118] and Extracted Header Fields (Base Edition and Premium Edition) [page 387].	Info only	Changed	2021-06-28
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Configuration API	The `dataFeedbackCollection` Configuration API [page 159] key is now available.	Info only	Changed	2021-06-28
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Template API (Beta)	The Template API (Beta) and its endpoints are no longer exposed to users at API level. The Template [page 320] feature remains available from the SAP Document AI UI application.	Info only	Changed	2021-06-28
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Security Guide	The Security [page 437] documentation has been updated.	Info only	Changed	2021-06-28

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-05-24
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Barcode Header Field	The *barcode* header field can now be extracted from Ticket-BAI invoices for the three Basque provincial councils (Álava, Vizcaya and Guipúzcoa) and the Basque government. See Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Barcode Header Field in Invoice Documents [page 399].	Info only	New	2021-05-24
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-05-05
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Barcode Header Field	The *barcode* header field can now be extracted from: • Brazil PIX (instant payments) • Argentina, Colombia and Uruguay invoices See Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Barcode Header Field in Invoice Documents [page 399].	Info only	New	2021-05-05

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-03-29
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Support for Factur-X and ZUGFeRD Standards	SAP Document AI now supports the Factur-X and ZUGFeRD standards (all versions) for e-invoice document files in PDF and XML hybrid format. See Supported File Types [page 121].	Info only	New	2021-03-29
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	SAP Document AI Basic UI	The SAP Document AI UI application now features: • Activation and deactivation of templates. See Template [page 320]. • Field level confidence visualization. See Document [page 295]. • Web Assistant	Info only	New	2021-03-29
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Template API (Beta)	The following Template API (Beta) endpoints are now available: • Activate Template (Beta) • Deactivate Template (Beta)	Info only	New	2021-03-29

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Data Feedback Collection for Model Improvement	The data feedback collection feature is now available. See Get Result [page 183] and Confirm Document [page 202].	Info only	New	2021-03-29
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-03-22
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Supported Languages and Countries/Regions	The list of supported countries/regions for `purchaseOrder` (controlled availability) documents, and the list of supported languages for the Template API (Beta) and the SAP Document AI basic UI Template (Beta) feature are now available. See Supported Languages [page 125].	Info only	Changed	2021-03-22
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Barcode Header Field	Barcode header field extraction has been improved. See Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Barcode Header Field in Invoice Documents [page 399].	Info only	Changed	2021-03-22

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-03-01
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Enrichment Data API	You can now set data activation to manual, instead of using the default automatic refresh of enrichment data, that takes place every 4 hours. See Create Data Activation [page 226] and Get Data Activation Details [page 227].	Info only	Changed	2021-03-01
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Configuration API	The Configuration API [page 159] is now available.	Info only	New	2021-03-01
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Identifier API	The Identifier API (Deprecated) [page 154] is now available.	Info only	New	2021-03-01

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Supported File Types	SAP Document AI now supports `paymentAdvice` document files in Excel format. See Supported File Types [page 121].	Info only	New	2021-03-01
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Document API	The `rawValue` response field is now available for the Get Result [page 183] endpoint.	Info only	Changed	2021-02-15
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	SAP API Business Hub	SAP Document AI is now available in the SAP API Business Hub. See SAP Document AI.	Info only	New	2021-02-15
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Enrichment Data API	You can now delete large numbers of data records for all clients per data type (`employee` or `businessEntity`). See Delete Enrichment Data (Asynchronous) [page 229].	Info only	Changed	2021-02-01

Technical Component	Capability	Environment	Title	Description	Action	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-02-01
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Template (Beta) Feature	The SAP Document AI UI Template [page 320] feature has been updated. See Add Documents and Activate/Deactivate Template [page 322]. The role collection `Document_Information_Extraction_UI_Templates_Admin` is now available. See Subscribing to the SAP Document AI Basic UI [page 285].	Info only	Changed	2021-01-18
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Info only	Changed	2021-01-18
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Extracted Header Fields	The list of header fields you can extract from `purchaseOrder` documents has been updated. See Extracted Header Fields (Base Edition and Premium Edition) [page 387].	Info only	Changed	2021-01-04

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Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Changed	2020-12-21
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Template (Beta) Feature	The SAP Document AI basic UI Template [page 320] feature now supports `purchaseOrder` documents (only for a previously selected group of beta customers). See Using the SAP Document AI Basic UI (Base Edition and Premium Edition) [page 285].	New	2020-12-21
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Changed	2020-12-03
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New SAP Cloud Platform Cockpit Booster	You can now use the *Set up account for SAP Document AI* booster to automate the onboarding steps on the SAP Cloud Platform cockpit, and quickly consume the service and its UI application. See Initial Setup [page 134] and Subscribing to the SAP Document AI Basic UI [page 285].	New	2020-11-20
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New Beta Features	• SAP Document AI now supports `purchaseOrder` documents (only for a previously selected group of beta customers). See Supported Document Types [page 118], Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Extracted Line Items (Base Edition and Premium Edition) [page 402]. • The Template [page 320] feature is now available (only for a previously selected group of beta customers) in the SAP Document AI basic UI. See Using the SAP Document AI Basic UI (Base Edition and Premium Edition) [page 285].	New	2020-11-20

Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	• There have been several code improvements. • The Feature Scope Description for SAP Document AI has been updated. • The Technical Constraints [page 383] have been updated. • The SAP Document AI Tutorials (Base Edition and Premium Edition) [page 140] have been updated.	Changed	2020-11-20
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New AWS Region	SAP Document AI is now available in the AWS region Europe (Frankfurt) EU-ONLY (access from Europe only).	New	2020-10-27
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	• There have been several code improvements. • The *discount* and *dueDate* header fields can now be extracted from invoices. See Extracted Header Fields (Base Edition and Premium Edition) [page 387]. • To get better extraction and enrichment results with SAP Document AI, see Optical Character Recognition (OCR): Best Practices [page 364].	Changed	2020-10-27
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Metering and Pricing	A new service plan is available for SAP Document AI. See Metering and Pricing [page 108].	New	2020-10-21
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements: • The *barcode* header field can now be extracted from India invoices. See Extracted Header Fields (Base Edition and Premium Edition) [page 387]. • The new `returnNullValues` request parameter is now available for the **Get Result** endpoint. See Get Result [page 183].	Changed	2020-10-16

Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Extracted Line Items	The *unitOfMeasure* line item can now be extracted from invoices. See Extracted Line Items (Base Edition and Premium Edition) [page 402].	Changed	2020-10-05
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	UI Application	The SAP Document AI basic UI is now generally available to all SAP Cloud Platform customers. See Using the SAP Document AI Basic UI (Base Edition and Premium Edition) [page 285].	New	2020-10-05
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Supported Document Types	The documentation has been updated with a new section: Supported Document Types [page 118].	New	2020-09-16
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements: • The *barcode* header field can now be extracted from invoices. See Extracted Header Fields (Base Edition and Premium Edition) [page 387]. • The `fileType` response field is now available for the Get Result [page 183] endpoint.	Changed	2020-09-16
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Using the SAP Document AI Basic UI (Beta)	A new version of the SAP Document AI basic UI is now available (only for a previously selected group of beta customers). See details on the possible document statuses and the *Confirm* document functionality in Using the Key Features of the SAP Document AI Basic UI [page 291].	Changed	2020-08-28

Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Changed	2020-08-28
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Document API	The `clientId` request parameter is no longer needed to send a request to the following Document API [page 171] endpoints: • Get Result [page 183] • Save Ground Truth [page 199] • Get All Pages Text [page 206] • Get Single Page Text [page 208] • Get Request Payload (Deprecated) [page 210]	Changed	2020-08-17
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Changed	2020-08-17
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New SAP Cloud Platform Trial Cockpit Booster	You can now use the *Set up account for SAP Document AI* booster to automatically create your SAP Document AI service key on SAP Cloud Platform Trial. Follow the steps described in the tutorial Set Up Account for SAP Document AI.	New	2020-08-17
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New AWS Region	SAP Document AI is now available in the AWS region US East (VA).	New	2020-07-31

Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New File Types for Payment Advice Documents	Single-page PNG and JPEG `paymentAdvice` files are now supported. See Upload Document [page 172] and Technical Constraints [page 383].	New	2020-07-31
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Using the SAP Document AI Basic UI (Beta)	A new version of the SAP Document AI basic UI is now available (only for a previously selected group of beta customers). See Using the SAP Document AI Basic UI (Base Edition and Premium Edition) [page 285].	Changed	2020-07-31
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements.	Changed	2020-07-31
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code and usability improvements: • Enrichment data upload performance. See Create Enrichment Data [page 214]. • Document confirmation feature. See the new Document API endpoint Confirm Document [page 202].	Changed	2020-07-14
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code improvements: • The *deliveryDate*, *paymentTerms* and *senderBankAccount* header fields can now be extracted from invoices. See Extracted Header Fields (Base Edition and Premium Edition) [page 387]. • The list of supported character types for the IDs of clients, enrichment data records, system and company codes has been updated. See Technical Constraints [page 383].	Changed	2020-06-15

Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code and usability improvements: • Single-page PNG and JPEG invoice files are now supported. See Upload Document [page 172] and Technical Constraints [page 383]. • New Document API [page 171] endpoints are now available. • The Enrichment Data API [page 213] endpoints have also been updated. Delete Enrichment Data (Asynchronous) [page 229] is now available. • The *deliveryNoteNumber* header field can now be extracted from invoices. See Extracted Header Fields (Base Edition and Premium Edition) [page 387]. • You can now use the Capabilities API [page 143] to get the list of document fields and enrichment data you can process by document type.	Changed	2020-06-02
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New Beta Features	The following beta features are now available (only for a previously selected group of beta customers): • Template-based information extraction. See Template API (Beta) and Technical Constraints [page 383]. • SAP Document AI basic UI. See Using the SAP Document AI Basic UI (Base Edition and Premium Edition) [page 285].	New	2020-06-02
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several code and usability improvements: • Higher model accuracy • The Supported Languages [page 125] list has been updated • The tutorial mission Use Machine Learning to Enrich Data Extracted from Documents is now available. See Tutorials (Base Edition and Premium Edition) [page 140].	Changed	2020-05-18
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New Notifications Functionality	The Notifications [page 278] functionality is now available.	New	2020-05-18

Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several stability and usability improvements, including the model accuracy. The Service Guide documentation has been updated: • Technical Constraints [page 383] • Free Tier Option and Trial Account Technical Constraints [page 385]	Changed	2020-04-20
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Overall Improvements	There have been several stability and usability improvements: • Some field value types have been updated. See Capabilities API [page 143] • The `enrichment` parameter `top` property has now a maximum possible value of 50. See Enrichment Parameter [page 178]. • Now, if no value is detected for fields in header or line items, they do not appear in the response JSON file. See Get Result [page 183].	Changed	2020-03-30
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	API Reference	The API Reference [page 141] documentation has been updated with the following new sections: • Get Access Token [page 142] • Capabilities API [page 143] • Technical Constraints [page 383]	Changed	2020-03-30
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Tutorials	A new tutorial mission is now available for SAP Document AI. See Use Machine Learning to Process Business Documents.	New	2020-03-02
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Client API	The new `clientIdStartsWith` request parameter is now available for the **Get Client** endpoint. See Get Client [page 152] .	New	2020-03-02

2.6 2019 What's New for SAP Document AI (Archive)

Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	New AWS Region	SAP Document AI is now available in the AWS region Japan (Tokyo).	New	2019-12-19
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Trial Account	You can now try out SAP Document AI on SAP Cloud Platform Trial. See Get a Trial Account.	New	2019-12-05
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	API Reference	• Enrichment Data API documentation is now available. See Enrichment Data API [page 213]. • Document API documentation has also been updated. See Document API [page 171] • The *documentNumber*, *documentDate*, *discountAmount*, *deductionAmount*, and *grossAmount* fields can now be extracted from line items. See Extracted Line Items (Base Edition and Premium Edition) [page 402].	Changed	2019-11-04
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Getting Support	CA-ML-BDP is now the BCP component for SAP Document AI. See Getting Support [page 446].	Changed	2019-11-04

Technical Component	Capability	Environment	Title	Description	Type	Available as of
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Security Guide	The Security Guide has been updated with Enrichment Data API details. See Security [page 437].	Changed	2019-11-04
SAP Document AI	Extension Suite - Development Efficiency	Cloud Foundry	Troubleshooting	The Troubleshooting section is now available. See Troubleshooting [page 447].	New	2019-11-04

3 Concepts

Find out more about key concepts relating to SAP Document AI.

Term	Definition
associated document	A document that is manually added to a template either via the Document feature or the Template API. Uploading a document, editing its extraction results, and then associating it with a template helps improve accuracy.
custom document	A type of document for which there are no default extractors. Any document type that isn't supported as standard is classified as custom.
custom field	A header or line item field for which there's no default extractor. Custom fields can occur both in custom and standard document types.
default extractor	A predefined means of extracting information from common header or line item fields. Default extractors correspond to the output terms extracted by the pretrained model. Fields for which default extractors are available include the following: *Due Date*, *Tax Rate*, *Buyer Name*, and *Delivery Note Number*.
document type	A classification for documents from which information is extracted. There are two document types: standard documents and custom documents.
enrichment data	Structured data added to the information extracted from documents. For example, if an invoice doesn't include a vendor number, this missing information can be added by matching the enrichment data entity for vendor numbers with the extracted header and line item fields.
extraction	Automated retrieval of information from documents based on machine learning.
extraction confidence range	A value range indicating the probable accuracy of results returned. Extraction confidence ranges are color coded, with red denoting low probability (0% to 50%), yellow denoting moderate probability (51% to 79%), and green denoting high probability (80% to 100%). Where the confidence range is low or moderate, users should check and, where necessary, correct extraction results for the relevant fields.
instant learning	A feature that enables the use of feedback to enhance extraction quality. When users edit extraction results for a document and confirm their entries, their feedback has an immediate effect. As a result, the quality of extraction improves the next time users upload documents including fields of the type edited.
pretrained model	A machine learning model trained to extract field values from documents. SAP manages multiple models of this kind. Each pretrained model is based on a large volume of data for a single document type and various layouts. Default extractors are outputs of these pretrained models.
SAP schema	A preconfigured collection of header and line item fields used to extract information from standard document types. Administrators can copy SAP schemas as a basis for creating their own schemas and templates for use with standard document types.

Term	Definition
schema	A defined collection of header and line item fields used when uploading documents for extraction. Schemas reduce the effort involved in managing fields for extraction and help ensure consistency. They also provide the basis for creating templates.
standard document	A document type for which there are default extractors. The standard document types include purchase order, payment advice, and invoice.
standard field	A header or line item field for which there's a default extractor. Fields of this kind come with a predefined name, label, description, and type (string, number, or date). Some of these fields can also be used for data enrichment. Standard fields can occur both in standard and custom document types.
template	A means of showing where fields for extraction are located in a particular document layout. Templates are built on a schema. After creating a template, you associate one or more documents with it. You then edit the extraction results for these documents, indicating the location of fields and their values. Templates are essential for extracting information from custom document types. They can also be used with standard document types to fine-tune extraction results.

4 Service Plans

Learn more about the different types of service plans for SAP Document AI.

SAP Document AI provides different types of service plans. The type you choose determines pricing, conditions of use, resources, available services, and hosts.

It depends on your use case whether you choose a free or a paid service plan. If you plan to use your global account in productive mode, you must purchase a paid enterprise account. It's important that you're aware of the differences when you're planning and setting up your account model. See Initial Setup [page 134].

The following service plans are currently available:

- For enterprise accounts: Base Edition (`blocks_of_100`)
- For enterprise accounts: Embedded Edition (`embedded_edition`)
- For enterprise accounts: Free (`free`)
- For enterprise accounts: Premium Edition (`premium_edition`)
- For trial accounts: Base Edition (`blocks_of_100`)

For more details about the available service plans, see the following table:

Service Plan (SAP BTP Cockpit)	Service Plan (SAP Discovery Center)	Account Type	Description
`blocks_of_100`	Base Edition	Enterprise	• Base Edition service plan that includes all core features but doesn't include document information extraction using generative AI and other premium features. • Service plan intended for productive use. • Inference requests in blocks of 100 documents and compute hours. • You can upload to the service up to 10,000 documents per hour per tenant (each document can have up to 100 pages). See Metering and Pricing [page 108] and Technical Constraints [page 383].

Service Plan (SAP BTP Cockpit)	Service Plan (SAP Discovery Center)	Account Type	Description

`embedded_edition`	Embedded Edition	Enterprise	• Service plan intended for productive use, charged in AI units.
			• You can upload to the service up to 10,000 documents per hour per tenant (each document can have up to 100 pages).
			• The following AI features are available:
			  • SAP Document AI, embedded edition
			  • SAP Document AI workspace
			
			See AI Features for Embedded Edition [page 114].

`free`	Free	Enterprise	• Service plan intended for development and try-out purposes on your enterprise account. • It provides access to all premium features, including document information extraction using **generative AI**, Instant Learning (Premium Edition) [page 301], and List of Values Data Type (Premium Edition) [page 313]. • You can upload to the service up to 50 document pages per tenant in a rolling period of 30 days. See Free Tier Option and Trial Account Technical Constraints [page 385] and the tutorial Get an Account on SAP BTP to Try Out Free Tier Service Plans.

Service Plan (SAP BTP Cockpit)	Service Plan (SAP Discovery Center)	Account Type	Description
`premium_edition`	Premium Edition	Enterprise	• Premium edition service plan that includes document information extraction using **generative AI** and other advanced features. • Service plan intended for productive use. • Inference requests in blocks of 100 documents, and requests. • You can upload to the service up to 10,000 documents per hour per tenant (each document can have up to 100 pages). See Metering and Pricing [page 108] and Technical Constraints [page 383].

Service Plan (SAP BTP Cockpit)	Service Plan (SAP Discovery Center)	Account Type	Description
`blocks_of_100`	Base Edition	Trial	• Service plan intended to let you try out the full functional scope of SAP Document AI. It isn't intended for productive use. Access is open to everyone after registration. • It provides access to all premium features, including document information extraction using **generative AI**, Instant Learning (Premium Edition) [page 301], and List of Values Data Type (Premium Edition) [page 313]. • You can upload up to 50 document pages per tenant to the service in a rolling period of 30 days. See Free Tier Option and Trial Account Technical Constraints [page 385] and the tutorial mission Use Generative AI to Process Business Documents. → Tip Use this service plan to try out premium features before deciding whether to opt for the premium edition service plan.

→ Remember

- If you first activated the free service plan, you can update the same service instance to switch to base edition or premium edition for enterprise accounts.
- Both metadata and transaction data are transferred to base edition or premium edition for enterprise accounts when you switch from free to base edition or premium edition.
- If you don't want free and base edition or premium edition data to be combined together, you can split them by subscribing to the service plans in separate subaccounts.

5 Metering and Pricing

Learn more about the different types of metering and pricing for SAP Document AI by service plan.

> → Tip
>
> The metering and pricing details listed here are relevant only to users of the service plans base edition, embedded edition, and premium edition for enterprise accounts. See Service Plans [page 104].

The base edition service plan is metered based on the following metrics:

- Blocks of 100 Documents for Base Edition [page 108]
- Compute Hours for Base Edition [page 109]

The premium edition service plan is metered based on the following metrics:

- Blocks of 100 Documents for Premium Edition [page 111]
- Requests for Premium Edition [page 113]

> → Tip
>
> Use the pricing estimator tool.

See also AI Features for Embedded Edition [page 114].

Related Information

SAP Discovery Center
SAP Business Technology Platform Service Description Guide
Commercial Information Glossary

5.1 Blocks of 100 Documents for Base Edition

Usage Metric

The base edition service plan is metered based on the usage of documents defined as unique records processed by the cloud service. One document can consist of maximum 3 pages. If a document consists of more than 3 pages, each additional 3 pages are charged as an additional document.

Block Size

1 block = 100 documents. The final price is a sum of the number of documents uploaded to the service.

Price Calculation

> ⚠ Caution
>
> The price rates listed below might be outdated. Find updated price rates in the SAP Discovery Center.

SAP Document AI does not allow users to train and deploy customizable models. For this service, the number of inference requests is relevant for the charged amount.

Metric	Tiers	Block Price per Month
Blocks of 100 documents 1 document = 3 pages	1 to 300 blocks	EUR 20.00
	301 to 600 blocks	EUR 17.00
	More than 601 blocks	EUR 14.00

Example

Cost for 7 blocks = 7 * EUR 20.00 = EUR 140.00.

Cost for 310 blocks = 310 * EUR 17.00 = EUR 5,270.

Cost for 610 blocks = 610 * EUR 14.00 = EUR 8,540.

5.2 Compute Hours for Base Edition

Usage Metric

The base edition service plan is also metered based on consumed compute hours defined as one hour, or portion thereof, consumed by the cloud service to process one or more documents with a custom model.

Piece Size

> ⚠ Caution
>
> The price rates listed below might be outdated. Find updated price rates in the SAP Discovery Center.

1 piece = compute hour. 1 compute hour = EUR 1.00.

1 template activation = 5 compute hours.

The costs are associated with the usage of templates. See Template API [page 261] and the Template [page 320] UI feature.

Example

> ⓘ Note
>
> The following calculation examples are based on current experiments. During the usage of the service, the exact usage numbers can vary slightly.

Price Calculation

- Metric = compute hours (usage of templates)
- 1 compute hour = EUR 1.00
- 1 template activation = 5 compute hours (EUR 5.00)
- 1 template transaction = 1 second

Number of Documents (per Month)	Estimated Processing Time in Compute Hours (per Month)	Estimated Costs in Euro (per Month)
500 documents	500 seconds = 1 compute hour	EUR 1.00
1000 documents	1000 seconds = 1 compute hour	EUR 1.00
5000 documents	5000 seconds = 2 compute hours	EUR 2.00
10,000 documents	10,000 seconds = 3 compute hours	EUR 3.00

Human Resources (HR) Onboarding Business Scenario Calculation

- HR Shared Service Center onboards 200 new employees each month.
- For each new employee, the HR agent needs to extract information from five different document types.
- The HR agent needs to:
  - Process 1000 documents per month
  - Create and activate five custom templates
  - Use each template 200 times per month

Cost Components	Consumption	Price
Document Upload	1000 documents (10 blocks of 100 documents)	EUR 200 per month
Template activation	5 templates * 5 compute hours	EUR 25.00 one time
Template usage	1000 (5 templates * 200 transactions) * 1 second = 0.3 compute hour (rounded up to 1 compute hour)	EUR 1.00 per month

In this example, the total cost is EUR 201.00 per month, and EUR 25.00 only once when the five templates are activated.

5.3 Blocks of 100 Documents for Premium Edition

Usage Metric

The premium edition service plan is metered based on the usage of documents defined as unique records processed by the cloud service.

One document can consist of a maximum of 1 page. If a document consists of more than 1 page, each additional page is charged as an additional document.

You can extract a maximum of 50 fields per document. If you extract more than 50 fields per document, every additional 50 fields, or portion thereof, are charged as an additional document. As a technical limit, you can add up to 500 header fields and line items per schema. For more information, see Technical Constraints [page 383].

The total number of fields is the sum of the following:

- Schema fields (header and line item fields, including list fields)
- Schema field categories
- Values of list fields

Example

The following table assumes that all the documents consist of 1 page. The rows show the relationship between the number of pages per document, the total number of fields, and the total number of documents metered:

Schema Fields – Apart from List Fields	Schema Field Categories	List Fields	List Field Values per List Field	Total Number of Fields	Total Number of Documents
30	20	0	0	50	1
30	21	0	0	51	2
0	0	1	100	101	3
30	10	10	5 (5*10 = 50)	100	2

→ Remember

For metering purposes, a document consists of a maximum of 1 page. If a document has n pages, where n is greater than 1, the total number of documents increases accordingly.

For example, if we replace the 1-page documents in the table with documents of n pages, the total number of documents is then as follows: 1*n, 2*n, and so on.

Block Size

1 block = 100 documents. The final price is based on the total number of documents calculated using the total number of fields and the number of pages per document.

Price Calculation

⚠ Caution

The price rates listed below might be outdated. Find updated price rates in the SAP Discovery Center.

SAP Document AI doesn't allow users to train and deploy customizable models. For this service, the number of inference requests is relevant for the charged amount.

Metric	Tiers	Price per Month
Blocks of 100 documents	Up to 5 blocks	EUR 300.00 (fixed price)
1 document = 1 page	Up to 500	EUR 60.00 (block price)

Metric	Tiers	Price per Month
	Up to 1000	EUR 50.00 (block price)
	From 1000 blocks	EUR 40.00 (block price)

Example

Cost for 1 block = EUR 300.00.

Cost for 3 blocks = EUR 300.00.

Cost for 5 blocks = EUR 300.00.

Cost for 10 blocks = 10 * EUR 60.00 = EUR 600.00.

5.4 Requests for Premium Edition

Usage Metric

Metric	Description
Request	The premium edition service plan is metered based on the number of requests related to the use of inbound and outbound channels. 1 request corresponds to 50 activities related to the use of inbound and outbound channels, for example, reading from an e-mail inbox.

Price Calculation

> ⚠ Caution
>
> The price rates listed below might be outdated. Find updated price rates in the SAP Discovery Center.

Metric	Price per Month
1 request	EUR 0.55

Related Information

Channels [page 351]

5.5 AI Features for Embedded Edition

AI Features

AI Feature	Description	Feature ID
SAP Document AI, embedded edition	SAP Document AI enables accurate, multilingual, and embedded document processing across the SAP portfolio.	AI-LPR893-REQUEST-0022-25Q3
SAP Document AI workspace	Maximize operational efficiency and automation rate with the SAP Document AI workspace, offering comprehensive administration tooling such as schema and extensibility configuration, channel management, instant learning, and analytics.	AI-LPR893-USER-0002-25Q3

Usage Metric

AI Feature	Metric	Description
SAP Document AI, embedded edition	Request	The metric request is related to the usage of the following features: • Intelligent document processing: 1 request corresponds to 1 artifact processed, for example, information extraction from 1 page, document classification per page, document splitting per page, document translation per page, file converted, and schema creation. **Note** Schema fields are metered as described in Blocks of 100 Documents for Premium Edition [page 111]. • Inbound and outbound channels: 1 request corresponds to 50 activities related to the use of inbound and outbound channels, for example, reading from an e-mail inbox. For more information, see Using the Key Features of the SAP Document AI Workspace [page 330].

AI Feature	Metric	Description

SAP Document AI workspace	User	The metric user corresponds to:
		• 1 user assigned to 1 of the following authorization policies:
		  • `DocumentAI.Admin`
		  • `DocumentAI.DocumentAdmin`
		  • `DocumentAI.ChannelAdmin`
		  • `DocumentAI.SchemaAdmin`
		  For more information, see Authorization Policies [page 329].
		• The storage made available to all SAP Document AI users (assigned to any of the authorization policies) in blocks of 100 GB.
		  Each 100-GB storage block corresponds to 1 user per month. If more than 100 GB are used for storage per month, extra users are charged. For example, if in the month of July, you use a 101-GB storage, you're charged 2 users; if in the following month, you use a 299-GB storage, you're charged 3 users.
		  Note
		  Users assigned to admin authorizations, get 100-GB storage for free. Extra users are charged, if you use more than 100 GB per month.

Price Calculation

AI Feature	Metric	Amount of AI Units Charged Monthly
SAP Document AI, embedded edition	1 request	0.1

AI Feature	Metric	Amount of AI Units Charged Monthly
SAP Document AI workspace	1 user	100

> → Tip
>
> Use the AI Estimate.

Related Information

SAP Business AI
SAP AI Services List

6 Supported Document Types

Explore the SAP Document AI supported document types by service plan.

Supported Document Types (Base Edition and Premium Edition) [page 118]

Supported Document Types (Embedded Edition and Premium Edition) [page 119]

6.1 Supported Document Types (Base Edition and Premium Edition)

See the list of supported document types when using the service plans base edition or premium edition, and the SAP Document AI basic UI or the APIs listed in API Rerence.

SAP Document AI supports the following document types as input:

- **Standard document types**: refer to document types for which SAP provides pretrained machine learning models that allow out-of-the-box (without prior training) extraction of information based on default extractors, which are managed directly by SAP.
  - business card

    > **Note**
    >
    > - The document type business card is **only** supported at API level.
    > - Be aware that business card documents with more than one contact person are **not** supported.
    > - For business card documents, the service extracts only the information (contact details) from the first page of any submitted document, but all pages are counted for metering purposes. Submit only single-page documents to avoid additional charges. See Metering and Pricing [page 108].

  - invoice
  - payment advice
  - purchase order
- **Custom document types**: refer to document types for which there are no pretrained machine learning models that are managed by SAP. Use the SAP schema *SAP_OCROnly_schema*, the Schema Configuration [page 306] and Template [page 320] features to extract information from custom documents. See also Schema API [page 231] and Template API [page 261].

  > **Note**
  >
  > The SAP Document AI solution is not intended to support the collection, processing, and storage of sensitive personal data. **Do not** use the instant learning or data feedback collection features for custom documents that include sensitive personal data.

> → Tip
>
> If you're using the service plan premium edition, extraction with generative AI is also possible for `standard` and `custom` documents.
>
> For more information, see Setup Types [page 311].

Parent topic: Supported Document Types [page 118]

Related Information

Supported Document Types (Embedded Edition and Premium Edition) [page 119]
Service Plans [page 104]
Using the SAP Document AI Basic UI (Base Edition and Premium Edition) [page 285]

6.2 Supported Document Types (Embedded Edition and Premium Edition)

See the list of supported document types when using the service plans embedded edition or premium edition.

SAP Document AI supports the following document types as input:

- **Standard document types**:
  - bill of exchange
  - business card
  - business partner certicate
  - delivery note
  - gas plant statement
  - in-house service
  - invoice
  - national ID

    > ⓘ Note
    >
    > The document type national ID does not support the following features:
    > - data feedback collection
    > - instant learning

  - payment advice
  - procurement quality certificate
  - purchase order
  - shipping document

- **Custom document types**: use generative AI or the content schema *OCR_STANDARD* to process custom documents.

> **Note**
>
> The SAP Document AI solution is not intended to support the collection, processing, and storage of sensitive personal data. **Do not** use the instant learning or data feedback collection features for custom documents that include sensitive personal data.

Parent topic: Supported Document Types [page 118]

Related Information

Supported Document Types (Base Edition and Premium Edition) [page 118]
Service Plans [page 104]
Using the SAP Document AI Workspace (Embedded Edition) [page 327]

7 Supported File Types

Explore the SAP Document AI supported file types by service plan and document type.

→ Remember

SAP Document AI supports:

- Single-page document files in JPEG, PNG, and TIFF format
- Image files that include scene text in JPEG, PNG, and TIFF format
- E-invoice document files in PDF and XML hybrid format, and in Factur-X and ZUGFeRD standards (up to version 2.3)
- The extraction of the first 1000 rows and 10 columns of `paymentAdvice` document files in XLS and XLSX format

ⓘ Note

- The endpoint Upload Document [page 172] accepts only multipart-encoded files with a file name and a content type.
- The file name must contain a file extension. For example: "invoice" only, without a file extension, is **not** a valid file name.
- The file name cannot be empty even if a file extension is provided. For example: ".pdf" is **not** a valid file name.

→ Tip

SAP Document AI handles distorted and asymmetrical images with a rotation of multiples of 90 degrees. In addition, small rotations of up to 15 degrees are also handled by the service. In both cases, the images are deskewed automatically.

Supported File Types (Base Edition) [page 121]

Supported File Types (Embedded Edition and Premium Edition) [page 122]

7.1 Supported File Types (Base Edition)

SAP Document AI supports the following file types as input for the available document types:

ⓘ Note

The supported file types listed here are relevant only to users of the base edition service plan. See Service Plans [page 104].

File Type	Document Type: business card	Document Type: invoice	Document Type: payment advice	Document Type: purchase order	Document Type: custom
JPEG	Yes	Yes	Yes	Yes	Yes
JPG	Yes	Yes	Yes	Yes	Yes
PDF	Yes	Yes	Yes	Yes	Yes
PNG	Yes	Yes	Yes	Yes	Yes
TIF	Yes	Yes	Yes	Yes	Yes
TIFF	Yes	Yes	Yes	Yes	Yes
XLS	No	No	Yes	No	No
XLSX	No	No	Yes	No	No

Parent topic: Supported File Types [page 121]

Related Information

Supported File Types (Embedded Edition and Premium Edition) [page 122]

7.2 Supported File Types (Embedded Edition and Premium Edition)

SAP Document AI supports the following file types as input for the available document types:

> **Note**
>
> The supported file types listed here are relevant to users of the service plans embedded edition and premium edition. See Service Plans [page 104].

File Type	Document Type: All custom and standard document types except for payment advice	Document Type: payment advice
CSV (Excel)	Yes	No

File Type	Document Type: All custom and standard document types except for payment advice	Document Type: payment advice
DOC	Yes	Yes
DOCM	Yes	Yes
DOCX	Yes	Yes
DOT	Yes	Yes
DOTM	Yes	Yes
DOTX	Yes	Yes
EML	Yes	Yes
EMLX	Yes	Yes
JPEG	Yes	Yes
JPG	Yes	Yes
MSG	Yes	Yes
NUMBERS	Yes	No
ODS	Yes	No
ODT	Yes	Yes
OFT	Yes	Yes
OLM	Yes	Yes
PAGES	Yes	Yes
PDF	Yes	Yes
PNG	Yes	Yes
RTF	Yes	Yes
TIF	Yes	Yes
TIFF	Yes	Yes
TSV (Excel)	Yes	No

File Type	Document Type: All custom and standard document types except for payment advice	Document Type: payment advice
TXT	Yes	Yes
XLAM	Yes	No
XLS	Yes	Yes
XLSB	Yes	No
XLSM	Yes	No
XLSX	Yes	Yes
XLT	Yes	No
XLTM	Yes	No
XLTX	Yes	No
XML (Excel)	Yes	No

Parent topic: Supported File Types [page 121]

Related Information

Supported File Types (Base Edition) [page 121]

8 Supported Languages

Explore the SAP Document AI supported languages by service plan, document type, and extraction method.

The supported languages have been validated with SAP Document AI. It is also possible to get similar accuracy results with documents in other languages that use *Latin-1 (ISO-8859-1)* character sets.

If you want to try out SAP Document AI to check if it fulfills your business needs, you can use a trial account to upload to the service a document in any language and get the results following the tutorial mission Use Machine Learning to Process Business Documents.

Supported Languages (Base Edition) [page 125]
See the list of supported languages when using the base edition service plan.

Supported Languages (Embedded Edition and Premium Edition) [page 129]
See the list of supported languages when using the service plans embedded edition and premium edition.

8.1 Supported Languages (Base Edition)

See the list of supported languages when using the base edition service plan.

SAP Document AI supports the following languages as input for the available document types:

> **Note**
>
> The supported languages listed here are relevant to users of the base edition service plan. See Service Plans [page 104].

> **→ Remember**
>
> With the base edition service plan, you can only use the extraction methods template and the solution's machine learning models to extract information from `standard` document types (`businessCard`, `invoice`, `paymentAdvice`, and `purchaseOrder`). To extract information from `custom` documents, you can only use the template extraction method. For more information, see Setup Types [page 311].

Language	Document Type: `businessCard` (extraction method: solution's machine learning models)	Document Type: `invoice` (extraction method: solution's machine learning models)	Document Type: `paymentAdvice` (extraction method: solution's machine learning models)	Document Type: `purchaseOrder` (extraction method: solution's machine learning models)	Document Type: `custom` and `standard` (extraction method: template)
Afrikaans (`af`)	✗ No	✗ No	✗ No	✗ No	✓ Yes

Language	Document Type: `businessCard` (extraction method: solution's machine learning models)	Document Type: `invoice` (extraction method: solution's machine learning models)	Document Type: `paymentAdvice` (extraction method: solution's machine learning models)	Document Type: `purchaseOrder` (extraction method: solution's machine learning models)	Document Type: `custom` and `standard` (extraction method: template)
Albanian (`sq`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Arabic (`ar`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Azerbaijani (`az`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Basque (`eu`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Belarusian (`be`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Bosnian (`bs`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Bulgarian (`bg`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Catalan (`ca`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Cebuano (`ceb`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Chinese Simplified (`zh-Hans`)	✓ Yes	✗ No	✗ No	✗ No	✓ Yes
Chinese Traditional (`zh-Hant`)	✓ Yes	✗ No	✗ No	✗ No	✓ Yes
Croatian (`hr`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Czech (`cs`)	✗ No	✓ Yes	✗ No	✗ No	✓ Yes
Danish (`da`)	✗ No	✓ Yes	✗ No	✗ No	✓ Yes
Dogri (`doi`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Dutch (`nl`)	✓ Yes	✓ Yes	✗ No	✗ No	✓ Yes
English (`en`)	✓ Yes	✓ Yes	✓ Yes	✓ Yes	✓ Yes
Esperanto (`eo`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Estonian (`et`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Filipino (Latin) (`fil`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Finnish (`fi`)	✗ No	✓ Yes	✗ No	✗ No	✓ Yes

Language	Document Type: `businessCard` (extraction method: solution's machine learning models)	Document Type: `invoice` (extraction method: solution's machine learning models)	Document Type: `paymentAdvice` (extraction method: solution's machine learning models)	Document Type: `purchaseOrder` (extraction method: solution's machine learning models)	Document Type: `custom` and `standard` (extraction method: template)
French (`fr`)	Yes	Yes	No	No	Yes
Galician (`gl`)	No	No	No	No	Yes
German (`de`)	Yes	Yes	Yes	Yes	Yes
Greek (Ancient) (`grc`)	No	No	No	No	Yes
Greek (Modern) (`el`)	No	No	No	No	Yes
Haitian Creole (`ht`)	No	No	No	No	Yes
Hebrew (`he`)	Yes	No	No	No	Yes
Hindi (`hi`)	No	No	No	No	Yes
Hungarian (`hu`)	No	Yes	No	No	Yes
Icelandic (`is`)	No	No	No	No	Yes
Indonesian (`id`)	No	No	No	No	Yes
Italian (`it`)	Yes	Yes	No	No	Yes
Irish (`ga`)	No	No	No	No	Yes
Japanese (`ja`)	Yes	Yes	No	No	Yes
Kazakh (`kk`)	No	No	No	No	Yes
Kirghiz (`ky`)	No	No	No	No	Yes
Korean (`ko`)	Yes	No	No	No	Yes
Latin (`la`)	No	No	No	No	Yes
Latvian (`lv`)	No	No	No	No	Yes
Lithuanian (`lt`)	No	No	No	No	Yes
Macedonian (`mk`)	No	No	No	No	Yes

Language	Document Type: `businessCard` (extraction method: solution's machine learning models)	Document Type: `invoice` (extraction method: solution's machine learning models)	Document Type: `paymentAdvice` (extraction method: solution's machine learning models)	Document Type: `purchaseOrder` (extraction method: solution's machine learning models)	Document Type: `custom` and `standard` (extraction method: template)
Malay (`ms`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Marathi (`mr`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Mongolian (`mn`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Montenegrin (`cnr`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Nepali (`ne`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Norwegian (`no`)	✗ No	✓ Yes	✗ No	✗ No	✓ Yes
Polish (`pl`)	✓ Yes	✓ Yes	✗ No	✗ No	✓ Yes
Portuguese (`pt`)	✓ Yes	✓ Yes	✗ No	✗ No	✓ Yes
Romanian (`ro`)	✗ No	✓ Yes	✗ No	✗ No	✗ No
Russian (`ru`)	✓ Yes	✗ No	✗ No	✗ No	✓ Yes
Sanskrit (`sa`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Serbian (`sr`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Slovak (`sk`)	✗ No	✓ Yes	✗ No	✗ No	✓ Yes
Slovenian (`sl`)	✗ No	✓ Yes	✗ No	✗ No	✓ Yes
Spanish (`es`)	✓ Yes	✓ Yes	✗ No	✗ No	✓ Yes
Swahili (`sw`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Swedish (`sv`)	✗ No	✓ Yes	✗ No	✗ No	✓ Yes
Thai (`th`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Turkish (`tr`)	✗ No	✓ Yes	✗ No	✗ No	✓ Yes
Ukrainian (`uk`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Urdu (`ur`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Uzbek (`uz`)	✗ No	✗ No	✗ No	✗ No	✓ Yes

Language	Document Type: `businessCard` (extraction method: solution's machine learning models)	Document Type: `invoice` (extraction method: solution's machine learning models)	Document Type: `paymentAdvice` (extraction method: solution's machine learning models)	Document Type: `purchaseOrder` (extraction method: solution's machine learning models)	Document Type: `custom` and `standard` (extraction method: template)
Vietnamese (`vi`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Welsh (`cy`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Yiddish (`yi`)	✗ No	✗ No	✗ No	✗ No	✓ Yes
Zulu (`zu`)	✗ No	✗ No	✗ No	✗ No	✓ Yes

Parent topic: Supported Languages [page 125]

Related Information

Supported Languages (Embedded Edition and Premium Edition) [page 129]

8.2 Supported Languages (Embedded Edition and Premium Edition)

See the list of supported languages when using the service plans embedded edition and premium edition.

> ⓘ Note
>
> The supported languages listed here are relevant to users of the service plans embedded edition and premium edition. See Service Plans [page 104].

> → Remember
>
> With the service plans embedded edition and premium edition, you can use all the available extraction methods (the solution's machine learning models, generative AI, and template).

Language

The premium edition service plan supports the following languages for all document types, extraction methods, and features:

Language	Language Code
Afrikaans	`af`
Albanian	`sq`
Amami (Northern)	`ryn`
Amami (Southern)	`ams`
Arabic	`ar`
Aromanian	`rup`
Azerbaijani	`az`
Basque	`eu`
Belarusian	`be`
Bosnian	`bs`
Bulgarian	`bg`
Catalan	`ca`
Cebuano	`ceb`
Chamorro	`ch`
Chavacano	`cbk`
Chinese (Hakka)	`hak`
Chinese Simplified	`zh-Hans`
Chinese Traditional	`zh-Hant`
Chinese (Wu)	`wuu`
Cimbrian	`cim`
Croatian	`hr`
Czech	`cs`
Danish	`da`
Dogri	`doi`
Dutch	`nl`
Dutch (Pennsylvania)	`pdc`
English	`en`
Esperanto	`eo`
Estonian	`et`
Fijian	`fj`
Filipino (Latin)	`fil`
Finnish	`fi`
Francien	`-`

Language	Language Code
French	`fr`
French (Norman)	`nrf`
Galician	`gl`
German	`de`
German (Alemannic)	`gsw`
German (Pennsylvania)	`pdc`
Greek (Ancient)	`grc`
Greek (Modern)	`el`
Greek (Pontic)	`pnt`
Haitian Creole	`ht`
Hausa (Latin)	`ha`
Hebrew	`he`
Hebrew (Ladino)	`lad`
Hindi	`hi`
Hungarian	`hu`
Icelandic	`is`
Ido	`io`
Indonesian	`id`
Interlingua	`ia`
Irish	`ga`
Istro-Romanian	`ruo`
Italian	`it`
Japanese	`ja`
Jeju	`jje`
Kazakh	`kk`
Kinyarwanda	`rw`
Kirghiz	`ky`
Korean	`ko`
Latin	`la`
Latvian	`lv`
Lingala	`ln`
Lithuanian	`lt`
Macedonian	`mk`

Language	Language Code
Malay	`ms`
Marathi	`mr`
Megleno-Romanian	`ruq`
Mirandese	`mwl`
Miyako	`mvi`
Moldovan (Latin)	`ro`
Mongolian	`mn`
Montenegrin	`cnr`
Muong	`mtq`
Nepali	`ne`
Norwegian	`no`
Okinoerabu	`okn`
Picard	`pcd`
Poitevin-Saintongeais	`-`
Polish	`pl`
Portuguese	`pt`
Russian	`ru`
Samoan	`sm`
Sanskrit	`sa`
Serbian	`sr`
Shona	`sn`
Slovak	`sk`
Slovenian	`sl`
Somali	`so`
Sotho (Southern)	`st`
Spanish	`es`
Swahili	`sw`
Swedish	`sv`
Tagalog	`tl`
Thai	`th`
Tok Pisin	`tpi`
Tsakonian	`tsd`
Tswana	`tn`

Language	Language Code
Turkish	`tr`
Ukrainian	`uk`
Urdu	`ur`
Uzbek	`uz`
Vietnamese	`vi`
Welsh	`cy`
Yaeyama	`rys`
Yiddish	`yi`
Xhosa	`xh`
Zulu	`zu`

Parent topic: Supported Languages [page 125]

Related Information

Supported Languages (Base Edition) [page 125]

9 Initial Setup

Get started with SAP Document AI using the standard procedures for SAP BTP Cloud Foundry environment or Kyma environment.

> → Tip
>
> See Tutorials (Base Edition and Premium Edition) [page 140] to find out how to use a trial account or the free tier option for SAP Document AI to try out the service.

Prerequisites

You have set up your global account and at least one subaccount on SAP BTP. For an overview of the required steps, see Getting Started in the Cloud Foundry Environment or Getting Started in the Kyma Environment.

> ⓘ Note
>
> SAP Document AI allows you to move subaccounts between your global accounts. For more information, see Relationship Between Global Accounts, Subaccounts, and Directories.
>
> SAP Document AI allows you to configure your own retention period for storing your subaccounts audit data. For more information, see Configurable Retention Period for Subaccounts.

Related Information

Enabling the Service in the Cloud Foundry Environment [page 135]
Enabling the Service in the Kyma Environment [page 135]
Subscribing to the SAP Document AI Basic UI [page 285]
Subscribing to the SAP Document AI Workspace With the Identity Authentication Service [page 327]

9.1 Enabling the Service in the Cloud Foundry Environment

Enable SAP Document AI using the standard procedures for SAP BTP Cloud Foundry environment.

Context

> → Tip
>
> You can also use the booster *Set up account for SAP Document AI* to automate the steps described below on the SAP BTP cockpit. See Boosters and the tutorials:
>
> - Use Free Tier to Set Up Account for SAP Document AI and Get Service Key
> - Use Free Tier to Set Up Account for SAP Document AI and Go to Application

Procedure

1. Create a service instance in the Cloud Foundry environment. See Creating Service Instances.

   > ⓘ Note
   >
   > In the *New Instance or Subscription* wizard, enter only the *Basic Info* details, and leave the *Parameters* details empty. The configuration of instance parameters isn't required or supported for this service.

2. You can then bind the service instance to your application, or you can create a service key to communicate directly with the service instance. See Binding Service Instances to Applications and Creating Service Keys.

9.2 Enabling the Service in the Kyma Environment

Enable SAP Document AI using the standard procedures for Kyma environment.

Procedure

1. Create a service instance in the Kyma environment.

   > ⓘ Note
   >
   > In the *New Instance or Subscription* wizard, enter only the *Basic Info* details, and leave the *Parameters* details empty. The configuration of instance parameters isn't required or supported for this service.

2. You can then bind the service instance to your application, or you can create a service key to communicate directly with the service instance. See Using SAP BTP Services in the Kyma Environment.

10 Enable X.509 Authentication

Find out how to enable your service instance for authentication with an X.509 client certificate.

SAP Document AI supports X.509 authentication with the certificates managed either by the SAP Authorization and Trust Management service or self-managed. The authentication with an X.509 client certificate is enabled for every service instance by default.

Create Service Key or Service Binding Additional Parameters

To use X.509 secrets, you need to set additional parameters when you create your service key or service binding. We support the following two scenarios:

- The SAP Authorization and Trust Management service generates certificates for you. In this case, the parameters you need to set when you create your service key or service binding are the following in `JSON` format:

  ```
  {
     "xsuaa":{
        "credential-type":"x509",
        "x509":{
           "key-length":2048,
           "validity":8,
           "validity-type":"DAYS"
        }
     }
  }
  ```

  For a detailed description of the parameters, see Parameters for X.509 Certificates Managed by SAP Authorization and Trust Management Service.

- You already have your own public key infrastructure (PKI), with certificates issued from one of the trusted Certificate Authorities (CAs). In this case, the parameters you need to set when you create your service key or service binding are the following in `JSON` format::

  ```
  {
     "xsuaa":{
        "credential-type":"x509",
        "x509":{
           "certificate":"-----BEGIN CERTIFICATE-----...-----END
  CERTIFICATE-----",
           "ensure-uniqueness":false,
           "certificate-pinning":true,
           "hide-certificate":true
        }
     }
  }
  ```

  For a detailed description of the parameters, see Parameters for Self-Managed X.509 Certificates. See also Trusted Certificate Authentication.

Get an Authorization Token with X.509 Certificate

To get an authorization token using an X.509 certificate, use “certurl”. In the scenario of already generated certificates, also use “key” and “certificate” from the service key.

Example of a request using `curl`:

```
curl --cert <path to certificate.pem> --key <path to
key.pem> --request POST <value of "uaa.certurl">/oauth/token -d
'grant_type=client_credentials&client_id=<Value of "uaa.clientid">'
```

See also the blog post: X.509 certificate-based authentication(mTLS) – Generating X.509 certificates of BTP managed services.

Restrict your Service Instance to X.509 Certificate Authentication Only (Optional)

To restrict your instance to support **only** X.509 certificate authentication and don't allow any service keys that use different authentication methods, in the **New Instance or Subscription** wizard, enter in **Parameters** the following instance parameters in `JSON` format:

```
{
   "xs-security":{
      "xsappname":"<app-name>",
      "oauth2-configuration":{
         "credential-types":[
            "x509"
         ]
      }
   }
}
```

> **Note**
>
> In the sample code, "<app-name>" is a name of your choice.

11 Run SAP Document AI in a Multitenant Application

Find out how to run SAP Document AI in a multitenant application.

In the Cloud Foundry environment, you can develop and run multitenant applications, and share them with multiple consumers simultaneously on SAP BTP.

SAP Document AI supports this scenario and can be declared as a dependency of a multitenant application. This means that SAP Document AI gets provisioned automatically for every consumer that subscribes to the multitenant application. Different consumers are independently provisioned and data from these consumers is isolated inside SAP Document AI.

> → Tip
>
> See Developing Multitenant Applications in the Cloud Foundry Environment for more details on how to declare SAP Document AI as a dependency of a multitenant application using the SAP SaaS Provisioning service.

12 Tutorials (Base Edition and Premium Edition)

Follow our tutorials to get familiar with the SAP Document AI basic UI application, APIs, and functionalities.

Tutorial Missions	Description
Use Generative AI to Process Business Documents	Find out how to use the SAP Business Technology Platform service SAP Document AI with generative AI to automate the extraction of information from any type of document using large language models (LLMs).
Use Machine Learning to Process Business Documents	Try out the SAP Document AI Trial UI to process business documents that have content in headers and tables.
Use Machine Learning to Extract Information from Business Documents and Enrich Data	Process business documents that have content in headers and tables, and enrich the information extracted with your own master data records, using machine learning and `Swagger UI`.
Shape Machine Learning to Process Standard Business Documents	Create your own header and line item fields, and edit extraction results for documents associated with templates to automate the extraction of information from standard business documents such as invoices and purchase orders.
Shape Machine Learning to Process Custom Documents	Create your own header and line item fields, and edit extraction results for documents associated with templates to automate the extraction of information from custom documents (not supported out of the box) such as résumés and power of attorney.

→ Tip

See also the following onboarding tutorials that use the free tier option for SAP Document AI:

- Use Free Tier to Set Up Account for SAP Document AI and Get Service Key
- Use Free Tier to Set Up Account for SAP Document AI and Go to Application

Related Information

Tutorial Navigator

13 Development (Base Edition and Premium Edition)

Explore the sections listed below to get started with the SAP Document AI APIs and the Notifications feature.

- API Reference [page 141]
- Notifications [page 278]

13.1 API Reference

Explore the SAP Document AI APIs.

Before using the SAP Document AI APIs listed below, you need to retrieve your OAuth access token as described in Get Access Token [page 142].

- Capabilities API [page 143]
- Client API [page 150]
- Identifier API (Deprecated) [page 154]
- Configuration API [page 159]
- Document API [page 171]
- Enrichment Data API [page 213]
- Schema API [page 231]
- Template API [page 261]

To display the comprehensive specification of the SAP Document AI APIs in `Swagger UI`, perform the following steps:

1. Open the SAP BTP cockpit and access your account.

   > → Tip
   >
   > If you've already created a service instance and a service key for SAP Document AI, and you've already subscribed to the SAP Document AI basic UI, you can skip step 2.

2. Click *Boosters* on the left navigation pane.
   Run the booster *Set up account for SAP Document AI*.
3. Go to your subaccount and click *Instances and Subscriptions* under *Services* on the left navigation pane.
4. Click the navigation arrow in the *Instances* section to open the details of your service instance for SAP Document AI. Then, click the three dots at the right end of the service key row to view or download your service key.

   > → Tip
   >
   > Open a text editor of your choice so that you can complete the following step.

5. Copy the "tenantuiurl" value and paste it into your text editor. Then, copy the "swagger" value and paste it onto the end of the "tenantuiurl" value. Finally, copy the entire string, paste it into the address bar of your web browser, and press *Enter* to access the `Swagger UI` for SAP Document AI.

> → Tip
>
> See also the tutorial mission Use Machine Learning to Extract Information from Business Documents and Enrich Data.

Related Information

Common Request Headers [page 277]
Common Status and Error Codes [page 277]
Best Practices (Base Edition and Premium Edition) [page 364]
Technical Constraints [page 383]
Extracted Header Fields (Base Edition and Premium Edition) [page 387]
Extracted Line Items (Base Edition and Premium Edition) [page 402]

13.1.1 Get Access Token

Retrieve your OAuth access token, which grants you access to the SAP Document AI APIs.

> ⓘ Note
>
> The token is valid for 12 hours. After that, you need to generate a new one.

> → Tip
>
> Alternatively, you can follow the steps in this tutorial to Get OAuth Access Token for SAP Document AI via Web Browser.

Request

Base URL: url value from inside the uaa section of the service key

URL Path: `/oauth/token`

HTTP Method: *POST*

Request Headers

Header	Required	Values
`Content-Type`	Yes	`<application/x-www-form-urlencoded>`

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`client_id`	Yes	String	*authorization header*	The `clientid` value from the service key.
`client_secret`	Yes	String	*authorization header*	The `clientsecret` value from the service key.
`grant_type`	Yes	String	*query*	Token grant type. Set it to `client_credentials`.
`response_type`	Yes	String	*query*	Token response type. Set it to `token`.

Response

The response is given as a status (200 or 401). See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
    "access_token": "<< your access token >>",
    "token_type": "bearer",
    "expires_in": 43199,
    "scope": "uaa.resource",
    "jti": "8d00c157058949daab714a44c04c416b"
}
```

13.1.2 Capabilities API

See the list of document fields and enrichment data for each document type you can process with SAP Document AI.

> → Tip
>
> - See Supported Document Types [page 118] and Supported File Types [page 121].
> - See also Supported Languages [page 125].

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/capabilities`

HTTP Method: *GET*

Request Parameters

No parameters

Response

Response Fields

JSON Field	Description
`deprecatedFields`	List of standard fields that have been deprecated and are no longer available for extraction
`documentTypes`	List of document types you can submit
`enrichment`	List of enrichment data you can match
`extraction`	List of `headerFields`, `lineItemFields`, `enrichment`, `documentTypes`, and `fileTypes`
`fileTypes`	List of file types you can submit
`headerFields`	List of header fields you can extract
`lineItemFields`	List of line items you can extract

The response is given as a status (200, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "extraction":{
      "headerFields":[
         {
            "name":"documentNumber",
            "type":"string",
            "category":"document",
            "supportedDocumentTypes":[
               "invoice",
               "paymentAdvice",
               "purchaseOrder"
            ],
            "textResources":{
               "invoice":{
                  "label":"Invoice Number",
                  "description":"Invoice number for this invoice"
```

```
                },
                "paymentAdvice":{
                   "label":"Payment Reference",
                   "description":"Number of the payment advice that references
the payment"
                },
                "purchaseOrder":{
                   "label":"Purchase Order Number",
                   "description":"Purchase order number for this purchase order"
                }
             }
          },
          {
             "name":"taxId",
             "type":"string",
             "category":"amounts",
             "supportedDocumentTypes":[
                "invoice",
                "paymentAdvice",
                "purchaseOrder"
             ],
             "textResources":{
                "invoice":{
                   "label":"Supplier Tax ID",
                   "description":"The number used to identify the supplier's
company for tax purposes"
                },
                "paymentAdvice":{
                   "label":"Tax ID",
                   "description":"Tax identifier of the sender's business entity:
unique to each sender"
                },
                "purchaseOrder":{
                   "label":"Tax ID",
                   "description":"Tax identifier of the sender's business entity:
unique to each sender"
                }
             }
          },
          {
             "name":"taxName",
             "type":"string",
             "category":"amounts",
             "supportedDocumentTypes":[
                "invoice"
             ],
             "textResources":{
                "invoice":{
                   "label":"Tax Description",
                   "description":"A brief description of the tax: for example,
'California sales tax'"
                }
             }
          },
          "..."
       ],
       "lineItemFields":[
          {
             "name":"description",
             "type":"string",
             "category":"details",
             "supportedDocumentTypes":[
                "invoice",
                "purchaseOrder"
             ],
             "textResources":{
                "invoice":{
                   "label":"Description",
```

```
                  "description":"Textual description of goods or services"
               },
               "purchaseOrder":{
                  "label":"Description",
                  "description":"Textual description of goods or services"
               }
            }
         },
         {
            "name":"netAmount",
            "type":"number",
            "category":"amounts",
            "supportedDocumentTypes":[
               "invoice",
               "paymentAdvice",
               "purchaseOrder"
            ],
            "textResources":{
               "invoice":{
                  "label":"Amount",
                  "description":"Total amount of the line item (typically
UnitPrice * Quantity)"
               },
               "paymentAdvice":{
                  "label":"Amount",
                  "description":"Total amount of the line item (typically
UnitPrice * Quantity)"
               },
               "purchaseOrder":{
                  "label":"Amount",
                  "description":"Total amount of the line item (typically
UnitPrice * Quantity)"
               }
            }
         },
         {
            "name":"quantity",
            "type":"number",
            "category":"details",
            "supportedDocumentTypes":[
               "invoice",
               "purchaseOrder"
            ],
            "textResources":{
               "invoice":{
                  "label":"Quantity",
                  "description":"Quantity of goods or services"
               },
               "purchaseOrder":{
                  "label":"Quantity",
                  "description":"Quantity of goods or services"
               }
            }
         },
         "..."
      ]
   },
   "enrichment":{
      "employee":{
         "dataTypes":[
            "employee"
         ]
      },
      "sender":{
         "dataTypes":[
            "businessEntity"
         ]
      },
```

```
      "receiver":{
         "dataTypes":[
            "businessEntity"
         ]
      },
      "product":{
         "dataTypes":[

         ]
      }
   },
   "documentTypes":[
      "invoice",
      "paymentAdvice",
      "purchaseOrder",
      "businessCard",
      "custom"
   ],
   "isExternalModelConsumptionAllowed":true,
   "isContentTranslationEnabled":false,
   "fileTypes":{
      "invoice":[
         ".csv",
         ".doc",
         ".docm",
         ".docx",
         ".dot",
         ".dotm",
         ".dotx",
         ".eml",
         ".emlx",
         ".jpeg",
         ".jpg",
         ".msg",
         ".numbers",
         ".ods",
         ".odt",
         ".oft",
         ".olm",
         ".pages",
         ".pdf",
         ".png",
         ".rtf",
         ".tiff",
         ".tsv",
         ".txt",
         ".xlam",
         ".xls",
         ".xlsb",
         ".xlsm",
         ".xlsx",
         ".xlt",
         ".xltm",
         ".xltx",
         ".xml"
      ],
      "paymentAdvice":[
         ".doc",
         ".docm",
         ".docx",
         ".dot",
         ".dotm",
         ".dotx",
         ".eml",
         ".emlx",
         ".jpeg",
         ".jpg",
         ".msg",
```

```
            ".odt",
            ".oft",
            ".olm",
            ".pages",
            ".pdf",
            ".png",
            ".rtf",
            ".tiff",
            ".txt",
            ".xls",
            ".xlsx"
        ],
        "purchaseOrder":[
            ".csv",
            ".doc",
            ".docm",
            ".docx",
            ".dot",
            ".dotm",
            ".dotx",
            ".eml",
            ".emlx",
            ".jpeg",
            ".jpg",
            ".msg",
            ".numbers",
            ".ods",
            ".odt",
            ".oft",
            ".olm",
            ".pages",
            ".pdf",
            ".png",
            ".rtf",
            ".tiff",
            ".tsv",
            ".txt",
            ".xlam",
            ".xls",
            ".xlsb",
            ".xlsm",
            ".xlsx",
            ".xlt",
            ".xltm",
            ".xltx",
            ".xml"
        ],
        "businessCard":[
            ".csv",
            ".doc",
            ".docm",
            ".docx",
            ".dot",
            ".dotm",
            ".dotx",
            ".eml",
            ".emlx",
            ".jpeg",
            ".jpg",
            ".msg",
            ".numbers",
            ".ods",
            ".odt",
            ".oft",
            ".olm",
            ".pages",
            ".pdf",
            ".png",
```

```
            ".rtf",
            ".tiff",
            ".tsv",
            ".txt",
            ".xlam",
            ".xls",
            ".xlsb",
            ".xlsm",
            ".xlsx",
            ".xlt",
            ".xltm",
            ".xltx",
            ".xml"
         ],
         "custom":[
            ".csv",
            ".doc",
            ".docm",
            ".docx",
            ".dot",
            ".dotm",
            ".dotx",
            ".eml",
            ".emlx",
            ".jpeg",
            ".jpg",
            ".msg",
            ".numbers",
            ".ods",
            ".odt",
            ".oft",
            ".olm",
            ".pages",
            ".pdf",
            ".png",
            ".rtf",
            ".tiff",
            ".tsv",
            ".txt",
            ".xlam",
            ".xls",
            ".xlsb",
            ".xlsm",
            ".xlsx",
            ".xlt",
            ".xltm",
            ".xltx",
            ".xml"
         ]
      },
      "deprecatedFields":{
         "headerFields":[
            {
               "name":"quantity",
               "type":"number",
               "category":"details",
               "supportedDocumentTypes":[
                  "purchaseOrder"
               ],
               "textResources":{
                  "purchaseOrder":{
                     "label":"Quantity",
                     "description":"Quantity of goods or services"
                  }
               }
            }
         ],
         "lineItemFields":[
```

```
         {
            "name":"materialNumber",
            "type":"string",
            "category":"details",
            "supportedDocumentTypes":[
               "purchaseOrder"
            ],
            "textResources":{
               "purchaseOrder":{
                  "label":"Material Number",
                  "description":"Unique code that identifies a specific good or
service in a supplier catalog or system"
               }
            }
         },
         {
            "name":"senderMaterialNumber",
            "type":"string",
            "category":"details",
            "supportedDocumentTypes":[
               "purchaseOrder"
            ],
            "textResources":{
               "purchaseOrder":{
                  "label":"Sender Material Number",
                  "description":"Unique code that identifies a specific good or
service in a customer catalog or system"
               }
            }
         }
      ]
   }
}
```

13.1.3 Client API

SAP Document AI requires a client to be called. A `default` client is created following tenant provisioning, enabling you to use the service immediately.

The Client API consists of the following endpoints:

- Create Client [page 150]
- Get Client [page 152]
- Delete Client [page 153]

13.1.3.1 Create Client

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/clients`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`payload`	Yes	JSON Object	*body*	List of clients containing `clientId` and `clientName`

Request Example

Single client:

```
{
   "value":[
      {
         "clientId":"c_00",
         "clientName":"client 00"
      }
   ]
}
```

Multiple clients:

```
{
   "value":[
      {
         "clientId":"c_00",
         "clientName":"tyler"
      },
      {
         "clientId":"c_01",
         "clientName":"jlaix"
      }
   ]
}
```

Response

Response Fields

JSON Field	Description
`inserted`	Number of inserted entries
`modified`	Number of modified entries

The response is given as a status (201, 400, 401, 429, or 500) and JSON file. See Common Status and Error Codes [page 277] and Technical Constraints [page 383].

Response Example

201 “Created”

```
{
```

```
    "inserted":1,
    "modified":2
}
```

13.1.3.2 Get Client

Retrieve all the client names and IDs.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/clients`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientIdStartsWith`	No	String	*query*	Filters the list of clients by the characters the clientId starts with. For example: c
`limit`	Yes	Integer	*query*	Number of clients to process. For example: 10. See Technical Constraints [page 383]
`offset`	No	Integer	*query*	Index of the first client to be retrieved. For example: 10

Response

Response Fields

JSON Field	Description
`id`	Tenant ID
`payload`	List of all clients, including their `zoneId`, `clientId`, and `clientName`

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
  "id": "1234",
  "payload": [
    {
      "clientId": "c_00",
      "clientName": "client 00"
    },
    {
      "clientId": "c_01",
      "clientName": "client 01"
    },
    {
      "clientId": "c_02",
      "clientName": "client 02"
    },
    {
      "clientId": "c_03",
      "clientName": "client 03"
    },
    {
      "clientId": "c_04",
      "clientName": "client 04"
    }
  ]
}
```

13.1.3.3 Delete Client

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/clients`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`payload`	Yes	JSON Object	*body*	List of client IDs

Payload Request Example

```
{
   "value":[
      "c_00"
   ]
```

```
}
```

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
  "message": "Successfully deleted 1 client(s)."
}
```

13.1.4 Identifier API (Deprecated)

Create, list, and delete identifiers for client mappings.

> ⚠ Caution
>
> The Identifier API and its endpoints have been deprecated and are scheduled for decommissioning in September 2025.
>
> You can't use the Identifier API to process `paymentAdvice` documents in Excel format.
>
> Please use the Document API [page 171] to process `paymentAdvice` documents in Excel format. You can optionally use the preconfigured SAP schema `SAP_paymentAdvice_schema` or your own custom schema for `paymentAdvice` documents when you Upload Document [page 172]. For more information, see Schema API [page 231].

The Identifier API consists of the following endpoints:

- Create Identifier (Deprecated) [page 155]
- Get Identifier (Deprecated) [page 157]
- Delete Identifier (Deprecated) [page 158]

13.1.4.1 Create Identifier (Deprecated)

Create identifiers for client mappings.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/identifier`

HTTP Method: *POST*

Request Parameters

> **Note**
>
> In single POST calls, you can create aliases for only one `documentType` and `fileType`.

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. For example: c_00.
`options`	Yes	JSON Object	*formData*	Options for processing the document. See the *Options Payload* table below.

Options Payload

Option	Required	Data Type	Description
`documentType`	Yes	String	Type of the document submitted. For now, only `paymentAdvice` is supported.
`fileType`	Yes	String	Type of the file submitted. For now, only Excel is supported.
`headerFields`	Yes	String	List of header fields with the aliases of supported capabilities you want to extract from a specific `documentType` and `fileType`. See the list of fields that can be extracted from header fields in Extracted Header Fields (Base Edition and Premium Edition) [page 387].
`language`	Yes	String	Language of the aliases

Option	Required	Data Type	Description
`lineItemFields`	Yes	String	List of line item fields with the aliases of supported capabilities you want to extract from a specific `documentType` and `fileType`. See the list of fields that can be extracted from line items in Extracted Line Items (Base Edition and Premium Edition) [page 402].

Request Example: Options Payload

```
{
   "documentType":"paymentAdvice",
   "fileType":"Excel",
   "headerFields":[
      {
         "language":"en",
         "capabilities":{
            "documentNumber":[
               "Payment Number"
            ],
            "documentDate":[
               "Payment Date"
            ],
            "currencyCode":[
               "Invoice Currency"
            ],
            "grossAmount":[
               "Amount in Invoice Currency",
               "Document currency"
            ]
         }
      },
      {
         "language":"de",
         "capabilities":{
            "documentNumber":[
               "Beleg-Nr."
            ],
            "documentDate":[
               "RE-Datum"
            ]
         }
      }
   ],
   "lineItemFields":[
      {
         "language":"en",
         "capabilities":{
            "documentNumber":[
               "Invoice Number",
               "Document Number"
            ],
            "documentDate":[
               "Invoice Date",
               "Document Date"
            ],
            "discountAmount":[
               "Cash disc. amt LC"
```

```
            ],
            "netAmount":[
               "Amount Paid",
               "Amount in doc. curr."
            ]
         }
      },
      {
         "language":"de",
         "capabilities":{
            "documentNumber":[
               "Beleg-Nr."
            ],
            "documentDate":[
               "RE-Datum"
            ],
            "netAmount":[
               "Gesamt-OP"
            ]
         }
      }
   ]
}
```

Response

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

13.1.4.2 Get Identifier (Deprecated)

Retrieve all identifiers for client mappings by `fileType`, `documentType`, and `clientId`.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/identifier`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. For example: c_00.

Parameter	Required	Data Type	Parameter Type	Description
`documentType`	Yes	String	*query*	Type of the document submitted. For now, only `paymentAdvice` is supported.
`fileType`	Yes	String	*query*	Type of the file submitted. For now, only Excel is supported.

Response

Response Fields

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

13.1.4.3 Delete Identifier (Deprecated)

Delete identifiers for client mappings.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/identifier`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. For example: c_00.
`documentType`	No	String	*query*	Type of the document submitted. For now, only `paymentAdvice` is supported.
`fileType`	No	String	*query*	Type of the file submitted. For now, only Excel is supported.

> **Note**
>
> If you want to delete aliases for a specific `documentType` and `fileType`, all parameter fields are required. If the `documentType` and `fileType` are not provided, all aliases are deleted.

Response

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

13.1.5 Configuration API

Create, update, list, and delete configurations on tenant scope by default, or optionally, on instance or client scope.

The Configuration API consists of the following endpoints:

- Create Configuration [page 159]
- Get Configuration [page 166]
- Get Configuration with Key [page 167]
- Delete Configuration [page 169]

See also Configuration Keys [page 161] and SAP BTP Security Recommendations.

13.1.5.1 Create Configuration

Create or update configurations according to the given payload.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/configuration`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	No	String	*query*	The ID of the client you want to set the configuration for. For example: c_00. This parameter is only used for `client` scope configurations.
`payload`	Yes	JSON Object	*body*	List of configuration key-value pairs. For more information, see Configuration Keys [page 161].

Parameter	Required	Data Type	Parameter Type	Description
`scope`	No	String	*query*	Choose the scope of the configuration among the following values: • `client` • `instance` • `tenant` → Tip If you leave this parameter empty, the `tenant` scope is used.
`tenantId`	No	String	*query*	The ID of the tenant you want to set the configuration for. → Tip If you leave this parameter empty, the `tenantId` sending the request is used.

Response

Response Fields

JSON Field	Description
`inserted`	Number of inserted entries
`modified`	Number of modified entries

The response is given as a status (201, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Success”

```
{
   "inserted":1,
   "modified":0
}
```

13.1.5.1.1 Configuration Keys

Explore the available configuration keys for SAP Document AI.

Configuration Key	Default Value	Possible Values	Scope	Description	Create Configuration [page 159] Request Payload Example
`activateDocumentNotifications`	**`false`**	**`true`**, or **`false`**	• `client` • `instance` • `tenant`	Use this configuration key to enable or disable the Notifications [page 278] functionality. Set `activateDocumentNotifications` to **`true`** to get notifications about the status of your processed documents.	`{ "value": { "activateDocumentNotifications": "true" } }`
`clientSegregation`	**`false`**	**`true`**, or **`false`**	• `instance` • `tenant`	Use this configuration key to restrict user access to specified clients. See also Add Document [page 296].	`{ "value": { "clientSegregation":"true" } }`
`coordinateFormat`	**`default`**	**`default`**, **`absolute`**, or **`normalized`**	• `instance` • `tenant`	Use this configuration key to choose the format of the bounding box coordinates in the extraction results.	`{ "value": { "coordinateFormat":"normalized" } }`

Configuration Key	Default Value	Possible Values	Scope	Description	Create Configuration [page 159] Request Payload Example

`dataFeedbackCollection`	**`false`**	**`true`**, or **`false`**	• `client`
			• `instance`
			• `tenant`
				Use this configuration key to make use of the data feedback collection feature. See also Confirm Document [page 202]. If set to **`false`**, all documents already uploaded to the service for retraining by this tenant (or instance) are deleted. And all documents uploaded from that moment onwards are no longer used to retrain the solution's machine learning models.
				
				See also Delete Configuration [page 169].
				
				→ Remember
				As SAP Document AI learns from data, enabling data feedback collection may help the service to become more accurate in extracting information from your documents. On the contrary, deletion of data may result in extraction results becoming less accurate. Deletion of data is irreversible.
				
				ⓘ Note
				After sending a *DELETE* request using the `dataFeedbackCollection` configuration key, all documents already uploaded to the service for retraining by this tenant (or service instance) are deleted. And all documents uploaded from that moment onwards are no longer used to retrain the solution's machine learning models. See also Con-
					`{`
					`"value": {`
					`"dataFeedbackCollection":"true"`
					`}`
					`}`

Configuration Key	Default Value	Possible Values	Scope	Description	Create Configuration [page 159] Request Payload Example
				figuration Keys [page 161] (if parameter is set to *false*).	

`documentRetentionTimeDays`	**`7`** days	**`1`** to **`30`** days	• `client`
			• `instance`
			• `tenant`
				Use this configuration key to set the retention period for inference documents uploaded to the service.
				Note
				After sending the *DELETE* request using the `documentRetentionTimeDays` configuration key, the default retention period of 7 days is used again.
					`{`
					`"value": {`
					`"documentRetentionTimeDays":"10"`
					`}`
					`}`
					`}`

`enableInstantLearning`	**`false`**	**`true`**, or **`false`**	• `client`
			• `instance`
			• `tenant`
				Use this configuration key to enable or disable the instant learning feature.
				See also Instant Learning (Premium Edition) [page 301].
					`{`
					`"value": {`
					`"enableInstantLearning": "true"`
					`}`
					`}`

Configuration Key	Default Value	Possible Values	Scope	Description	Create Configuration [page 159] Request Payload Example

`enrichmentConfidenceThreshold`	**`low`**	**`low`**, **`medium`**, or **`high`**	• `client`
			• `instance`
			• `tenant`
				Use this configuration key to adjust the similarity confidence threshold for data enrichment.
				
				The **`low`** value results in more matches with higher possibility of false-positive matches.
				
				The **`high`** value returns only very confident matches and has lower tolerance for differences between document content and master data.
				
				The **`medium`** value is a balanced adjustment.
				
				This configuration can alter the behavior of data enrichment. If you don't get good enrichment results, it's recommended to test the different values for this configuration. Use a lower value if you want to get more matches, or if the expected master data doesn't match the document. Use a higher value if you get incorrect or unexpected matches.
					`{`
					`"value": {`
					`"enrichmentConfidenceThreshold": "medium" }`
					`}`

`manualDataActivation`	**`false`**	**`true`**, or **`false`**	`tenant`	Use this configuration key to set data activation to manual, instead of using the default automatic refresh of enrichment data, that takes place every 4 hours.
				
				See also Create Data Activation [page 226] and Get Data Activation Details [page 227].
					`{`
					`"value": {`
					`"manualDataActivation":"true" }`
					`}`

Configuration Key	Default Value	Possible Values	Scope	Description	Create Configuration [page 159] Request Payload Example
`performPIICheck`	**`true`**	**`true`**, or **`false`**	`tenant`	This is a subconfiguration of the `dataFeedbackCollection` configuration key. To use this subconfiguration, set the `dataFeedbackCollection` configuration key to **`true`**. The `performPIICheck` subconfiguration is set to **`true`** by default. If set to true, the service automatically scans documents for Personally Identifiable Information (PII) and excludes any document with PII from being used for improving the service. If you set `performPIICheck` to **`false`**, all documents may be used for improving the service. See also Confirm Document [page 202].	`{ "value": { "performPIICheck":"false" } }`
`removeDotsFromMaterialNumber`	**`false`**	**`true`**, or **`false`**	`tenant`	Set this configuration key to **`true`** to remove dots in the extraction results from the string of the following standard line item fields for `purchaseOrder` documents: • *customerMaterialNumber* • *supplierMaterialNumber* → Remember Leading and trailing dots as in ".123" and "123." are removed by default.	`{ "value": { "removeDotsFromMaterialNumber":"true" } }`

> **Note**
>
> Before setting the `dataFeedbackCollection` configuration key to *true*, and the `performPIICheck` subconfiguration to *false*, review the subsection *Deletion of Personal Data* in Data Protection and Privacy [page 437].

> **⚠ Restriction**
>
> The `documentRetentionTimeDays` and `dataFeedbackCollection` configuration keys, and the `performPIICheck` subconfiguration are only available on production environments for enterprise accounts. These keys are not available for trial account users.

13.1.5.2 Get Configuration

Retrieve all configurations already created for the requested scope.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/configuration`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	No	String	*query*	The ID of the client you want to get the configuration for. For example: c_00. This parameter is only used for client `scope` configurations.
`scope`	No	String	*query*	Choose the scope of the configuration among the following values: • `active` (all configurations already created, including the ones on `client`, `instance`, and `tenant` scope) • `client` • `instance` • `tenant` **→ Tip** If you leave this parameter empty, the `active` scope is used.

Parameter	Required	Data Type	Parameter Type	Description
`tenantId`	No	String	*query*	The ID of the tenant you want to get the configuration for. → Tip If you leave this parameter empty, the `tenantId` sending the request is used.

Response

Response Fields

JSON Field	Description
`results`	List containing information of all configurations

The response is given as a status (200, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "results":{
      "documentRetentionTimeDays": "10",
      "manualDataActivation": "true",
      "dataFeedbackCollection": "true",
      "performPIICheck": "true"
   }
}
```

13.1.5.3 Get Configuration with Key

Retrieve all configurations already created for a given key for the requested scope.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/configuration/<key>`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	No	String	*query*	The ID of the client you want to get the configuration for. For example: c_00. This parameter is only used for client `scope` configurations.
`key`	Yes	String	*query*	One of the available Configuration Keys [page 161].
`scope`	No	String	*query*	Choose the scope of the configuration among the following values: • `active` (all configurations already created, including the ones on `client`, `instance`, and `tenant` scope) • `client` • `instance` • `tenant` → Tip If you leave this parameter empty, the `active` scope is used.
`tenantId`	No	String	*path*	The ID of the tenant you want to get the configuration for. → Tip If you leave this parameter empty, the `tenantId` sending the request is used.

Response

Response Fields

JSON Field	Description
`results`	List containing information of all configurations

The response is given as a status (200, 400, 401, 404, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "results":{
      "documentRetentionTimeDays": "10"
   }
}
```

```
{
   "results":{
      "manualDataActivation": "true"
   }
}
```

```
{
   "results":{
      "dataFeedbackCollection": "true"
   }
}
```

```
{
   "results":{
      "performPIICheck": "true"
   }
}
```

13.1.5.4 Delete Configuration

Delete configurations according to the given payload.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/configuration`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	No	String	*query*	The ID of the client you want to delete the configuration for. For example: c_00. This parameter is only used for client `scope` configurations.

Parameter	Required	Data Type	Parameter Type	Description
`payload`	Yes	JSON Object	*body*	List of configuration keys you want to delete. All configurations are deleted if payload is empty. For more information, see Configuration Keys [page 161].
`scope`	No	String	*query*	Choose the scope of the configuration among the following values: • `client` • `instance` • `tenant` → Tip If you leave this parameter empty, the `tenant` scope is used.
`tenantId`	No	String	*query*	The ID of the tenant you want to delete the configuration for. → Tip If you leave this parameter empty, the `tenantId` sending the request is used.

Payload Request Examples

```
{
   "value":[
      "documentRetentionTimeDays"
   ]
}
```

```
{
   "value":[
      "manualDataActivation"
   ]
}
```

```
{
   "value":[
      "dataFeedbackCollection"
   ]
}
```

```
{
   "value":[
      "performPIICheck"
   ]
}
```

```
{
```

```
    "value":[
       "documentRetentionTimeDays",
       "manualDataActivation",
       "dataFeedbackCollection",
       "performPIICheck"
    ]
}
```

Response

Response Fields

JSON Field	Description
`deleted`	Total number of configurations deleted with this request

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
  "deleted": 1
}
```

13.1.6 Document API

The core functionality of SAP Document AI is extracting structured information from documents automatically using machine learning. The Document API provides endpoints to upload documents for processing and also to get the results.

The Document API consists of the following endpoints:

- Upload Document [page 172]
- Post Catalog [page 179]
- List Documents [page 182]
- Get Result [page 183]
- Save Ground Truth [page 199]
- Confirm Document [page 202]
- Export Document Details [page 204]
- Get Document File [page 205]
- Get All Pages Text [page 206]
- Get Single Page Text [page 208]
- Get Request Payload (Deprecated) [page 210]
- Get Templates Associated with Document [page 211]

- Delete Document [page 212]

13.1.6.1 Upload Document

Upload a document file to the service to get the extraction results from header fields and line items in JSON format.

> → Tip
>
> - See Supported Document Types [page 118] and Supported File Types [page 121].
> - See also Supported Languages [page 125].

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`file`	Yes	File	*formData*	Document file you want to process. See Supported File Types [page 121].
`options`	Yes	JSON Object	*formData*	Options for processing the document. See the *Options Payload* table below.

Options Payload

Option	Required	Data Type	Description
`candidateTemplateIds`	No	String	IDs of templates from which the service automatically detects the appropriate `templateId`.
`clientId`	Yes	String	The ID of the client. For example: c_00
`customLabel`	No	String	The label you want to use for the document. If used you can query the corresponding document ID using the Post Catalog [page 179] endpoint.

Option	Required	Data Type	Description
`documentType`	No	String	The type of the document you uploaded. For example: `invoice` or `paymentAdvice`
`enrichment`	No	String	See Enrichment Parameter [page 178].
`headerFields`	No (Yes if payload doesn't include `schemaId` or `schemaName`)	String	Comma-separated list of header fields you want to extract. When you include `schemaId` in the payload, don't include a list of `headerFields`. See the list of fields that can be extracted from header fields in Extracted Header Fields (Base Edition and Premium Edition) [page 387].
`lineItemFields`	No (Yes if payload doesn't include `schemaId` or `schemaName`)	String	Comma-separated list of line item fields you want to extract. When you include `schemaId` in the payload, don't include a list of `lineItemFields`. See the list of fields that can be extracted from line items in Extracted Line Items (Base Edition and Premium Edition) [page 402].
`receivedDate`	No	String	The date when the document was received. For example: 2020-02-17

Option	Required	Data Type	Description
`templateId`	No	String	The ID of the template to be used for this document. To detect `templateId` automatically, use the value `"detect"` instead of the ID string. You can also optionally use the `candidateTemplateIds` option to restrict detection to specified templates. ⚠ Caution `schemaId` isn't always a required option. However, if your payload includes `templateId`, it must also include `schemaId` or `schemaName`. In such cases, don't include `headerFields` or `lineItemFields` in the payload to avoid conflicts.

Option	Required	Data Type	Description
`schemaId`	No (Yes if payload includes `templateId` or doesn't include a list of `headerFields` and / or a list of `lineItemFields`, or `schemaName`)	String	The ID of the schema to be used for this document. To use one of the preconfigured SAP schemas, consider the following schema IDs and document types: • `SAP_OCROnly_schema`: "schemaId":"09e6c9e4-d7b0-414f-bd85-cfee6fbb2add" for `custom` documents • `SAP_invoice_schema`: "schemaId":"cf8cc8a9-1eee-42d9-9a3e-507a61baac23" for `invoice` documents • `SAP_purchaseOrder_schema`: "schemaId":"fbab052e-6f9b-4a5f-b42f-29a8162eb1bf" for `purchaseOrder` documents • `SAP_paymentAdvice_schema`: "schemaId":"b7fdcfac-7853-42bb-89d2-ede2ba1ce803" for `paymentAdvice` documents
`schemaName`	No (Yes if payload includes `templateId` or doesn't include a list of `headerFields` and / or a list of `lineItemFields`, or `schemaId`)	String	The name of the schema to be used for this document. To use one of the preconfigured SAP schemas, consider the schema names and document types listed above in the description for `schemaId`.

Option	Required	Data Type	Description
`schemaVersion`	No (Yes if payload includes `schemaId` or `schemaName`, and you don't want to use the `schemaVersion` default version **1**)	String	The version number of the schema you want to use for this document. In the payload, `schemaId` or `schemaName`, and `schemaVersion` must be provided. If `schemaVersion` isn't provided, default version **1** is used.

Request Example: Options Payload for Autodetecting `templateID`

```
{
   "clientId":"c_00",
   "documentType":"invoice",
   "receivedDate":"2020-02-17",
   "schemaId":"10c10bd2-082b-47c8-851d-e58827828637",
   "templateId":"detect",
   "candidateTemplateIds":[
      "0ebcd5c4-7843-4e6e-867a-1e5c997e4e4c",
      "98ee6ff3-30bf-4e22-8579-0f0bde462c53",
      "d6f62ef3-551a-454d-bfa4-fc334af30bf2"
   ],
   "enrichment":{

   }
}
```

Request Example: Options Payload with Template

```
{
   "clientId":"c_00",
   "documentType":"invoice",
   "receivedDate":"2020-02-17",
   "schemaId":"10c10bd2-082b-47c8-851d-e58827828637",
   "templateId":"0ebcd5c4-7843-4e6e-867a-1e5c997e4e4c",
   "enrichment":{

   }
}
```

Request Example: Options Payload without Template

```
{
   "extraction":{
      "headerFields":[
         "documentNumber",
         "taxId",
         "purchaseOrderNumber",
         "shippingAmount",
         "netAmount",
         "senderAddress",
         "senderName",
         "grossAmount",
         "currencyCode",
         "receiverContact",
         "documentDate",
         "taxAmount",
```

```
            "taxRate",
            "receiverName",
            "receiverAddress"
         ],
         "lineItemFields":[
            "description",
            "netAmount",
            "quantity",
            "unitPrice",
            "materialNumber"
         ]
      },
   "clientId": "c_00",
   "documentType": "invoice",
   "receivedDate": "2020-02-17",
   "enrichment": {}
}
```

Request Example: Options Payload with the `schemaName` of `SAP_OCROnly_schema`

```
{
   "schemaName":"SAP_OCROnly_schema",
   "clientId":"c_10",
   "documentType":"custom"
}
```

Request Example: Options Payload with the `schemaId` of `SAP_OCROnly_schema`

```
{
   "schemaId":"09e6c9e4-d7b0-414f-bd85-cfee6fbb2add",
   "clientId":"c_10",
   "documentType":"custom"
}
```

Response

Response Fields

JSON Field	Description
`id`	Request ID
`processedTime`	Timestamp in RFC format
`status`	Status of the request. Possible values: “PENDING”, “DONE”, or “FAILED”

The response is given as a status (201, 400, 401, 415, 429, 500, or 503). See Common Status and Error Codes [page 277].

Response Example

201 “Created”

```
{
   "id":"484b6e1c-501c-4a07-85cb-84554656a175",
   "status":"PENDING",
   "processedTime":"2020-03-26T17:00:00.000000+00:00"
}
```

13.1.6.1.1 Enrichment Parameter

The enrichment parameter can be used to retrieve a matching of enrichment data to extracted header fields. See Create Enrichment Data [page 214]. The property should be a JSON object which can contain properties, as listed in the table below, depending on the enrichment data you want to match.

Example

```
"enrichment":{
   "sender":{
      "top":5,
      "type":"businessEntity",
      "subtype":"supplier"
   },
   "employee":{
      "type":"employee"
   },
   "product":{
      "type":"product"
   }
}
```

Property	Required	Description
`employee`	No	To match the *receiverContact* extracted header field to enrichment data, the `employee` property should be present in enrichment.
`product`	No	To match the product line items found on the document to enrichment data, the `product` property should be present in enrichment.
`receiver`	No	To match the extracted visual information from the document to the receiver enrichment data, the `receiver` property should be present in enrichment.
`sender`	No	To match the extracted visual information from the document to the sender enrichment data, the `sender` property should be present in enrichment.
`type`	Yes	The type of enrichment data entities used for matching. Available values: `businessEntity`, `employee`, and `product`. See Entities [page 217] for details about the available enrichment data entity types.
`subtype`	No	The subtype of enrichment data entities used for matching with type **businessEntity**. Available values: `supplier`, `customer`, and `companyCode`.

Property	Required	Description
`top`	No	The `top` property specifies the maximum number of matched enrichment data entities returned. **Note** If the top property is not defined, the default value is 1. The maximum possible value of the property is 50. If you enter a value higher than 50, you will get an error message with the maximum possible value.

> **Note**
>
> The following properties are optional, but, in case you want to match enrichment data, at least one of them is required:
>
> - `sender`
> - `receiver`
> - `employee`
> - `product`

Related Information

Extracted Header Fields (Base Edition and Premium Edition) [page 387]

13.1.6.2 Post Catalog

Post a search or filter request to get the current status of document processing jobs. Returns a list with all document processing jobs in a JSON file.

Optionally, the jobs can be filtered based on the client ID and a filter query. You have the following catalog options:

- Filtering using the `filter` and `likeFilter` parameters
- Ordering using the `order` parameter
- Pagination using the `limit` and `offset` parameters

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/catalog`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`options`	Yes	JSON Object	*formData*	Catalog options used when searching for documents. See the *Options Payload* table below.

Options Payload

Option	Required	Data Type	Description
`clientId`	No	String	The ID of the client used while submitting the document. For example: “c_00”.
`filter`	No	String	Filter query for retrieving documents. The filter query needs to be an expression. The expression should follow the format: "fieldName op value <AND/OR> fieldName op value". Supported fields: documentType, created, schemaId, status, customLabel, reviewStatus, or tenantId. Possible operators (op): depend on the field. For example: “status eq done”.
`likeFilter`	No	String	Filter query for retrieving documents that uses the LIKE operator. The expression should follow the format “fieldName like value”. Supported field: fileName. For example: “fileName like \"test receipt\"”.
`limit`	No	Integer	Number of documents to retrieve (maximum allowed value: 50). For example: 10.
`offset`	No	Integer	Index of the first document to be retrieved. For example: 20.
`order`	No	String	Order criteria for the retrieved documents. Possible values: created, fileName, documentType, or status. For example: “created asc” (sorts by creation date in ascending order).

Request Example: Options Payload

```
{
   "clientId":"c_00",
   "limit":10,
   "offset":2,
   "order":"created desc",
   "likeFilter":"fileName like \"test receipt\"",
   "filter":"status eq failed or documentType eq invoice"
}
```

Response

Response Fields

JSON Field	Description
`results`	List containing all document processing jobs
`totalDocumentCount`	Total number of document processing jobs returned by the request options
`usedOptions`	Options used in the filtering and/or ordering of document processing jobs

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "results":[
      [
         {
            "status":"DONE",
            "id":"c4f25368-d3e6-43f7-a0b4-55adf7f54e95",
            "fileName":"test receipt_invoice1.pdf",
            "documentType":"invoice",
            "created":"2020-03-26 17:00:00.000000+00:00",
            "clientId":"c_00",
            "finished":"2020-03-26 17:01:30.000000+00:00"
         },
         {
            "status":"PENDING",
            "id":"50199d80-c742-453b-830d-8e6ce14568e2",
            "fileName":"test receipt invoice2.pdf",
            "documentType":"invoice",
            "created":"2020-03-26 18:00:00.000000+00:00",
            "clientId":"c_00"
         },
         {
            "status":"FAILED",
            "id":"50199d80-c742-453b-830d-8e6ce14568e2",
            "fileName":"test receipt pa.pdf",
            "documentType":"paymentAdvice",
            "created":"2020-03-26 19:00:00.000000+00:00",
            "clientId":"c_00",
            "finished":"2020-03-26 19:01:30.000000+00:00"
         }
      ]
```

```
    ],
    "usedOptions":{
       "clientId":"c_00",
       "limit":10,
       "offset":2,
       "order":"created desc",
       "likeFilter":"fileName like \"test receipt\"",
       "filter":"status eq failed or documentType eq invoice"
    },
    "totalDocumentCount":5
 }
```

13.1.6.3 List Documents

Get a list of up to 200 documents in a JSON file.

> → Tip
>
> Use the endpoint Post Catalog [page 179] to page through lists of more than 200 documents in a JSON file.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	No	String	*query*	The ID of the client. For example: c_00

Response

Response Fields

JSON Field	Description
`clientId`	ID of the client this document was processed for
`created`	Time when the document was submitted for processing
`finished`	Time when the document status changed to “DONE”, or “FAILED”
`id`	Document ID

JSON Field	Description
`results`	List containing information of all processed documents
`status`	Processing status of the document. Possible values: “PENDING”, “DONE”, “CONFIRMED”, or “FAILED”

The response is given as a status (200, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "results":[
      [
         {
            "id":"c4f25368-d3e6-43f7-a0b4-55adf7f54e95",
            "clientId":"c1",
            "created":"2020-05-08T10:39:59.916359+00:00",
            "finished":"2020-05-08T10:40:50.467719+00:00",
            "status":"DONE"
         },
         {
            "id":"50199d80-c742-453b-830d-8e6ce14568e2",
            "clientId":"c1",
            "created":"2020-05-12T08:30:04.718730+00:00",
            "status":"PENDING"
         },
         {
            "id":"47299d80-c742-453b-830d-8e6ce14568e2",
            "clientId":"c1",
            "created":"2020-05-12T08:23:06.938779+00:00",
            "finished":"2020-05-12T08:23:21.765680+00:00",
            "status":"FAILED"
         }
      ]
   ]
}
```

13.1.6.4 Get Result

SAP Document AI takes document files as input and returns a JSON file that contains the information that has been extracted from the header fields and line items of the specified document. See Supported Document Types [page 118] and Supported File Types [page 121].

> → Remember
>
> SAP Document AI typically provides extraction results for an average document in about 30 seconds.
>
> However, processing can take longer if the task involved is more complex – for example, if the documents processed are large.
>
> Before you use the service for important or time-sensitive tasks, we strongly recommend running mass tests to assess the performance of the service and make sure it meets your requirements.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`extractedValues`	No	Boolean	*query*	Set to *true* to get the extracted values. Set to false to get the ground truth values, if available. If ground truth values are not available, extracted values are returned in any case. The default value for this parameter is *false*.
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff.
`returnNullValues`	No	Boolean	*query*	Set to *true* to get all requested fields in the document results, even if they could not be extracted. For fields that could not be extracted, for example, because they are not available in the document or because the service was not able to identify the field, the value is **null**. If no `value` can be extracted, both `value` and `rawValue` are **null**. If a `value` is extracted, it can occur that the corresponding `rawValue` is displayed as an empty string. Additionally, the extraction confidence score is **null** and the x-coordinate, y-coordinate, width, and height are set to **0**. Per default, this parameter is set to *false* and fields not extracted are not returned.

Response

Response Fields

JSON Field	Description
`attributes`	Dictionary containing the `method` of the matched enrichment data record. Or dictionary containing the `symbology` of the extracted barcode header field.
`bocrVersion`	The version number of the Optical Character Recognition (OCR) service.
`category`	Category of the field. For example: document or receiver.
`clientId`	Identify the client that submitted the extraction request using the Upload Document [page 172] endpoint.
`confidence`	Extraction confidence score for a field or enrichment data. The possible values are between 0.0 and 1.0.
`coordinates`	Bounding box coordinates for this field (not present if value is **null**).
`country`	Country/Region code of the document submitted.
`created`	Time when the document was submitted for processing.
`dataForRetrainingStatus`	Retraining status. Possible values: “notUsedForTraining”, “rejectedDueToPII”, “inProcess”, “acceptedForTraining”, or “usedForTraining”.
`documentType`	Type of the document submitted.
`doxVersion`	The version number of SAP Document AI.
`employee`	Employee enrichment data. For example: employee name.
`enrichment`	Dictionary containing enrichment data.
`extraction`	Dictionary containing all the extracted header fields and line items.
`fileName`	Full name of the document submitted.
`fileType`	File format of the document submitted. For example: PDF, PNG, JPEG.
`finished`	Time when the document status changed to “DONE”, or “FAILED”.
`group`	Group this field belongs to.
`headerFields`	Dictionary containing all extracted header fields.
`height`	Page height of the document
`id`	Document or enrichment data ID.
`label`	User-friendly names for header fields and line items. See Add Fields to Schema Version [page 249].
`languageCodes`	Array containing strings of language codes. For example: "en" for English and "de" for German.
`lineItems`	Dictionary containing all extracted line items.
`method`	Match strategy for each matched enrichment data record. Possible values: “exactTaxId”, “exactBankAccount”, “exactMaterialNumber”, or “similarity”.

JSON Field	Description
`model`	The model used to extract information from the specified field. Possible values: “ai” or “template”. “ai” denotes the machine learning models of SAP Document AI.
`name`	Name of the field.
`page`	Page number of the document where the field was found (not present if value is **null**).
`pageCount`	Total number of pages a document contains. For example: 2.
`rawValue`	Value extracted for this field by SAP Document AI as displayed in the document.
`schemaId`	The ID of the schema used when you uploaded the document.
`schemaName`	The name of the schema used when you uploaded the document.
`schemaVersion`	The version number of the schema used when you uploaded the document.
`sender`	Sender enrichment data. For example: sender name and sender address.
`status`	Processing status of the document. Possible values: “PENDING”, “DONE”, or “FAILED”.
`symbology`	Type of the extracted barcode. For example: QR.
`templateId`	The ID of the template associated with the document
`type`	Data type of the extracted hearder fields and line items.
`value`	Value extracted for this field by SAP Document AI in standardized format.
`values`	Dictionary containing all matched enrichment data records.
`variant`	See Data Variants [page 219].
`width`	Page width of the document

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success” with `SAP_OCROnly_schema` ("schemaId":"09e6c9e4-d7b0-414f-bd85-cfee6fbb2add")


```
{
   "status":"DONE",
   "id":"2acc2040-f956-4178-9cf4-d02f020626a6",
   "fileName":"sample-power_of_attorney-3.pdf",
   "documentType":"custom",
   "created":"2022-10-04T07:46:03.412498+00:00",
   "finished":"2022-10-04T07:46:56.834313+00:00",
   "clientId":"c_00",
   "languageCodes":[
      "en"
   ],
   "pageCount":1,
   "schemaId":"09e6c9e4-d7b0-414f-bd85-cfee6fbb2add",
   "schemaName":"SAP_OCROnly_schema",
   "country":null,
   "extraction":{
      "headerFields":[

      ],
      "lineItems":[

      ]
```

```
   },
   "bocrVersion":"2.7.1",
   "doxVersion":"local",
   "fileType":"pdf",
   "dataForRetrainingStatus":"notUsedForTraining"
}
```


Response Example

200 “Success” without `schemaId`


```
{
   "status":"DONE",
   "id":"a712375f-0b6d-4550-83fb-2271a2301aad",
   "fileName":"demo_taxid.pdf",
   "documentType":"invoice",
   "created":"2022-04-27T09:46:20.090953+00:00",
   "finished":"2022-04-27T09:46:45.151654+00:00",
   "clientId":"c_00",
   "languageCodes":[
      "xx"
   ],
   "pageCount":1,
   "country":"MX",
   "extraction":{
      "headerFields":[
         {
            "name":"receiverContact",
            "category":"receiver",
            "value":"FELISHIA ICE SOUTH",
            "rawValue":"FELISHIA ICE SOUTH",
            "type":"string",
            "page":1,
            "confidence":0.9431540966033936,
            "coordinates":{
               "x":0.0792156862745098,
               "y":0.19575757575757577,
               "w":0.13568627450980392,
               "h":0.009090909090909066
            },
            "model":"ai",
            "label":"receiverContact"
         },
         {
            "name":"receiverName",
            "category":"receiver",
            "value":"JOERNS ICE HEALTH (EST)",
            "rawValue":"JOERNS ICE HEALTH (EST)",
            "type":"string",
            "page":1,
            "confidence":0.8918973803520203,
            "coordinates":{
               "x":0.05215686274509804,
               "y":0.45696969696969697,
               "w":0.18823529411764706,
               "h":0.011818181818181839
            },
            "model":"ai",
            "label":"receiverName"
         },
         {
            "name":"shippingAmount",
            "category":"amounts",
            "value":0.0,
            "rawValue":"0.00",
            "type":"number",
            "page":1,
```

```
            "confidence":0.9837643504142761,
            "coordinates":{
               "x":0.907843137254902,
               "y":0.7975757575757576,
               "w":0.03215686274509799,
               "h":0.009393939393939399
            },
            "model":"ai",
            "label":"shippingAmount"
         },
         {
            "name":"taxAmount",
            "category":"amounts",
            "value":7.07,
            "rawValue":"7.07",
            "type":"number",
            "page":1,
            "confidence":0.9896121621131897,
            "coordinates":{
               "x":0.9078431129455566,
               "y":0.8166666626930237,
               "w":0.0313725471496582,
               "h":0.008787870407104492
            },
            "model":"ai",
            "group":1,
            "label":"taxAmount"
         },
         {
            "name":"senderAddress",
            "category":"sender",
            "value":"12345 NETWORK PLACE CHICAGO, IL 60000-1234",
            "rawValue":"12345 NETWORK PLACE CHICAGO, IL 60000-1234",
            "type":"string",
            "page":1,
            "confidence":0.6106114352383017,
            "coordinates":{
               "x":0.3184313725490196,
               "y":0.1087878787878788,
               "w":0.15725490196078434,
               "h":0.022727272727272707
            },
            "model":"ai",
            "label":"senderAddress"
         },
         {
            "name":"receiverAddress",
            "category":"receiver",
            "value":"12345 DEARBORN STREET CHATSWORTH, CA 12345 UNITED STATES",
            "rawValue":"12345 DEARBORN STREET CHATSWORTH, CA 12345 UNITED
STATES",
            "type":"string",
            "page":1,
            "confidence":0.5784785588744978,
            "coordinates":{
               "x":0.07882352941176471,
               "y":0.21363636363636362,
               "w":0.21607843137254903,
               "h":0.04545454545454547
            },
            "model":"ai",
            "label":"receiverAddress"
         },
         {
            "name":"senderName",
            "category":"sender",
            "value":"GLOBAL ICE COMPANY INC.",
            "rawValue":"GLOBAL ICE COMPANY INC.",
```

```
            "type":"string",
            "page":1,
            "confidence":0.602843187909389,
            "coordinates":{
               "x":0.343921568627451,
               "y":0.2875757575757576,
               "w":0.2984313725490196,
               "h":0.009393939393939399
            },
            "model":"ai",
            "label":"senderName"
         },
         {
            "name":"taxId",
            "category":"amounts",
            "value":"11-3584699",
            "rawValue":"11-3584699",
            "type":"string",
            "page":1,
            "confidence":0.950018584728241,
            "coordinates":{
               "x":0.5015686274509804,
               "y":0.3409090909090909,
               "w":0.08784313725490189,
               "h":0.009393939393939399
            },
            "model":"ai",
            "group":1,
            "label":"taxId"
         },
         {
            "name":"currencyCode",
            "category":"amounts",
            "value":"USD",
            "rawValue":"",
            "type":"string",
            "page":1,
            "confidence":0.9978113174438477,
            "coordinates":{
               "x":0.0,
               "y":0.0,
               "w":0.0,
               "h":0.0
            },
            "model":"ai",
            "label":"currencyCode"
         },
         {
            "name":"documentNumber",
            "category":"document",
            "value":"112857784",
            "rawValue":"112857784",
            "type":"string",
            "page":1,
            "confidence":0.9963446855545044,
            "coordinates":{
               "x":0.5862745098039216,
               "y":0.08757575757575757,
               "w":0.0811764705882353,
               "h":0.008787878787878789
            },
            "model":"ai",
            "label":"documentNumber"
         },
         {
            "name":"documentDate",
            "category":"document",
            "value":"2018-06-29",
```

```
            "rawValue":"06-29-2018",
            "type":"date",
            "page":1,
            "confidence":0.9906787872314453,
            "coordinates":{
               "x":0.7003921568627451,
               "y":0.08757575757575757,
               "w":0.08470588235294119,
               "h":0.008484848484848484
            },
            "model":"ai",
            "label":"documentDate"
         },
         {
            "name":"grossAmount",
            "category":"amounts",
            "value":108.13,
            "rawValue":"108.13",
            "type":"number",
            "page":1,
            "confidence":0.9433890581130981,
            "coordinates":{
               "x":0.8913725490196078,
               "y":0.8357575757575758,
               "w":0.05058823529411771,
               "h":0.009696969696969648
            },
            "model":"ai",
            "label":"grossAmount"
         },
         {
            "name":"netAmount",
            "category":"amounts",
            "value":101.06,
            "rawValue":"101.06",
            "type":"number",
            "page":1,
            "confidence":0.9396025538444519,
            "coordinates":{
               "x":0.8901960784313725,
               "y":0.7778787878787878,
               "w":0.04980392156862745,
               "h":0.010000000000000009
            },
            "model":"ai",
            "label":"netAmount"
         },
         {
            "name":"purchaseOrderNumber",
            "category":"details",
            "value":"14035740",
            "rawValue":"14035740",
            "type":"string",
            "page":1,
            "confidence":0.7348883748054504,
            "coordinates":{
               "x":0.5905882352941176,
               "y":0.12818181818181817,
               "w":0.0725490196078431,
               "h":0.009090909090909094
            },
            "model":"ai",
            "label":"purchaseOrderNumber"
         }
      ],
      "lineItems":[
         [
            {
```

```
                "name":"description",
                "category":"details",
                "value":"PIP Ambi-Dex&#174; 63-331PF Industrial Grade Nitrile
Gloves, Powder-Free, Tex- tured, Blue, L, 100/Box - Tracking#:
1ZX647100300080084",
                "rawValue":"PIP Ambi-Dex&#174; 63-331PF Industrial Grade
Nitrile Gloves, Powder-Free, Tex- tured, Blue, L, 100/Box - Tracking#:
1ZX647100300080084",
                "type":"string",
                "page":1,
                "confidence":0.8756256103515625,
                "coordinates":{
                   "x":0.2988235294117647,
                   "y":0.6545454545454545,
                   "w":0.30980392156862746,
                   "h":0.05363636363636359
                },
                "model":"ai",
                "label":"description"
            },
            {
                "name":"materialNumber",
                "category":"details",
                "value":"B676817",
                "rawValue":"B676817",
                "type":"string",
                "page":1,
                "confidence":0.982785165309906,
                "coordinates":{
                   "x":0.18313725490196078,
                   "y":0.6548484848484849,
                   "w":0.06627450980392158,
                   "h":0.009393939393939288
                },
                "model":"ai",
                "label":"materialNumber"
            },
            {
                "name":"netAmount",
                "category":"amounts",
                "value":88.0,
                "rawValue":"88.00",
                "type":"number",
                "page":1,
                "confidence":0.8774160146713257,
                "coordinates":{
                   "x":0.779607843137255,
                   "y":0.6551515151515152,
                   "w":0.04117647058823526,
                   "h":0.009393939393939399
                },
                "model":"ai",
                "label":"netAmount"
            },
            {
                "name":"quantity",
                "category":"details",
                "value":10.0,
                "rawValue":"10",
                "type":"number",
                "page":1,
                "confidence":0.9688798189163208,
                "coordinates":{
                   "x":0.08627450980392157,
                   "y":0.6551515151515152,
                   "w":0.016470588235294126,
                   "h":0.009090909090909038
                },
```

```
                "model":"ai",
                "label":"quantity"
            },
            {
                "name":"unitPrice",
                "category":"details",
                "value":8.8,
                "rawValue":"8.80",
                "type":"number",
                "page":1,
                "confidence":0.9341872334480286,
                "coordinates":{
                    "x":0.6862745098039216,
                    "y":0.6551515151515152,
                    "w":0.03176470588235292,
                    "h":0.009393939393939399
                },
                "model":"ai",
                "label":"unitPrice"
            }
        ],
        [
            {
                "name":"description",
                "category":"details",
                "value":"Ergodyne&#174; ProFlex&#174; 812 Standard Utility Glove,
Black, Large, 17174 - Tracking#: 1ZX647100300081467",
                "rawValue":"Ergodyne&#174; ProFlex&#174; 812 Standard Utility
Glove, Black, Large, 17174 - Tracking#: 1ZX647100300081467",
                "type":"string",
                "page":1,
                "confidence":0.7070900797843933,
                "coordinates":{
                    "x":0.296078431372549,
                    "y":0.7233333333333334,
                    "w":0.323921568627451,
                    "h":0.040303030303030285
                },
                "model":"ai",
                "label":"description"
            },
            {
                "name":"materialNumber",
                "category":"details",
                "value":"B2139393",
                "rawValue":"B2139393",
                "type":"string",
                "page":1,
                "confidence":0.9847809076309204,
                "coordinates":{
                    "x":0.17882352941176471,
                    "y":0.7233333333333334,
                    "w":0.07529411764705879,
                    "h":0.009696969696969648
                },
                "model":"ai",
                "label":"materialNumber"
            },
            {
                "name":"netAmount",
                "category":"amounts",
                "value":13.06,
                "rawValue":"13.06",
                "type":"number",
                "page":1,
                "confidence":0.8856437802314758,
                "coordinates":{
                    "x":0.7803921568627451,
```

```
                  "y":0.7233333333333334,
                  "w":0.040784313725490184,
                  "h":0.010303030303030258
               },
               "model":"ai",
               "label":"netAmount"
            },
            {
               "name":"quantity",
               "category":"details",
               "value":1.0,
               "rawValue":"1",
               "type":"number",
               "page":1,
               "confidence":0.9791963696479797,
               "coordinates":{
                  "x":0.08901960784313726,
                  "y":0.723939393939394,
                  "w":0.010196078431372546,
                  "h":0.008484848484848428
               },
               "model":"ai",
               "label":"quantity"
            },
            {
               "name":"unitPrice",
               "category":"details",
               "value":13.06,
               "rawValue":"13.06",
               "type":"number",
               "page":1,
               "confidence":0.8986196517944336,
               "coordinates":{
                  "x":0.6772549019607843,
                  "y":0.7233333333333334,
                  "w":0.04117647058823526,
                  "h":0.010303030303030258
               },
               "model":"ai",
               "label":"unitPrice"
            }
         ]
      ]
   },
   "bocrVersion":null,
   "doxVersion":"local",
   "fileType":"pdf",
   "enrichment":{
      "sender":[
         {
            "id":"demo-match",
            "confidence":0.7157895,
            "values":{
               "name":"GLOBAL ICE COMPANY INC.",
               "bankAccount":"de23672700030136040305",
               "email":"example@sap.com",
               "address1":"12345 NETWORK PLACE CHICAGO, IL 60673-1298 2",
               "countryCode":"US",
               "state":"Illinois",
               "city":"Chicago",
               "postalCode":"60007"
            },
            "attributes":{
               "method":"similarity"
            }
         }
      ],
      "employee":[
```

```
      ],
      "product":[

      ]
   },
   "dataForRetrainingStatus":"notUsedForTraining"
}
```


If the document is processed successfully, SAP Document AI provides the extractions for the requested fields. The requested fields are those which were requested in Upload Document [page 172]. When no value can be detected for fields in header or line items, they do not appear in the response JSON file.

Response Example

200 “Success” with barcode header field extraction


```
{
   "status":"DONE",
   "id":"2853a32c-9cf9-415f-9585-82c63c2fa699",
   "fileName":"qr_three_codes.pdf",
   "documentType":"invoice",
   "created":"2023-01-27T09:57:26.160906+00:00",
   "finished":"2023-01-27T09:58:20.383827+00:00",
   "clientId":"c_00",
   "languageCodes":[
      "de"
   ],
   "pageCount":1,
   "width":2480,
   "height":3507,
   "country":"MX",
   "bocrVersion":"1.7.0",
   "doxVersion":"local",
   "fileType":"pdf",
   "enrichment":{
      "sender":[

      ],
      "employee":[

      ],
      "product":[

      ]
   },
   "dataForRetrainingStatus":"notUsedForTraining",
   "extraction":{
      "headerFields":[
         {
            "name":"barcode",
            "category":"details",
            "value":"https://verificacfdi.facturaelectronica.sat.gob.mx/
default.aspx?
id=706220d0-3b0b-4801-82b8-5f771f8af9c1&re=CSA080218TQ8&rr=NME140730ME0&tt=000009
9576.720000&fe=ZI/I4A==",
            "rawValue":"https://verificacfdi.facturaelectronica.sat.gob.mx/
default.aspx?
id=706220d0-3b0b-4801-82b8-5f771f8af9c1&re=CSA080218TQ8&rr=NME140730ME0&tt=000009
9576.720000&fe=ZI/I4A==",
            "type":"string",
            "page":1,
            "confidence":1.0,
            "coordinates":{
               "x":0.14717741935483872,
               "y":0.262617621899059,
```

```
                "w":0.07782258064516129,
                "h":0.05503279155973767
            },
            "model":"ai",
            "group":1,
            "attributes":{
                "symbology":"QR"
            },
            "label":"barcode"
        },
        {
            "name":"barcode",
            "category":"details",
            "value":"https://verificacfdi.facturaelectronica.sat.gob.mx/
default.aspx?
id=706220d0-3b0b-4801-82b8-5f771f8af9c1&re=CSA080218TQ8&rr=NME140730ME0&tt=000009
9576.720000&fe=ZI/I4A==",
            "rawValue":"https://verificacfdi.facturaelectronica.sat.gob.mx/
default.aspx?
id=706220d0-3b0b-4801-82b8-5f771f8af9c1&re=CSA080218TQ8&rr=NME140730ME0&tt=000009
9576.720000&fe=ZI/I4A==",
            "type":"string",
            "page":1,
            "confidence":1.0,
            "coordinates":{
                "x":0.3294354838709677,
                "y":0.6854861705161106,
                "w":0.21129032258064517,
                "h":0.1497005988023952
            },
            "model":"ai",
            "group":2,
            "attributes":{
                "symbology":"QR"
            },
            "label":"barcode"
        },
        {
            "name":"barcode",
            "category":"details",
            "value":"https://verificacfdi.facturaelectronica.sat.gob.mx/
default.aspx?
id=706220d0-3b0b-4801-82b8-5f771f8af9c1&re=CSA080218TQ8&rr=NME140730ME0&tt=000009
9576.720000&fe=ZI/I4A==",
            "rawValue":"https://verificacfdi.facturaelectronica.sat.gob.mx/
default.aspx?
id=706220d0-3b0b-4801-82b8-5f771f8af9c1&re=CSA080218TQ8&rr=NME140730ME0&tt=000009
9576.720000&fe=ZI/I4A==",
            "type":"string",
            "page":1,
            "confidence":1.0,
            "coordinates":{
                "x":0.7411290322580645,
                "y":0.47619047619047616,
                "w":0.20725806451612902,
                "h":0.14656401482748788
            },
            "model":"ai",
            "group":3,
            "attributes":{
                "symbology":"QR"
            },
            "label":"barcode"
        },
        {
            "name":"currencyCode",
            "category":"amounts",
            "value":"CHF",
```

```
            "rawValue":"",
            "type":"string",
            "page":1,
            "confidence":0.992719292640686,
            "coordinates":{
               "x":0.0,
               "y":0.0,
               "w":0.0,
               "h":0.0
            },
            "model":"ai",
            "label":"currencyCode"
         },
         {
            "name":"documentDate",
            "category":"document",
            "value":"2019-11-18",
            "rawValue":"19-11-18",
            "type":"date",
            "page":1,
            "confidence":0.9978566765785217,
            "coordinates":{
               "x":0.294758064516129,
               "y":0.16737952666096378,
               "w":0.08548387096774196,
               "h":0.00883946392928428
            },
            "model":"ai",
            "label":"documentDate"
         },
         {
            "name":"documentNumber",
            "category":"document",
            "value":"10101010",
            "rawValue":"10101010",
            "type":"string",
            "page":1,
            "confidence":0.947092592716217,
            "coordinates":{
               "x":0.3100806451612903,
               "y":0.18106643855146848,
               "w":0.07379032258064516,
               "h":0.00855431993156544
            },
            "model":"ai",
            "label":"documentNumber"
         },
         {
            "name":"grossAmount",
            "category":"amounts",
            "value":99576.72,
            "rawValue":"0000099576.720000",
            "type":"number",
            "page":1,
            "confidence":1.0,
            "coordinates":{
               "x":0.14717741935483872,
               "y":0.262617621899059,
               "w":0.07782258064516129,
               "h":0.05503279155973767
            },
            "model":"ai",
            "label":"grossAmount"
         },
         {
            "name":"receiverAddress",
            "category":"receiver",
```

```
            "value":"Max M\u00fcller, Teststral\u00dfe 99, 19012 Testort Rene
Teststral\u00dfe 100 19012 Testort",
            "rawValue":"Max M\u00fcller, Teststral\u00dfe 99, 19012 Testort Rene
Teststral\u00dfe 100 19012 Testort",
            "type":"string",
            "page":1,
            "confidence":0.7233287231620119,
            "coordinates":{
               "x":0.567741935483871,
               "y":0.20786997433704021,
               "w":0.2270161290322581,
               "h":0.053607071571143444
            },
            "model":"ai",
            "label":"receiverAddress"
         },
         {
            "name":"receiverContact",
            "category":"receiver",
            "value":"Rene M\u00fcller",
            "rawValue":"Rene M\u00fcller",
            "type":"string",
            "page":1,
            "confidence":0.5884397625923157,
            "coordinates":{
               "x":0.5689516129032258,
               "y":0.22783005417735958,
               "w":0.08185483870967736,
               "h":0.00855431993156544
            },
            "model":"ai",
            "label":"receiverContact"
         },
         {
            "name":"receiverName",
            "category":"receiver",
            "value":"Max M\u00fcller,",
            "rawValue":"Max M\u00fcller,",
            "type":"string",
            "page":1,
            "confidence":0.6223656535148621,
            "coordinates":{
               "x":0.5677419304847717,
               "y":0.2078699767589569,
               "w":0.06330645084381104,
               "h":0.008269175887107849
            },
            "model":"ai",
            "label":"receiverName"
         },
         {
            "name":"senderAddress",
            "category":"sender",
            "value":"Teststra\u00df\u00dfe 99 19012 Testort",
            "rawValue":"Teststra\u00df\u00dfe 99 19012 Testort",
            "type":"string",
            "page":1,
            "confidence":0.9818366663199499,
            "coordinates":{
               "x":0.15201612903225806,
               "y":0.08639863130881095,
               "w":0.10443548387096777,
               "h":0.02281151981750784
            },
            "model":"ai",
            "label":"senderAddress"
         },
         {
```

```
            "name":"senderBankAccount",
            "category":"sender",
            "value":"CHS1 5112 3453 5444 44",
            "rawValue":"CHS1 5112 3453 5444 44",
            "type":"string",
            "page":1,
            "confidence":0.6283774228323075,
            "coordinates":{
               "x":0.06411290322580646,
               "y":0.682919874536641,
               "w":0.1411290322580645,
               "h":0.007128599942971103
            },
            "model":"ai",
            "group":1,
            "label":"senderBankAccount"
         },
         {
            "name":"senderName",
            "category":"sender",
            "value":"Max M\u00fcller",
            "rawValue":"Max M\u00fcller",
            "type":"string",
            "page":1,
            "confidence":0.8665437601845373,
            "coordinates":{
               "x":0.15201612903225806,
               "y":0.0718562874251497,
               "w":0.08225806451612905,
               "h":0.009409751924721987
            },
            "model":"ai",
            "label":"senderName"
         },
         {
            "name":"taxId",
            "category":"amounts",
            "value":"CSA080218TQ8",
            "rawValue":"CSA080218TQ8",
            "type":"string",
            "page":1,
            "confidence":1.0,
            "coordinates":{
               "x":0.14717741935483872,
               "y":0.262617621899059,
               "w":0.07782258064516129,
               "h":0.05503279155973767
            },
            "model":"ai",
            "group":1,
            "label":"taxId"
         }
      ],
      "lineItems":[

      ]
   }
}
```


Extracted Header Fields and Extracted Line Items Categories

Fields can belong to a category. This is indicated by the category property of a field in the response JSON. An example is a tax with multiple fields. Taxes are returned in the form of a category with the fields taxName, taxRate, and taxAmount. See all field categories in Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Extracted Line Items (Base Edition and Premium Edition) [page 402].

Response Example

400 “Bad Request”

```
{
  "code": "E93",
  "message": "Required parameters not provided.",
  "details": "string"
}
```

Response Example

401 “Unauthorized”

```
{
  "message": "No Authorization given in the request header"
}
```

Response Example

500 “Internal server error”

```
{
   "message": "Internal server error"
}
```

13.1.6.5 Save Ground Truth

Save the ground truth (correct values for document fields) for the specified document job ID.

This endpoint takes the job ID of a document submitted previously and returns the corresponding processing results, or an error, if the given ID isn't found.

Add to the payload `extraction` (list of all the extracted header fields and line items), and `enrichment` (list of the matched enrichment data).

For the fields, the following attributes are part of the ground truth:

- `name` (required)
- `value` (required)
- `rawValue` (optional)
- `page` (optional)
- `coordinates` (optional)

For enrichment data, the following attribute is part of the ground truth: `id` (required).

> ⚠ Caution
>
> It's technically possible to add other attributes to the ground truth payload (for example, `confidence`), but they have no impact on the stored values and are ignored.

> ⓘ Note
>
> After saving the ground truth of a document, the extraction confidence score of all header fields and line items is automatically set to 1.0 (100%). The service assumes that all field values are correct or have been

manually corrected. Only save the ground truth of documents that have been reviewed and don't contain incorrect extraction results.

> ⚠ Caution
>
> It isn't possible to save ground truth if you used the `SAP_OCROnly_schema` for the document extraction. See second "Bad Request" error message in the *Response* section below.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff
`payload`	Yes	JSON Object	*body*	Fields of the document (header fields and line items) and enrichment data **Note** The structure of the `payload` is as the response returned by the Get Result [page 183] endpoint. However, while the top-N enrichment matches are returned in Get Result [page 183], for the *Save Ground Truth* endpoint, the enrichment list **must not** contain more than one (ground truth) match for each `sender` and `employee`.

Request Example

```
{
   "extraction":{
      "headerFields":[
         {
            "name":"documentDate",
            "value":"2019-02-18"
         },
         {
            "name":"grossAmount",
            "value":200
```

```
            }
        ],
        "lineItems":[
            [
                {
                    "name":"description",
                    "value":"Professional Services"
                },
                {
                    "name":"netAmount",
                    "value":200
                },
                {
                    "name":"unitPrice",
                    "value":200
                },
                {
                    "name":"materialNumber",
                    "value":"007"
                }
            ]
        ]
    },
    "enrichment":{
        "sender":[
            {
                "id":"BE0001"
            }
        ],
        "employee":[
            {
                "id":"E0001"
            }
        ]
    }
}
```

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request
`status`	Status of the ground truth upload. Possible values: “PENDING”, “DONE”, or “FAILED”

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Created”

```
{
    "status": "DONE",
    "message": "Ground truth / corrected values uploaded successfully"
}
```

Response Example

400 “Bad Request”

```
{
  "code": "E93",
  "message": "Required parameters not provided.",
  "details": "string"
}
```

Response Example

400 “Bad Request” (with `SAP_OCROnly_schema`)

```
{
   "error":{
      "code":"ES068",
      "message":"Posting ground truth is not allowed for SAP_OCROnly_schema.",
      "details":[

      ]
   }
}
```

Response Example

401 “Unauthorized”

```
{
  "message": "No Authorization given in the request header"
}
```

Response Example

500 “Internal server error”

```
{
   "message":"Internal server error"
}
```

13.1.6.6 Confirm Document

Change the status of a document from “DONE” to “CONFIRMED”. After that, the document status is permanent and cannot be changed anymore. The document extraction values cannot be changed anymore either. Also use this endpoint to enable the data feedback collection feature to allow documents to be used for retraining.

> **Note**
>
> SAP reserves the right to use confirmed documents in the reporting of accuracy values and for analytics.
>
> If you set the parameter `dataForRetraining` to *true*, you allow the use of confirmed documents to retrain the machine learning models and improve the service.

> Submitting retraining data and documents to SAP does not guarantee that SAP will actually use the data for improving the service, or that SAP guarantees that potential errors will be fixed in future improved versions of the service.
>
> The extraction confidence score of all header fields and line items is automatically set to 1.0 (100%) for confirmed documents. The service assumes that all field values are correct or have been manually corrected. Only confirm documents that have been reviewed and don't contain incorrect extraction results.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>/confirm`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`dataForRetraining`	No	Boolean	*query*	Set to *true* to allow confirmed documents to be used to retrain the solution's machine learning models. Set to *false* if you do not want to use the data feedback collection feature. **Note** The data feedback collection feature is only available on production environments for enterprise accounts. This feature is not available for trial account users. SAP reserves the right to reject documents submitted by the customers for retraining. To use the data feedback collection feature, Create Configuration [page 159] setting the `dataFeedbackCollection` configuration key to *true*.
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff.

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request
`status`	Document confirmation status. Possible value: “CONFIRMED”

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "status": "CONFIRMED",
   "message": "Document confirmed successfully."
}
```

400 “ Bad Request” (`dataFeedbackCollection` configuration key is not set to *true*)

```
{
   "message": "Data feedback collection is only possible with the correct tenant
configuration. Please set dataFeedbackCollection to true."
}
```

13.1.6.7 Export Document Details

Export information that is associated with a document, such as ground truth and related instant learning data. You can also forward the exported data to your support contact for troubleshooting.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>/export`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. For example: c_00

Parameter	Required	Data Type	Parameter Type	Description
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Response

The response is given as a status (200, 400, 401, or 500) and ZIP folder with files for troubleshooting. See Common Status and Error Codes [page 277].

13.1.6.8 Get Document File

Get the original document file you uploaded to the service.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>/file`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff.

Response

The response is given as a status (200, 400, 401, 404, 410, or 500) and document file in the format previously uploaded using the Upload Document [page 172] endpoint. See Common Status and Error Codes [page 277].

13.1.6.9 Get All Pages Text

Get the text of all pages of a document.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>/pages/text`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Response

Response Fields

JSON Field	Description
`results`	List containing the text and the corresponding bounding boxes (specified by the returned coordinates) of all pages of a document

The response is given as a status (200, 400, 401, 404, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "results":{
      "1":[
         {
            "word_boxes":[
               {
                  "bbox":[
                     [
                        890,
                        141
                     ],
                     [
                        1028,
                        174
                     ]
```

```
                    ],
                    "content":"Rocket"
                },
                {
                    "bbox":[
                        [
                            1049,
                            141
                        ],
                        [
                            1275,
                            182
                        ]
                    ],
                    "content":"Enterprises"
                },
                {
                    "bbox":[
                        [
                            1297,
                            143
                        ],
                        [
                            1365,
                            183
                        ]
                    ],
                    "content":"Pty"
                },
                {
                    "bbox":[
                        [
                            1383,
                            140
                        ],
                        [
                            1443,
                            174
                        ]
                    ],
                    "content":"Ltd"
                }
            ],
            "bbox":[
                [
                    890,
                    140
                ],
                [
                    1443,
                    184
                ]
            ]
        }
    ]
  }
}
```

13.1.6.10 Get Single Page Text

Get the text of a single page of a document.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>/pages/<no>/text`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff
`no`	Yes	String	*path*	The page number of the document

Response

Response Fields

JSON Field	Description
`value`	List containing the text and the corresponding bounding boxes (specified by the returned coordinates) of a single page of a document

The response is given as a status (200, 400, 401, 404, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "value":[
      {
         "word_boxes":[
            {
               "bbox":[
                  [
                     890,
                     141
                  ],
                  [
                     1028,
                     174
```

```
                ]
            ],
            "content":"Rocket"
        },
        {
            "bbox":[
                [
                    1049,
                    141
                ],
                [
                    1275,
                    182
                ]
            ],
            "content":"Enterprises"
        },
        {
            "bbox":[
                [
                    1297,
                    143
                ],
                [
                    1365,
                    183
                ]
            ],
            "content":"Pty"
        },
        {
            "bbox":[
                [
                    1383,
                    140
                ],
                [
                    1443,
                    174
                ]
            ],
            "content":"Ltd"
        }
    ],
    "bbox":[
        [
            890,
            140
        ],
        [
            1443,
            184
        ]
    ]
  }
 ]
}
```

13.1.6.11 Get Request Payload (Deprecated)

Get the request payload of a previously submitted document. It takes the job ID of a document and returns the request payload specified during initial upload of the document.

> ⚠ Caution
>
> This endpoint is deprecated and is scheduled for decommissioning in September 2025. Following that date, the endpoint will no longer be available.
>
> Please use the Schema API [page 231] instead and simply add the `schemaId` or `schemaName` of your chosen SAP schema or custom schema to the *Options Payload* of Upload Document [page 172]. With this approach, you don't need to manually enter a comma-separated list of `headerFields` and `lineItemFields` in the *Options Payload*, and you can also add standard and custom fields to your schema.
>
> You can use the Get Schema Details [page 240] endpoint to see all details of the schema, including the list of its header fields and line items.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>/request`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Response

Response Fields

JSON Field	Description
`clientId`	ID of the client this document was processed for
`documentType`	Type of the document submitted
`extraction`	Dictionary containing all the extracted header fields and line items

JSON Field	Description
`receivedDate`	The date when the document was received, for example, 2020-02-17.

The response is given as a status (200, 400, 401, 404, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "extraction":"...",
   "clientId":"c_00",
   "documentType":"invoice",
   "receivedDate":"2020-02-17"
}
```

13.1.6.12 Get Templates Associated with Document

Get all the templates associated with the specified document ID.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs/<id>/template`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. For example: c_00
`id`	Yes	String	*path*	The ID returned by the Upload Document [page 172] endpoint. For example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Response

Response Fields

JSON Field	Description
`templateId`	The ID of the template associated with the document ID.

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "templateId":[
      "4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff"
   ]
}
```

13.1.6.13 Delete Document

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/document/jobs`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`payload`	Yes	JSON Object	*body*	List of document IDs you want to delete

Payload Request Example

```
{
   "value":[
      "4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff"
   ]
}
```

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request
`processedTime`	Timestamp in RFC format
`status`	Deletion status of the document. Possible values: “PENDING”, “DONE”, or “FAILED”

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
  "status": "DONE",
  "message": "Documents deleted successfully.",
  "processedTime": "2020-03-26T17:00:00.000000+00:00"
}
```

13.1.7 Enrichment Data API

SAP Document AI can also enrich the information extracted from documents with your existing structured data (typically master data records).

Enrichment in that context means to provide additional information to a document, which is not directly contained on a document, but which is inferred based on information, which is contained on a document in conjunction to other external data.

You can, for example, infer the proprietary ID of a customer from another SAP system based on the sender address contained on an invoice document. Even though the customer ID is not explicitly contained on the invoice, the ID from the SAP system can be inferred by using the address data contained on the invoice by matching it against the relevant master data.

The service matches enrichment data entities with the Extracted Header Fields (Base Edition and Premium Edition) [page 387] and Extracted Line Items (Base Edition and Premium Edition) [page 402] from processed documents.

The Enrichment Data API provides the functionalities to create, update, get and delete enrichment data. After enrichment data entities have been maintained, please check the usage of the enrichment property in Upload Document [page 172] in order to leverage the matching of enrichment data to extracted fields.

The Enrichment Data API consists of the following endpoints:

- Create Enrichment Data [page 214]
- List Data-Persistence Jobs [page 221]
- Get Enrichment Data [page 222]

- Get Enrichment Data Creation or Deletion Status [page 224]
- Create Data Activation [page 226]
- Get Data Activation Details [page 227]
- Delete Enrichment Data (Synchronous) - Decommissioned [page 228]
- Delete Enrichment Data (Asynchronous) [page 229]

Related Information

Data Enrichment: Best Practices [page 376]
Enrichment Parameter [page 178]

13.1.7.1 Create Enrichment Data

Create or update one or more enrichment data entities.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/data/jobs`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. For example: c_00.
`payload`	Yes	JSON Object	*body*	List containing enrichment data entities in value property. The entities can be: • BusinessEntity [page 217] • Employee [page 218] • Product [page 219] See request examples below. See also Data Variants [page 219].

Parameter	Required	Data Type	Parameter Type	Description
`type`	Yes	String	*query*	The type of enrichment data entities used for matching specified in the JSON string of the `payload`. Available values: `businessEntity`, `employee`, and `product`.
`subtype`	No	String	*query*	The subtype of enrichment data entities used for matching with type **businessEntity** specified in the JSON string of the `payload`. Available values: `supplier`, `customer`, and `companyCode`.

Request Examples

Create BusinessEntity [page 217] entities:

```
payload:
{
   "value":[
      {
         "id":"BE0001",
         "name":"Emma Dowerg",
         "accountNumber":"SK2421",
         "address1":"Amalie-Klemm-Platz 0/9, 48581, Geithain",
         "address2":"Near city church",
         "city":"Geithain",
         "countryCode":"DE",
         "postalCode":"48581",
         "state":"Schleswig-Holstein",
         "email":"e.dowerf@mustermail.com",
         "phone":"+49(0) 909979463",
         "bankAccount":"DE345982837402",
         "taxId":"DE435531312"
      },
      {
         "id":"BE0002",
         "name":"Ioannis Kruschwitz",
         "accountNumber":"393H292",
         "address1":"Alina-Reichmann-Allee 73, 63228, Staßfurt",
         "city":"Staßfurt",
         "countryCode":"DE",
         "postalCode":"63228",
         "state":"Hessen",
         "email":"Ioannis.Kruschwitz@mustermail.com",
         "phone":"+49(0) 818172710",
         "bankAccount":"DE1093628093743",
         "taxId":"DE593029048"
      }
   ]
}
type: businessEntity
clientId: c_00
subtype: supplier
```

Create Employee [page 218] entities:

```
payload:
{
   "value":[
      {
         "id":"E0001",
```

```
            "email":"john.will.doe@mustermail.com",
            "firstName":"John",
            "middleName":"William",
            "lastName":"Doe"
        },
        {
            "id":"E0002",
            "email":"m.gierschner@mustermail.com",
            "firstName":"Maren",
            "middleName":"Volkhard",
            "lastName":"Gierschner"
        }
    ]
}
type: employee
clientId: c_00
```

Create Product [page 219] entities:

```
payload:
{
  "value": [
    {
      "id": "12342",
      "description": "Glycerin Retinol 80 ML",
      "materialNumber": "B676817",
      "unitPrice": "1000,0 €",
      "unitOfMeasure": "LTR"
    }
  ]
}
type: product
clientId: c_00
```

Response

Response Fields

JSON Field	Description
`id`	Request ID
`status`	Status of the request. Possible values: “PENDING”, “DONE”, or “FAILED”

The response is given as a status (201, 400, 401, 422, 429, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Success”

```
{
  "id": "484b6e1c-501c-4a07-85cb-84554656a175",
  "status": "PENDING"
}
```

Related Information

Entities [page 217]
Data Variants [page 219]
Data Duplicates [page 220]

13.1.7.1.1 Entities

Entities are several actors which can be addressed by a business document. A business entity can be, for example, a customer and a supplier. The employee entity represents an employee in the company. The product entity represents a specific good or service available in a catalog or system.

Related Information

BusinessEntity [page 217]
Employee [page 218]
Product [page 219]

13.1.7.1.1.1 BusinessEntity

A `businessEntity` can represent different kind of organizations with which you deal as a company. It can represent, for example, suppliers and customers.

See Create Enrichment Data [page 214] to create `businessEntity` entities.

Key	Type	Length (maximum length of the string)	Description	Example
`accountNumber`	String	100	Account number of the business entity. This refers to a business account number and not a bank account number.	1213414
`address1`	String	150	Complete address fields of the business entity. Use a comma (“,”) to separate each individual field of the address.	Musterstraße 21, 13123, Musterstadt

Key	Type	Length (maximum length of the string)	Description	Example
`address2`	String	100	Any additional fields or landmarks that are part of the address.	Near Stadt Dom
`bankAccount`	String	100	Bank account number of the business entity. Enter the bank account number in a continuous string without spaces.	DE32245443233323
`city`	String	100	City of the business entity.	Musterstadt
`countryCode`	String	100	Country/Region of the business entity.	Deutschland
`id`	String	100	Unique identifier of the business entity in the user system.	BE21e112
`email`	String	100	Email address of the business entity.	mustermann@muster-mail.com
`name`	String	256	Name of the business entity.	Muster Mann GmbH
`phone`	String	100	Phone number of the business entity. Add the country/region code with the "+" symbol before the phone number.	+49131231331
`postalCode`	String	100	Postal code of the business entity.	12323
`state`	String	100	State of the business entity.	Rhineland Palatinate
`taxId`	String	100	Tax ID of the business entity.	DE123456789

13.1.7.1.1.2 Employee

An `employee` is a specific employee within the company.

See Create Enrichment Data [page 214] to create `employee` entities.

Key	Type	Length (maximum length of the string)	Description	Example
`email`	String	256	Email address of the employee.	m.gierschner@muster-mail.com

Key	Type	Length (maximum length of the string)	Description	Example
`firstName`	String	100	First name of the employee.	Maren
`id`	String	128	Unique identifier of the employee in the user system.	E0002
`lastName`	String	100	Last name of the employee.	Gierschner
`middleName`	String	100	Middle name of the employee.	Volkhard

13.1.7.1.1.3 Product

A `product` is a specific good or service available in a catalog or system.

See Create Enrichment Data [page 214] to create `product` entities.

Key	Type	Length (maximum length of the string)	Description	Example
`description`	String	100	Description of the product.	Glycerin Retinol 80 ML
`id`	String	128	Unique identifier of the product in the user system.	12342
`materialNumber`	String	100	Unique code that identifies a specific good or service in a supplier catalog or system.	B676817
`unitOfMeasure`	String	100	The unit of measure UN/CEFACT code.	LTR for liter and KGM for kilogram.
`unitPrice`	String	100	Price for a single instance of an object.	1000,0 €

13.1.7.1.2 Data Variants

Use variants to create multiple versions of the same data record, which all point to the same record ID.

To create a data record variant, add the `variant` key to the Create Enrichment Data [page 214] payload:

```
payload:
{
   "value":[
      {
         "id":"BE0001",
```

```
            "name":"Emma Dowerg",
            "address1":"Amalie-Klemm-Platz 0/9, 48581, Geithain",
            "bankAccount":"DE345982837402",
            "taxId":"DE435531312",
            "variant":"2"
        }
    ]
}
type: businessEntity
clientId: c_00
subtype: supplier
```

All the variants are used for the enrichment. If a data record match is associated with a variant ID, the matched variant ID is returned by Get Result [page 183] alongside the usual enrichment result information. For example:

```
enrichment: {
   "id":"BE0001",
   "confidence":98.647,
   "variant":2
}
```

The variant ID is an optional parameter. If absent, the data record is not associated to any variant. If used, variant IDs can be a number in the inclusive range 1 - 9. Any other variant ID is invalid and will result in an error.

Creating another master data record with the same ID and variant ID will not result in an error. Instead, the behavior is the same as creating a data record with an already existing ID, but both without variant IDs. See Data Duplicates [page 220].

> **Note**
>
> A single invalid variant ID value (for example, a variant that is not a number in the inclusive range 1 - 9) will cause the whole batch (API request) to fail.

> **→ Tip**
>
> You can create multiple variants of the same data record (all sharing the same ID) but in different languages.

13.1.7.1.3 Data Duplicates

Find out how how SAP Document AI handles the upload of duplicated master data records.

What are data duplicates?

A master data record “X” is considered a duplicate by SAP Document AI if there is another existing record “Y” which fulfills all of the following conditions:

- “X” has the exact same ID as “Y”.
- “X” has the exact same variant ID as “Y”. If both records have no variant ID they are also considered as equals.

- “X” and “Y” are created from the same tenant, client and service instance.

How does SAP Document AI handle duplicates?

The service filters out duplicate records as part of the automatic or manual data activation. If one or more duplicates are identified, the following update rule is applied to all of them: the most recently created record replaces all previously created versions of that record.

This process optimizes the service experience and results for most common use cases in which duplicated records are not intended. If duplicated records are required as part of an individual use case, this can be achieved using variant IDs.

13.1.7.2 List Data-Persistence Jobs

Returns a list of all data-persistence jobs for this tenant.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/data/jobs`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	No	String	*query*	The ID of the client. For example: c_00
`limit`	No	Integer	*query*	Items per page. Defines a maximum limit. For example: 10. See Technical Constraints [page 383].
`offset`	No	Integer	*query*	Offset of the first item to be returned. For example: 10
`order`	No	String	*query*	Order criteria for the retrieved data-persistence jobs. Possible values: created, client, or status. For example: created asc (sorts by creation date in ascending order)
`status`	No	String	*query*	The status of this data-persistence job. Possible values: “PENDING”, “SUCCESS”, or “FAILED”

Response

Response Fields

JSON Field	Description
`clientId`	ID of the client this data-persistence job was created for
`created`	Time when the data-persistence job was created
`id`	Data-persistence job ID
`status`	The status of this data-persistence job. Possible values: “PENDING”, “SUCCESS”, or “FAILED”

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "value":{
      "id":"c4f25368-d3e6-43f7-a0b4-55adf7f54e95",
      "status":"PENDING",
      "clientId":"c_00",
      "created":"2020-05-08T10:39:59.916359+00:00"
   }
}
```

13.1.7.3 Get Enrichment Data

Retrieve one or more enrichment data entities.

> ⓘ Note
>
> Enrichment data is refreshed automatically every 4 hours. It might take up to 4 hours until the enrichment data extraction is available in the Get Result [page 183] response. Manual data activation is also available and is the recommended process. You can set data activation to manual using the following endpoints:
>
> - Create Configuration [page 159]
> - Create Data Activation [page 226]

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/data`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. For example: c_00
`companyCode`	No	String	*query*	The company code of a single entry
`id`	No	String	*query*	The data ID of a single entry
`limit`	No	Integer	*query*	Items per page. Defines a maximum limit. For example: 10. See Technical Constraints [page 383].
`offset`	No	Integer	*query*	Offset of the first item to be returned. For example: 10
`type`	Yes	String	*query*	The type of enrichment data entities used for matching. Available values: `businessEntity`, `employee`, and `product`.
`subtype`	No	String	*query*	The subtype of enrichment data entities used for matching with type **businessEntity**. Available values: `supplier`, `customer`, and `companyCode`.
`system`	No	String	*query*	The system of a single entry

Response

Response Fields

JSON Field	Description
`accountNumber`	Account number of the enrichment data entity
`address1`	Address of the enrichment data entity
`address2`	Additional address of the enrichment data entity
`bankAccount`	Bank account number of the enrichment data entity
`city`	City name of the enrichment data entity
`companyCode`	Company code of the enrichment data entity
`countryCode`	Country/Region code of the enrichment data entity
`email`	Email address of the enrichment data entity
`id`	ID of the enrichment data entity
`name`	Name of the enrichment data entity
`phone`	Phone number of the enrichment data entity

JSON Field	Description
`postalCode`	Postal code of the enrichment data entity
`state`	State code of the enrichment data entity
`system`	System of the enrichment data entity
`taxId`	Tax ID of the enrichment data entity

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
  "value": [
    {
      "id": "BE0001",
      "name": "A",
      "accountNumber": "12345",
      "address1": "A street 5",
      "address2": "",
      "city": "Heidelberg",
      "countryCode": "DE",
      "postalCode": "69117",
      "state": "BW",
      "email": "a@a.com",
      "phone": "",
      "bankAccount": "000001",
      "taxId": "999",
      "companyCode": "4711",
      "system": "System A"
    }
  ]
}
```

13.1.7.4 Get Enrichment Data Creation or Deletion Status

Give a data persistence job ID to check the database and receive information on this data persistence job.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/data/jobs/<id>`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`id`	Yes	String	*path*	The ID returned by the Create Enrichment Data [page 214] or Delete Enrichment Data (Asynchronous) [page 229] endpoints. For example: 29812f26-464e-4ee6-be63-731859cf99f3.

Response

Response Fields

JSON Field	Description
`id`	Request ID.
`processedTime`	Amount of time it took to process the request.
`refreshedAt`	Date in extended ISO 8601 format (for example, "2021-01-16T13:36:29.453713+00:00"). It tells when the enrichment data job was refreshed for the last time. When the response is "**null**", it means that the enrichment data has not yet been refreshed.
`status`	Status of the request. Possible values: "PENDING", "DONE", or "FAILED".

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 "Success"

```
{
   "value":{
      "id":"b89645b4-605b-45cd-bf69-1147875e75f5",
      "status":"SUCCESS",
      "processedTime":"0:00:00.063022",
      "refreshedAt":"2021-01-16T13:36:29.453713+00:00"
   }
}
```

Response Example

400 "Bad Request"

```
{
  "code": "E5",
  "message": "Failed to retrieve data.",
  "details": "string"
}
```

Response Example

401 "Unauthorized"

```
{
```

```
  "message": "No Authorization given in the request header"
}
```

13.1.7.5 Create Data Activation

Create a data activation job record to see new or updated enrichment data in the extraction results if you are using the manual data activation process. Only activated enrichment data is added to the extraction results.

> → Remember
>
> Before creating an enrichment data activation job record, you need to Create Configuration [page 159].

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/data/activation`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`type`	No	String	*query*	The type of enrichment data entities used for matching. Available values: `businessEntity`, `employee`, and `product`.
`subtype`	No	String	*query*	The subtype of enrichment data entities used for matching with type **businessEntity**. Available values: `supplier`, `customer`, and `companyCode`.

Response

Response Fields

JSON Field	Description
`id`	ID of the enrichment data activation job record
`status`	Status of the request. Possible values: “PENDING”, “DONE”, or “FAILED”

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Success”

```
{
  "id": "484b6e1c-501c-4a07-85cb-84554656a175",
  "status": "PENDING"
}
```

13.1.7.6 Get Data Activation Details

Give an enrichment data activation job record ID to check the database, and receive information on this data activation job.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/data/activation/<id>`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`id`	Yes	String	*path*	The ID returned by the Create Data Activation [page 226] endpoint. For example: 484b6e1c-501c-4a07-85cb-84554656a175.

Response

Response Fields

JSON Field	Description
`created`	Time when the enrichment data was submitted for processing
`finished`	Time when the enrichment data status changed to “DONE”, or “FAILED”
`id`	ID of the enrichment data activation job record
`processedTime`	Timestamp in RFC format
`status`	Status of the request. Possible values: “PENDING”, “DONE”, or “FAILED”

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
  "value": {
    "id": "484b6e1c-501c-4a07-85cb-84554656a175",
    "status": "DONE",
    "processedTime": "0:01:00",
    "created": "2019-07-04T15:20:37.668873+00:00",
    "finished": "2019-07-04T15:21:37.668873+00:00"
  }
}
```

13.1.7.7 Delete Enrichment Data (Synchronous) - Decommissioned

Perform synchronous deletion of existing data records for specified fields.

> ⚠ Caution
>
> This endpoint has been decommissioned and is no longer available. Please use the endpoint Delete Enrichment Data (Asynchronous) [page 229] to delete data records.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/data`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. For example: c_00
`payload`	Yes	JSON Object	*body*	Comma-separated list of data record IDs that you want to delete

Parameter	Required	Data Type	Parameter Type	Description
`type`	Yes	String	*query*	The type of enrichment data entities used for matching specified in the JSON string of the `payload`. Available values: `businessEntity`, `employee`, and `product`.
`subtype`	No	String	*query*	The subtype of enrichment data entities used for matching with type **businessEntity** specified in the JSON string of the `payload`. Available values: `supplier`, `customer`, and `companyCode`.

Response

Response Fields

JSON Field	Description
`deleted`	Total number of data records deleted with this request

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
  "deleted": "2"
}
```

13.1.7.8 Delete Enrichment Data (Asynchronous)

Perform asynchronous deletion of existing data records for specified fields.

This endpoint accepts an array of data record IDs that you want to delete. If no array is entered in the `payload`, all entries are deleted.

You can also delete large numbers of data records for all clients per data type (businessEntity, employee, or product) by entering only the `type` parameter in your request. If you do not specify `clientId` and `type`, you delete all data records for a tenant.

> → Tip
>
> Delete outdated and no longer used data records frequently to improve the performance of the data enrichment feature when matching a business document to an enrichment data record based on the information extracted from the document.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/data/jobs`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	No	String	*query*	The ID of the client. For example: c_00
`payload`	Yes	JSON Object	*body*	Comma-separated list of data record IDs that you want to delete. All data records are deleted if `payload` is empty.
`type`	No	String	*query*	The type of enrichment data entities used for matching specified in the JSON string of the `payload`. Available values: `businessEntity`, `employee`, and `product`.
`subtype`	No	String	*query*	The subtype of enrichment data entities used for matching with type **businessEntity** specified in the JSON string of the `payload`. Available values: `supplier`, `customer`, and `companyCode`.

Payload Request Example

```
{
   "value":[
      {
         "id":"E0001",
         "companyCode":"companyCode",
         "system":"1234"
      }
   ]
}
```

Request Examples

Delete all data records:

```
payload:
{
   "value":[]
}
```

Delete all BusinessEntity [page 217] data records:

```
payload:
{
   "value":[]
}
```

```
type: businessEntity
```

Delete all Employee [page 218] data records:

```
payload:
{
   "value":[]
}
type: employee
```

Delete all Product [page 219] data records:

```
payload:
{
   "value":[]
}
type: product
```

Response

Response Fields

JSON Field	Description
`id`	Request ID
`status`	Status of the request. Possible values: “PENDING”, “DONE”, or “FAILED”

The response is given as a status (201, 400, 401, 422, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Success”

```
{
  "id": "484b6e1c-501c-4a07-85cb-84554656a175",
  "status": "PENDING"
}
```

13.1.8 Schema API

Create schemas containing data fields found in standard or custom document types. You can use these schemas as a basis for creating templates. You can select schemas and associated templates when adding documents. The Schema API provides endpoints to create, list, update, and delete schemas and schema versions.

The Schema API consists of the following endpoints:

- Create Schema [page 232]
- Get Schema [page 234]

- Get Schema Capabilities [page 236]
- Import Schema [page 238]
- Update Schema [page 238]
- Get Schema Details [page 240]
- Delete Schema [page 243]
- Create Schema Version [page 244]
- Update Schema Version [page 245]
- Activate Schema Version [page 247]
- Deactivate Schema Version [page 248]
- Add Fields to Schema Version [page 249]
- Get Schema Versions [page 256]
- Get Schema Version Details [page 257]
- Export Schema [page 259]
- Delete Schema Versions [page 260]

13.1.8.1 Create Schema

Create one or more schemas for a client.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`payload`	Yes	JSON Object	*body*	List containing `clientId`, `name`, `schemaDescription`, `documentType`, and `documentTypeDescription`. → Remember Each `schemaDescription` can have a maximum length of 500 characters. → Tip To get better results for extractions with generative AI (available with the premium edition service plan), you can use the `schemaDescription` value. This value is used in the prompt for document processing with large language models (LLMs).

Request Example

```
{
   "clientId":"c_00",
   "name":"Custom_Payment_Advice_Schema",
   "schemaDescription":"Schema For Accounts Department Payment Advices",
   "documentType":"paymentAdvice",
   "documentTypeDescription":"Payment Advice with Order Number"
}
```

Response

Response Fields

JSON Field	Description
`created`	Time when the schema was created.
`id`	ID of the schema

The response is given as a status (201, 400, 401, 429, or 500) and JSON file. See Common Status and Error Codes [page 277] and Technical Constraints [page 383].

Response Example

201 “Success”

```
{
   "id":"484b6e1c-501c-4a07-85cb-84554656a175",
   "created":"2020-03-26T17:00:00.000000+00:00"
}
```

13.1.8.2 Get Schema

Retrieve all schemas for a client.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`documentType`	No	String	*query*	The type of the document used when creating the schema. For example: `custominvoice`, or `paymentAdvice`
`limit`	No	Integer	*query*	Maximum number of schemas to be returned (maximum allowed value: 1000). For example: 10
`offset`	No	Integer	*query*	Index of the first schema to be retrieved. For example: 20
`order`	No	String	*query*	Order criteria of schemas to be returned. For example: “name asc”, (sorts by name in ascending order)
`predefined`	No	Boolean	*query*	Set to true for standard documents or false for custom documents.

Response

Response Fields

JSON Field	Description
`created`	Time when the schema was created
`documentType`	Type of the document submitted
`documentTypeDescription`	Description of the document submitted
`id`	ID of the schema
`name`	Name of the schema
`predefined`	True for standard documents, false for custom documents
`schemaDescription`	Description of the schema
`state`	State of the schema
`updated`	Time when the schema was updated

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "schemas":[
      [
         {
            "name":"Basic Involve FormatSchema",
            "schemaDescription":"SAP Invoice Schema",
            "documentType":"Invoice",
            "documentTypeDescription":"Payment Advice with Order Number",
            "id":"484b6e1c-501c-4a07-85cb-84554656a175",
            "predefined":"True",
            "created":"2020-03-26T17:00:00.000000+00:00",
            "updated":"2020-04-26T17:00:00.000000+00:00",
            "state":"draft"
         },
         {
            "name":"Daimier Payment Advice Schema",
            "schemaDescription":"Payment Advice Schema",
            "documentType":"Payment Advice",
            "documentTypeDescription":"Payment Advice with Order Number",
            "id":"484b6e1c-501c-4a07-85cb-84554656a189",
            "predefined":"False",
            "created":"2020-03-26T17:00:00.000000+00:00",
            "updated":"2020-04-26T17:00:00.000000+00:00",
            "state":"active"
         }
      ]
   ]
}
```

13.1.8.3 Get Schema Capabilities

Retrieve all schema capabilities.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/capabilities`

HTTP Method: *GET*

Request Parameters

No parameters

Response

Response Fields

JSON Field	Description
`documentTypes`	List of the document types that are relevant to schemas
`formatting`	List of the possible formatting for schemas
`setupTypes`	List of the possible setup types for schemas
`state`	List of the possible statuses for schemas

The response is given as a status (200, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "documentTypes":[
      "invoice",
      "paymentAdvice",
      "purchaseOrder",
      "custom",
      "businessCard"
   ],
   "state":[
      "active",
      "inactive",
      "draft"
   ],
   "setupTypes":[
      {
```

```
            "name":"static",
            "properties":[

            ]
         },
         {
            "name":"ml",
            "properties":[
               "x",
               "y",
               "w",
               "z"
            ]
         },
         {
            "name":"...",
            "properties":"[]"
         }
      ],
      "formatting":[
         {
            "name":"string",
            "properties":[
               {
                  "name":"length",
                  "values":[
                     "number"
                  ]
               }
            ]
         },
         {
            "name":"number",
            "properties":[
               {
                  "name":"length",
                  "values":[
                     "number"
                  ]
               },
               {
                  "name":"thousandSeparator",
                  "values":[
                     ".",
                     ",",
                     " "

                  ]
               },
               {
                  "name":"decimalSeparator",
                  "values":[
                     ".",
                     ",",
                     " "

                  ]
               }
            ]
         },
         {
            "name":"...",
            "properties":"[]"
         }
      ]
   }
```

13.1.8.4 Import Schema

Import a schema.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/import`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`file`	Yes	File	*formData*	The schema file you want to import.
`name`	No	String	*query*	New schema name. If `name` isn't provided, the name of the file is used.

Response

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Created”

13.1.8.5 Update Schema

Update existing schemas for a client.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>`

HTTP Method: *PUT*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`payload`	Yes	JSON Object	*body*	List containing `name`, `schemaDescription`, and `documentTypeDescription`.
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Request Example

```
{
   "name":"Custom_Payment_Advice_Schema",
   "schemaDescription":"Schema For Accounts Department Payment Advices",
   "documentTypeDescription":"Payment Advice with Order Number"
}
```

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Success”

```
{
   "message":"Schema has been updated successfully."
}
```

13.1.8.6 Get Schema Details

Retrieve schema details for a client.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Response

Response Fields

JSON Field	Description
`created`	Time when the schema was created
`documentType`	Type of the document used for the schema
`documentTypeDescription`	Description of the document used for the schema
`headerFields`	List of header fields that are part of the schema
`id`	ID of the schema
`lineItemFields`	List of line items that are part of the schema
`name`	Name of the schema
`predefined`	True for standard documents, false for custom documents
`schemaDescription`	Description of the schema
`state`	State of the schema
`updated`	Time when the schema was updated

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”


```
{
   "name":"Basic Involve FormatSchema",
   "schemaDescription":"SAP Invoice Schema",
   "documentType":"Invoice",
   "documentTypeDescription":"Payment Advice with Order Number",
   "id":"484b6e1c-501c-4a07-85cb-84554656a175",
   "created":"2020-03-26T17:00:00.000000+00:00",
   "updated":"2020-04-26T17:00:00.000000+00:00",
   "predefined":"FALSE",
   "state":"draft",
   "headerFields":[
      {
         "name":"GrossAmountValue",
         "description":"TotalAmountValue",
         "defaultExtractor":{

         },
         "setupType":"static",
         "setupTypeVersion":"1.0.0",
         "setup":{
            "type":"default",
            "priority":1,
            "filter":[
               {
                  "key":"language",
                  "value":"EN"
               },
               {
                  "key":"language",
                  "value":"DE"
               }
            ],
            "properties":[
               {
                  "key":"deploymentID",
                  "value":"123e4567-e89b-12d3-a456-426614174000."
               },
               {
                  "key":"fieldName",
                  "value":"GrossAmount"
               }
            ]
         },
         "formattingType":"number",
         "formatting":{
            "length":"64",
            "precision":"3",
            "decimalSeparator":".",
            "thousandSeparator":","
         },
         "formattingTypeVersion":"1.0.0"
      },
      {
         "name":"sendersFullName",
         "description":"Name of Sender",
         "defaultExtractor":{
            "fieldName":"senderName"
         },
         "setup":{
            "type":"default",
```

```
            "priority":1,
            "filter":[
               {
                  "key":"language",
                  "value":"EN"
               },
               {
                  "key":"language",
                  "value":"DE"
               }
            ],
            "properties":[
               {
                  "key":"deploymentID",
                  "value":"123e4567-e89b-12d3-a456-426614174000."
               },
               {
                  "key":"fieldName",
                  "value":"senderName"
               }
            ]
         },
         "setupTypeVersion":"",
         "setupType":"",
         "formattingType":"",
         "formatting":{

         },
         "formattingTypeVersion":"1.0.0"
      }
   ],
   "lineItemFields":[
      {
         "name":"Amount",
         "description":"TotalAmountValue",
         "defaultExtractor":{

         },
         "setupType":"static",
         "setupTypeVersion":"1.0.0",
         "setup":{
            "type":"default",
            "priority":1,
            "filter":[
               {
                  "key":"language",
                  "value":"EN"
               },
               {
                  "key":"language",
                  "value":"DE"
               }
            ],
            "properties":[
               {
                  "key":"deploymentID",
                  "value":"123e4567-e89b-12d3-a456-426614174000."
               },
               {
                  "key":"fieldName",
                  "value":"NetAmount"
               }
            ]
         },
         "formattingType":"number",
         "formatting":{
            "length":"64",
            "precision":"3",
```

```
            "decimalSeparator":".",
            "thousandSeparator":","
         },
         "formattingTypeVersion":"1.0.0"
      },
      {
         "name":"WithdrawalDate",
         "description":"Date of Withdrawal",
         "defaultExtractor":{

         },
         "setupType":"static",
         "setupTypeVersion":"1.0.0",
         "setup":{
            "type":"default",
            "priority":1,
            "filter":[
               {
                  "key":"language",
                  "value":"EN"
               },
               {
                  "key":"language",
                  "value":"DE"
               }
            ],
            "properties":[
               {
                  "key":"deploymentID",
                  "value":"123e4567-e89b-12d3-a456-426614174000."
               },
               {
                  "key":"fieldName",
                  "value":"DocumentDate"
               }
            ]
         },
         "formattingType":"date",
         "formatting":{
            "dateformat":"dd/mm/yy"
         },
         "formattingTypeVersion":"1.0.0"
      }
   ]
}
```

13.1.8.7 Delete Schema

Delete one or more schemas for a client.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`payload`	Yes	JSON Object	*body*	Comma-separated list of `schemaIds` you want to delete.

Payload Request Example

```
{
   "value":[
      "4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff"
   ]
}
```

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "message":"Schemas deleted successfully."
}
```

13.1.8.8 Create Schema Version

Create a new version for a schema.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Response

Response Fields

JSON Field	Description
`created`	Time when the schema version was created.
`id`	ID of the schema
`version`	Version of the schema

The response is given as a status (201, 400, 401, 429, or 500) and JSON file. See Common Status and Error Codes [page 277] and Technical Constraints [page 383].

Response Example

201 “Success”

```
{
   "id":"484b6e1c-501c-4a07-85cb-84554656a175",
   "version":"2",
   "created":"2020-03-26T17:00:00.000000+00:00"
}
```

13.1.8.9 Update Schema Version

Update existing schema versions for a client.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>/versions/<version>`

HTTP Method: *PUT*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`payload`	Yes	JSON Object	*body*	List containing `schemaDescription`.
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff
`version`	Yes	String	*path*	The `version` returned by the endpoint Create Schema Version [page 244]. Example: 2

Request Example

```
{
   "schemaDescription":"Schema For Accounts Department Payment Advices"
}
```

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Success”

```
{
   "message":"Schema has been updated successfully."
}
```

13.1.8.10 Activate Schema Version

Activate a particular version of a schema.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>/versions/<version>/activate`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff
`version`	Yes	String	*path*	The `version` returned by the endpoint Create Schema Version [page 244]. Example: 2

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277] and Technical Constraints [page 383].

Response Example

201 “Success”

```
{
   "message":"Schema version activated successfully."
}
```

13.1.8.11 Deactivate Schema Version

Deactivate a particular version of a schema..

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>/versions/<version>/deactivate`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff
`version`	Yes	String	*path*	The `version` returned by the endpoint Create Schema Version [page 244]. Example: 2

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277] and Technical Constraints [page 383].

Response Example

201 “Success”

```
{
   "message":"Schema version deactivated successfully."
}
```

13.1.8.12 Add Fields to Schema Version

Add fields to schema version for a client.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>/versions/<version>/fields`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00

Parameter	Required	Data Type	Parameter Type	Description
`payload`	Yes	JSON Object	*body*	List containing the `headerFields` and `lineItemFields` that you want to add to the schema version. You can also optionally use the `label` property to give user-friendly names to some or all of the `headerFields` and `lineItemFields` that you enter in the `payload`. → Remember • Each `label` can have a maximum length of 200 characters. • Each schema field `description` can have a maximum length of 500 characters. Use setup types to choose the best schema field setup type for your documents. The following values are available: • *auto* • *manual* In schemas created for standard document types, *auto* supports extraction in the following ways: • Using the solution's machine learning models: In this case, select an appropriate default extractor. • Using generative AI: In this case, don't select a default extractor. In schemas created for custom document types, *auto* supports extraction using generative AI. In this case, no default extractor is available. ⚠ Restriction The setup type *auto* is available without default extractor for schemas with the premium edition service plan. See Service Plans [page 104] and Metering and Pricing [page 108].

Parameter	Required	Data Type	Parameter Type	Description
				⚠ Caution Always validate information extracted using generative AI before using it for critical applications. To extract information from documents **without using generative AI**, do the following when adding fields to your schema: • Select setup type *auto* with a default extractor (standard document types only). • Alternatively, select setup type *manual* (standard and custom document types). In the first case, SAP Document AI uses the solution's machine learning models; in the second, you use a template. The setup type *manual* supports extraction using a template. It's available in schemas created for standard and custom document types. **ⓘ Note** To consume the setup types "*auto*" and "*manual*", use the `setupTypeVersion` 2.0.0. The `setupTypeVersion` 1.0.0 is still supported. As of October 9, 2023, 2.0.0 is the recommended `setupTypeVersion`.
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff
`version`	Yes	String	*path*	The `version` returned by the endpoint Create Schema Version [page 244]. Example: 2

Request Example: Payload with `label` and `setupTypeVersion` 2.0.0

```
{
   "headerFields":[
      {
```

```
            "name":"documentDate",
            "label":"Document Date",
            "description":"Document Date",
            "defaultExtractor":{

            },
            "setupType":"static",
            "setupTypeVersion":"2.0.0",
            "setup":{
               "type":"manual",
               "priority":1
            },
            "formattingType":"date",
            "formatting":{
               "dateformat":"dd/mm/yy"
            },
            "formattingTypeVersion":"1.0.0"
         }
      ],
      "lineItemFields":[
         {
            "name":"netAmount",
            "label":"Net Amount",
            "description":"Net Amount",
            "defaultExtractor":{
               "fieldName":"netAmount"
            },
            "setupType":"static",
            "setupTypeVersion":"2.0.0",
            "setup":{
               "type":"auto",
               "priority":1
            },
            "formattingType":"number",
            "formatting":{

            },
            "formattingTypeVersion":"1.0.0"
         },
         {
            "name":"discountAmount",
            "label":"Discount Amount",
            "description":"Discount Amount",
            "defaultExtractor":{

            },
            "setupType":"static",
            "setupTypeVersion":"2.0.0",
            "setup":{
               "type":"manual",
               "priority":1
            },
            "formattingType":"number",
            "formatting":{

            },
            "formattingTypeVersion":"1.0.0"
         }
      ]
   }
```

Request Example: Payload with `label`**,** `setupType` *auto* **without** `defaultExtractor`**, and** `setupTypeVersion` **2.0.0**

```
{
   "headerFields":[
      {
```

```
            "name":"documentDate",
            "label":"Document Date",
            "description":"Document Date",
            "defaultExtractor":{

            },
            "setupType":"static",
            "setupTypeVersion":"2.0.0",
            "setup":{
               "type":"auto",
               "priority":1
            },
            "formattingType":"date",
            "formatting":{
               "dateformat":"dd/mm/yy"
            },
            "formattingTypeVersion":"1.0.0"
         },
         {
            "name":"documentNumber",
            "label":"Document Number",
            "description":"Document Number",
            "defaultExtractor":{

            },
            "setupType":"static",
            "setupTypeVersion":"2.0.0",
            "setup":{
               "type":"auto",
               "priority":1
            },
            "formattingType":"number",
            "formatting":{

            },
            "formattingTypeVersion":"1.0.0"
         }
      ],
      "lineItemFields":[
         {
            "name":"netAmount",
            "label":"Net Amount",
            "description":"Net Amount",
            "defaultExtractor":{

            },
            "setupType":"static",
            "setupTypeVersion":"2.0.0",
            "setup":{
               "type":"auto",
               "priority":1
            },
            "formattingType":"number",
            "formatting":{

            },
            "formattingTypeVersion":"1.0.0"
         },
         {
            "name":"discountAmount",
            "label":"Discount Amount",
            "description":"Discount Amount",
            "defaultExtractor":{

            },
            "setupType":"static",
            "setupTypeVersion":"2.0.0",
            "setup":{
```

```
            "type":"auto",
            "priority":1
         },
         "formattingType":"number",
         "formatting":{

         },
         "formattingTypeVersion":"1.0.0"
      }
   ]
}
```

Request Example: Payload with `setupTypeVersion` 1.0.0

```
{
   "headerFields":[
      {
         "name":"DocumentNumber",
         "description":"",
         "defaultExtractor":{
            "fieldName":"documentNumber"
         },
         "setupType":"static",
         "setupTypeVersion":"1.0.0",
         "setup":{

         },
         "formattingType":"string",
         "formatting":{

         },
         "formattingTypeVersion":"1.0.0"
      },
      {
         "name":"TaxId",
         "description":"",
         "defaultExtractor":{

         },
         "setupType":"static",
         "setupTypeVersion":"1.0.0",
         "setup":{

         },
         "formattingType":"string",
         "formatting":{

         },
         "formattingTypeVersion":"1.0.0"
      }
   ],
   "lineItemFields":[
      {
         "name":"Quantity",
         "description":"",
         "defaultExtractor":{
            "fieldName":"quantity"
         },
         "setupType":"static",
         "setupTypeVersion":"1.0.0",
         "setup":{

         },
         "formattingType":"number",
         "formatting":{

         },
```

```
            "formattingTypeVersion":"1.0.0"
        },
        {
            "name":"netAmount",
            "description":"",
            "defaultExtractor":{

            },
            "setupType":"static",
            "setupTypeVersion":"1.0.0",
            "setup":{

            },
            "formattingType":"number",
            "formatting":{

            },
            "formattingTypeVersion":"1.0.0"
        },
        {
            "name":"UnitPrice",
            "description":"",
            "defaultExtractor":{
                "fieldName":"unitPrice"
            },
            "setupType":"static",
            "setupTypeVersion":"1.0.0",
            "setup":{

            },
            "formattingType":"number",
            "formatting":{

            },
            "formattingTypeVersion":"1.0.0"
        }
    ]
}
```

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277] and Technical Constraints [page 383].

Response Example

201 “Success”

```
{
    "message":"Schema fields have been uploaded successfully."
}
```

13.1.8.13 Get Schema Versions

Retrieve all versions for a schema.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>/versions`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Response

Response Fields

JSON Field	Description
`created`	Time when the schema was created
`documentType`	Type of the document submitted
`documentTypeDescription`	Description of the document submitted
`id`	ID of the schema
`name`	Name of the schema
`predefined`	True for standard documents, false for custom documents
`schemaDescription`	Description of the schema
`state`	State of the schema
`updated`	Time when the schema was updated
`version`	Version of the schema

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”


```
{
   "schemas":[
      [
         {
            "name":"Basic Involve FormatSchema",
            "schemaDescription":"SAP Invoice Schema",
            "documentType":"Invoice",
            "documentTypeDescription":"Payment Advice with Order Number",
            "id":"484b6e1c-501c-4a07-85cb-84554656a175",
            "version":"1",
            "predefined":"True",
            "created":"2020-03-26T17:00:00.000000+00:00",
            "updated":"2020-04-26T17:00:00.000000+00:00",
            "state":"draft"
         },
         {
            "name":"Basic Involve FormatSchema",
            "schemaDescription":"SAP Invoice Schema",
            "documentType":"Invoice",
            "documentTypeDescription":"Payment Advice with Order Number",
            "id":"484b6e1c-501c-4a07-85cb-84554656a175",
            "version":"2",
            "predefined":"True",
            "created":"2020-03-26T17:00:00.000000+00:00",
            "updated":"2020-04-26T17:00:00.000000+00:00",
            "state":"draft"
         }
      ]
   ]
}
```


13.1.8.14 Get Schema Version Details

Retrieve version details of a schema for a client.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>/versions/<version>`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00

Parameter	Required	Data Type	Parameter Type	Description
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff
`version`	Yes	String	*path*	The `version` returned by the endpoint Create Schema Version [page 244]. Example: 2

Response

Response Fields

JSON Field	Description
`created`	Time when the schema was created
`documentType`	Type of the document submitted
`documentTypeDescription`	Description of the document submitted
`id`	ID of the schema
`name`	Name of the schema
`predefined`	True for standard documents, false for custom documents
`schemaDescription`	Description of the schema
`state`	State of the schema
`updated`	Time when the schema was updated

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "schemas":[
      [
         {
            "name":"Basic Involve FormatSchema",
            "schemaDescription":"SAP Invoice Schema",
            "documentType":"Invoice",
            "documentTypeDescription":"Payment Advice with Order Number",
            "id":"484b6e1c-501c-4a07-85cb-84554656a175",
            "predefined":"True",
            "created":"2020-03-26T17:00:00.000000+00:00",
            "updated":"2020-04-26T17:00:00.000000+00:00",
            "state":"draft"
         },
         {
            "name":"Daimier Payment Advice Schema",
            "schemaDescription":"Payment Advice Schema",
```

```
            "documentType":"Payment Advice",
            "documentTypeDescription":"Payment Advice with Order Number",
            "id":"484b6e1c-501c-4a07-85cb-84554656a189",
            "predefined":"False",
            "created":"2020-03-26T17:00:00.000000+00:00",
            "updated":"2020-04-26T17:00:00.000000+00:00",
            "state":"active"
        }
    ]
  ]
}
```


13.1.8.15 Export Schema

Export a schema version.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>/versions/<version>/export`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`schema_id`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff
`version`	Yes	String	*path*	The `version` returned by the endpoint Create Schema Version [page 244]. Example: 2

Response

The response is given as a status (200, 400, 401 or 500). See Common Status and Error Codes [page 277].

Response Example

200 “Success”

13.1.8.16 Delete Schema Versions

Delete versions associated with a schema.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/schemas/<schemaId>/versions`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client used when creating the schema. Example: c_00
`payload`	Yes	JSON Object	*body*	Comma-separated list of the schema versions you want to delete. The schema and all its versions are deleted if `payload` is empty. You can't delete version "1".
`schemaId`	Yes	String	*path*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Request Example

```
{
   "version":[
      "5"
   ]
}
```

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Success”

```
{
   "message":"Schema versions deleted successfully."
}
```

13.1.9 Template API

Create, reuse, edit, and delete templates based on schemas and document types. You can select templates together with a corresponding schema to extract information from business documents of the appropriate type and structure. The Template API provides endpoints to create, update, list, import, export, activate, deactivate, and delete templates. You can also associate documents with a template and dissociate documents from a template using the Template API endpoints.

The Template API consists of the following endpoints:

- Create or Update Template [page 261]
- Get Template [page 263]
- Import Template [page 265]
- Get Template Details [page 266]
- Delete Template [page 268]
- Activate Template [page 269]
- Deactivate Template [page 270]
- Associate Document with Template [page 271]
- Dissociate Document from Template [page 272]
- Export Template [page 273]
- Create Template Metadata [page 274]
- Get Template Metadata [page 275]

13.1.9.1 Create or Update Template

Create or update a template.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`payload`	Yes	JSON Object	*body*	List containing `id`, `name`, `description`, `clientId`, `schemaId`, and `schemaVersion`. **Note** If `id` is not provided, a template ID is generated and returned. If `id` is provided, but it is not in the system, a new record with template ID provided is created. If `id` is provided, and it is in the system, an update of record with same template ID is executed.

Request Example

```
{
   "id":"37c8a59b-b210-48c1-9002-19ec989066eb",
   "name":"Test_Template",
   "description":"Test description",
   "clientId":"c_00",
   "schemaId":"37c8a59b-b210-48c1-9002-19ec989066eb",
   "schemaVersion":"1"
}
```

Response

Response Fields

JSON Field	Description
`id`	Template ID

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277] and Technical Constraints [page 383].

Response Example

201 “Created”

```
{
   "id":"31516520-b4c9-40a6-b9ba-94d1800d472d"
}
```

13.1.9.2 Get Template

Get templates for a `client` ID.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`includeHeader`	No	Boolean	*query*	Result should include header fields
`includeLineItems`	No	Boolean	*query*	Result should include line item fields
`limit`	No	Integer	*query*	Max number of records to be returned. All records are returned if limit = 0. Example: 10
`offset`	No	Integer	*query*	The offset of the query result start index to be returned. Example: 0
`order`	No	String	*query*	Order the results. Example: name asc
`schemaId`	No	String	*query*	The ID returned by the endpoint Create Schema [page 232]. Example: 4476cc01-72f3-4b64-9eb0-cdd9c1cb27ff

Response

Response Fields

JSON Field	Description
`clientId`	ID of the client this template was created for
`creationDate`	Date when you created this template
`documentAssociations`	ID of the documents associated with this template

JSON Field	Description
`description`	Template description
`documentType`	Type of the document this template was created for
`extraction`	Dictionary containing all the extracted header fields and line items
`headerFields`	Dictionary containing all extracted header fields
`id`	Template ID
`isActive`	Set to true if template has been activated. Set to false if template has not been activated, or it has been deactivated
`language`	Template language
`lastUpdatedDate`	Date when you last updated this template
`lineItemFields`	Dictionary containing all extracted line items
`name`	Template name
`results`	List containing information of all templates by `clientId`
`schemaId`	Schema ID
`status`	Template status. Possible values: “NO_SAMPLES”, “NO_ANNOTATIONS”, or “READY”

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "results":[
      {
         "id":"5fb6279a-1bb9-4e37-b3bc-95ffb0e3d220",
         "schemaId":"3e048fac-7799-45dc-a360-ff921d8ef152",
         "name":"Test Template",
         "description":"Test Description",
         "language":"en",
         "documentType":"invoice",
         "clientId":"c_00",
         "status":"NO_SAMPLES",
         "isActive":true,
         "creationDate":"2023-11-14T07:39:23.536547+00:00",
         "lastUpdatedDate":"2023-11-14T07:39:23.536547+00:00",
         "documentAssociations":[
            {
               "id":"sample_id"
            }
         ],
         "extraction":{
            "headerFields":[
               {
                  "name":"documentNumber",
                  "label":"Document Number:",
                  "type":"number"
               }
            ]
         }
      },
      {
```

```
            "id":"1213723c-bdff-4b2a-b821-93f051966b0c",
            "schemaId":"0f68b9c8-1e10-467d-a01a-23ffae9b5e4e",
            "name":"Test Template 2",
            "description":"Test Description 2",
            "language":"en",
            "documentType":"invoice",
            "clientId":"c_00",
            "status":"NO_SAMPLES",
            "isActive":false,
            "creationDate":"2023-11-14T07:39:23.536547+00:00",
            "documentAssociations":[
               {
                  "id":"sample_id"
               }
            ],
            "extraction":{
               "headerFields":[
                  {
                     "name":"documentNumber",
                     "type":"number"
                  }
               ]
            }
         }
      ]
   }
```


13.1.9.3 Import Template

Import a template.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/import`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`file`	Yes	File	*formData*	The template file you want to import.

Response

The response is given as a status (201, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

201 “Created”

13.1.9.4 Get Template Details

Get template details for a template ID. You can only get template details that belong to the same `zone_id` and `client_id`.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd

Response

Response Fields

JSON Field	Description
`clientId`	ID of the client this template was created for
`creationDate`	Date when you created this template
`documentAssociations`	ID of the documents associated with this template
`description`	Template description

JSON Field	Description
`documentType`	Type of the document this template was created for
`extraction`	Dictionary containing all the extracted header fields and line items
`headerFields`	Dictionary containing all extracted header fields
`id`	Template ID
`isActive`	Set to true if template has been activated. Set to false if template has not been activated, or it has been deactivated
`language`	Template language
`lastUpdatedDate`	Date when you last updated this template
`lineItemFields`	Dictionary containing all extracted line items
`name`	Template name
`schemaId`	Schema ID
`schemaName`	Schema Name
`status`	Template status. Possible values: “NO_SAMPLES”, “NO_ANNOTATIONS”, or “READY”

The response is given as a status (200, 400, 401, or 500) and JSON file. See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "id":"37c8a59b-b210-48c1-9002-19ec989066eb",
   "schemaId":"608aa59c-4895-4308-bcae-905f8f343acc",
   "name":"Test Template",
   "description":"Test Template Description",
   "language":"en",
   "documentType":"invoice",
   "clientId":"c_00",
   "status":"NO_SAMPLES",
   "isActive":true,
   "creationDate":"2023-11-14",
   "lastUpdatedDate":"2023-11-14T07:39:23.536547+00:00",
   "schemaName":"SAP_Schema",
   "documentAssociations":[
      {
         "id":"f58f7e0b-a1a8-449c-aa4b-6c71e256cd3e"
      }
   ],
   "extraction":{
      "headerFields":[
         {
            "name":"string",
            "label":"string",
            "type":"string"
         }
      ],
      "lineItemFields":[
         {
            "name":"string",
            "label":"string",
            "type":"string"
         }
```

```
        ]
    }
}
```

13.1.9.5 Delete Template

Delete a template and its links to the associated documents for a template ID.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (200, 400, 401, or 500). See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
    "message":"Successfully deleted 1 template."
}
```

13.1.9.6 Activate Template

Activate a template.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>/activate`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (200, 400, 401, or 500). See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "message":"Successfully activated the template"
}
```

13.1.9.7 Deactivate Template

Deactivate a template.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>/deactivate`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (200, 400, 401, or 500). See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "message":"Successfully deactivated the template"
}
```

13.1.9.8 Associate Document with Template

Associate a document with a template.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>/documents/<document_id>`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`document_id`	Yes	String	*path*	Document ID. Example: 5146ce05-7tf3-4g64-9eb0-vaa9f9cb22af
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd
`validateDocumentStatus`	No	Boolean	*query*	Set to false to skip document status validation when associating document with template. The default value is true.

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (200, 400, 401, or 500). See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "message":"Successfully added document to the template."
}
```

13.1.9.9 Dissociate Document from Template

Dissociate a document from a template.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>/documents/<document_id>`

HTTP Method: *DELETE*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`document_id`	Yes	String	*path*	Document ID. Example: 5146ce05-7tf3-4g64-9eb0-vaa9f9cb22af
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd

Response

Response Fields

JSON Field	Description
`message`	Status message with information about the request

The response is given as a status (200, 400, 401, or 500). See Common Status and Error Codes [page 277].

Response Example

200 “Success”

```
{
   "message":"Successfully removed document from the template."
}
```

13.1.9.10 Export Template

Export a template.

> **Note**
>
> You can download malware-scanned documents only. You can't download documents that are part of the template export package but haven't been malware-scanned during upload.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>/export`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd

Response

The response is given as a status (200, 400, 401, 410 or 500). See Common Status and Error Codes [page 277].

Response Example

200 “Success”

13.1.9.11 Create Template Metadata

Set certain fields of a template to be fixed-value fields.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>/metadata`

HTTP Method: *POST*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`payload`	Yes	JSON Object	*body*	List containing all fixed-value fields of a template. You can use the options `extraction` and `isLineItemField` to specify the extraction method for a field. Possible values for `extraction` are **`template`**, **`templateOnly`**, or **`schema`**, and for `isLineItemField` are **`true`**, or **`false`**.
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd

Request Payload Examples

```
{
   "metadata":[
      {
         "name":"name",
         "value":"value"
      }
   ]
}
```

```
{
   "metadata":[
      {
         "name":"name",
         "value":"value",
         "extraction":"template",
         "isLineItemField":"false"
      },
      {
         "name":"name",
         "value":null,
         "extraction":"schema",
         "isLineItemField":"true"
      }
```

```
    ]
}
```

Response

Response Fields

JSON Field	Description
`id`	Metadata ID

The response is given as a status (201, 400, 401, or 500). See Common Status and Error Codes [page 277].

Response Example

201 “Accepted”

```
{
   "id":"b6e6ddaf-ceb0-4245-ab07-6ced50b18807"
}
```

13.1.9.12 Get Template Metadata

Get all fixed-value fields of a template.

Request

Base URL: url value from outside the uaa section of the service key

URL Path Extension: `/document-information-extraction/v1/`

URL Endpoint Path: `/templates/<template_id>/metadata`

HTTP Method: *GET*

Request Parameters

Parameter	Required	Data Type	Parameter Type	Description
`clientId`	Yes	String	*query*	The ID of the client. Example: c_00
`template_id`	Yes	String	*path*	Template ID. Example: 4176cc01-71f3-4b64-9eb0-cdd9c0cb27fd

Response

Response Fields

JSON Field	Description
`extraction`	Either **`template`** or **`schema`**
`isLineItemField`	Either **`true`** or **`false`**
`metadata`	Dictionary containing all fixed-value fields of a template
`name`	Metadata name
`value`	Metadata value

The response is given as a status (200, 400, 401, or 500). See Common Status and Error Codes [page 277].

Response Examples

200 “Success”

```
{
   "metadata":[
      {
         "name":"name",
         "value":"value"
      }
   ]
}
```

200 “Success”

```
{
   "metadata":[
      {
         "name":"name",
         "value":"value",
         "extraction":"template",
         "isLineItemField":"false"
      },
      {
         "name":"name",
         "value":null,
         "extraction":"schema",
         "isLineItemField":"true"
      }
   ]
}
```

13.1.10 Common Request Headers

Header	Required	Description
`Authorization`	Yes	Access token used to access the service.
`Content-Type`	Yes	Indicates the type that can be consumed by this service. Set the `Accept` parameter to **`application/json`**.
`Accept`	Yes	Indicates the type that is associated with the message body. Set the `Content-Type` parameter to **`application/json`**.
`tenantName`	Yes	Specifies the tenant name used to access this service.

13.1.11 Common Status and Error Codes

Code	Reason
200	The request was successful
201	Client creation, document upload and deletion of enrichment data or uploaded document, for example, was successful.
400	Bad request. SAP Document AI process could not be submitted or completed; possibly due to parameter error.
401	Unauthorized, for example, no token or bad token
413	The request you are making is too large. Either you are sending a file that is too large or trying to process too many objects in a single request. See Technical Constraints [page 383].
415	Unsupported document file format. See Supported File Types [page 121].

Code	Reason
422	Unprocessable entity. Your request payload references a clientId, senderName, or documentNumber that does not exist. For example, you will get this error if you try to create a document for a client that does not exist. You may also get this error if the document you upload cannot be parsed.
429	Application quota limit exceeded
500	Internal server error. SAP Document AI process could not be submitted or completed; possibly due to an internal error.
503	System is temporarily unavailable

13.2 Notifications

Discover the notifications functionality.

Use this functionality to get notifications about your processed documents status without having to constantly send requests to SAP Document AI. Through this functionality, SAP Document AI notifies an endpoint using a callback URL that you specify with the explicit name of `document-information-extraction-callback`.

> → Remember
>
> To enable the notifications functionality, set the configuration key `activateDocumentNotifications` to *true* as described in Create Configuration [page 159] and Configuration Keys [page 161].
>
> The notification callback request is sent only once document processing has either completed or failed.
>
> SAP Document AI sends only one notification per document without retry.

Related Information

Enabling Destination Service for Notifications [page 279]
Creating Destination Configuration for Notifications [page 280]
Supported Authentication Methods [page 281]
Callback Request Examples [page 282]
Callback Response Status [page 283]

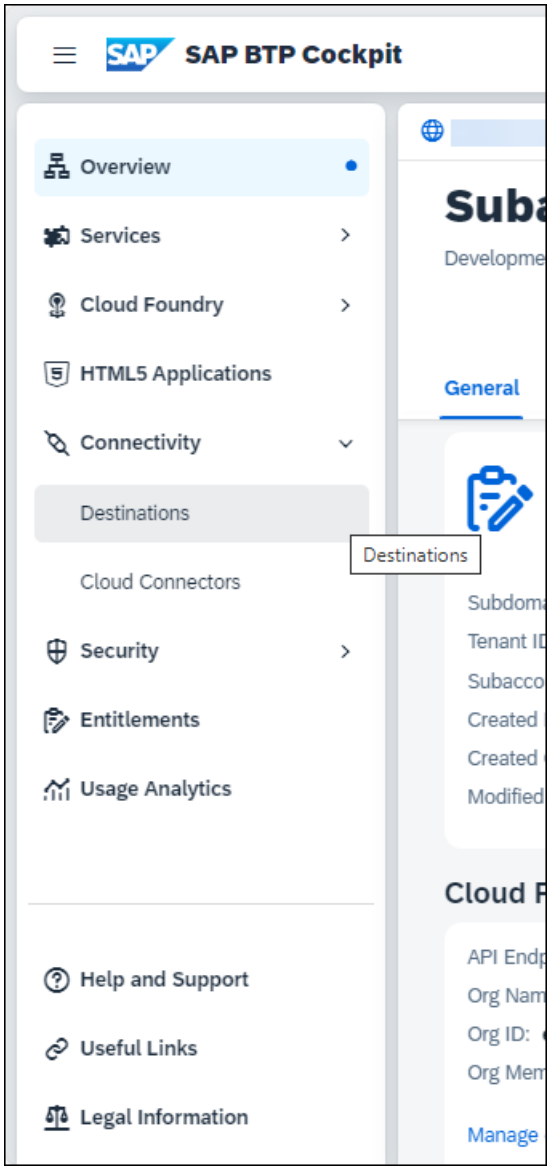
13.2.1 Enabling Destination Service for Notifications

Prerequisites

You have subscribed to the SAP Document AI basic UI in SAP Business Technology Platform.

> → Tip
>
> In Subscribing to the SAP Document AI Basic UI With Identity Providers [page 286], observe the prerequisites and follow the procedure steps from 1 until 6.

To use the notifications functionality, you need to enable the Cloud Foundry Destination service at subaccount level via the *Entitlements*. After that, *Destinations* is visible in the left navigation pane.

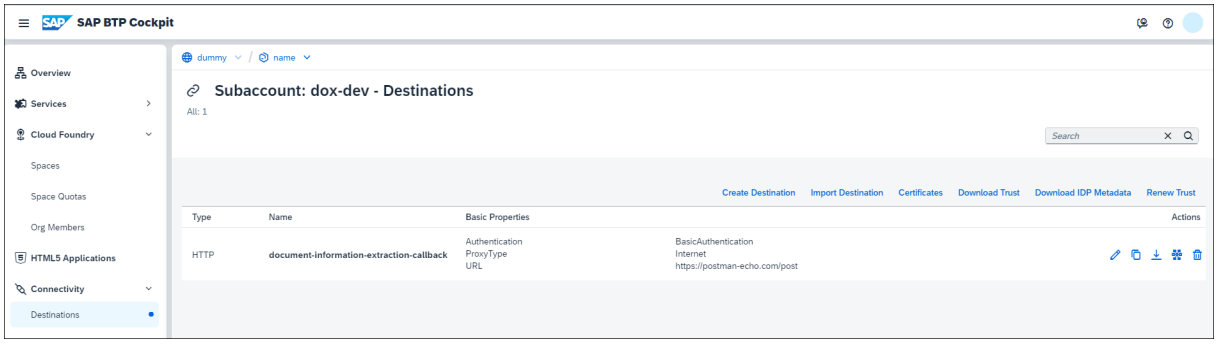


See Consuming the Destination Service.

13.2.2 Creating Destination Configuration for Notifications

Create a new destination configuration that includes the callback URL, and some additional information about authentication credentials and the ProxyType.

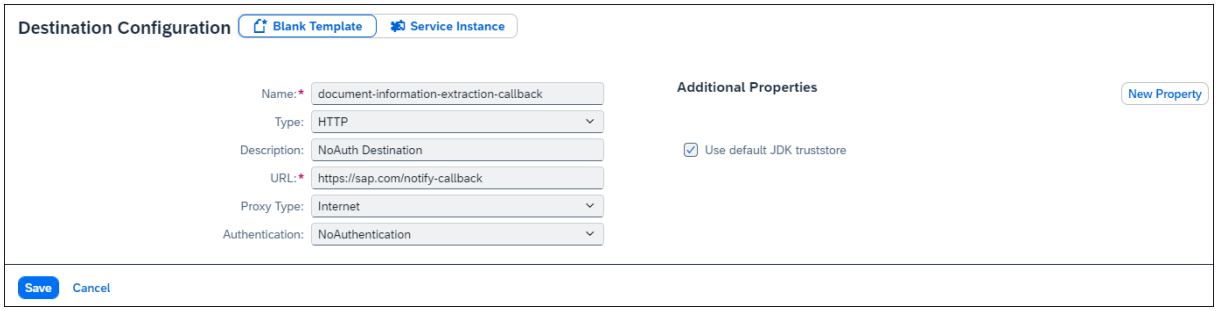
Name the callback endpoint `document-information-extraction-callback`. You can only have one callback endpoint with this name on subaccount level. This destination configuration callback URL must link to an endpoint connected to the Internet.



See Create HTTP Destinations.

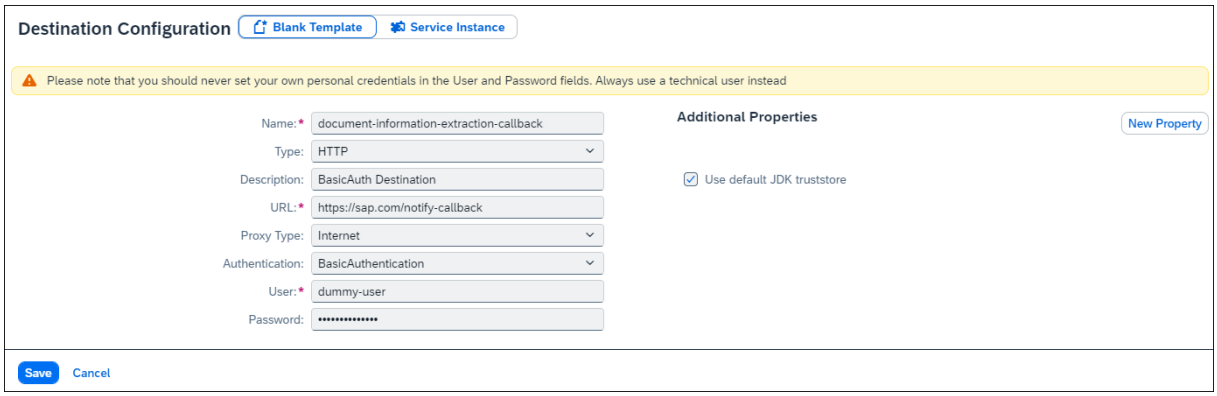
Example

NoAuthentication Destination Configuration:



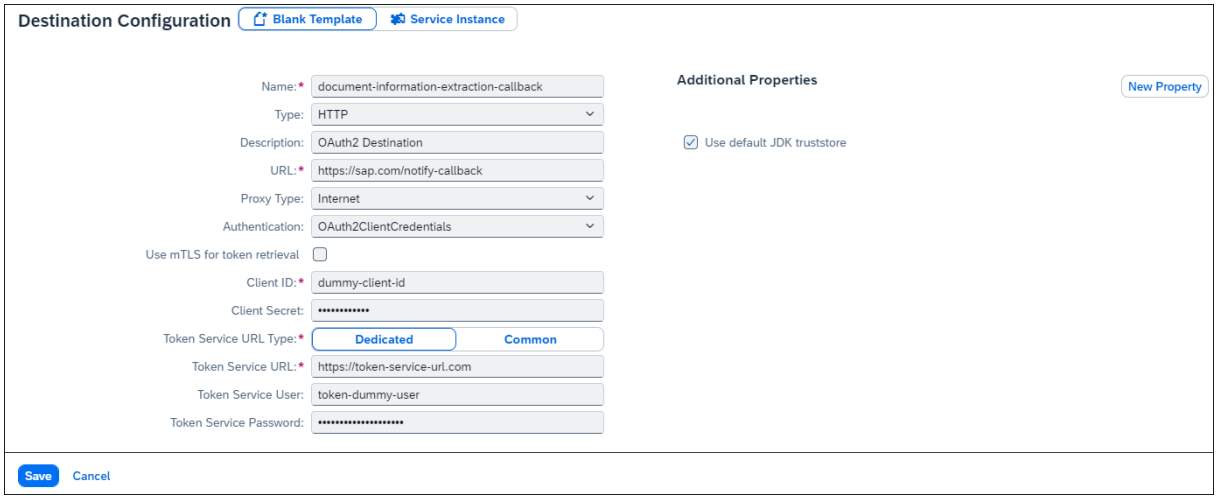
Example

BasicAuthentication Destination Configuration:



Example

OAuth2 Client Credentials Destination Configuration:



13.2.3 Supported Authentication Methods

The following authentication types are currently supported:

- NoAuthentication
- BasicAuthentication
- OAuth2 Client Credentials

See Create HTTP Destinations.

13.2.4 Callback Request Examples

The SAP Document AI callback sends a POST request to the URL specified in the destination configuration with the name `document-information-extraction-callback`.

Example

Payload

The payload is sent with the POST request to the specified callback URL in the destination configuration specified by the customer.

The payload includes the ID of the uploaded document and its status. These two fields are in alignment with the other SAP Document AI API fields:

- The ID field string represents a `<uuid>` representing a document
- The status field string includes the process status which can be either “DONE”, or “FAILED”

This payload indicates a successful processing of the document:

```
{
        "id": "d7c08124-d852-408f-8d46-0466312f6007",
        "status": "DONE"
}
```

Example

NoAuthentication

CURL representation of the POST request with no authentication to the callback URL of the customer:

```
curl --location --request POST 'https://callback.url/notify-callback' \
--header 'Content-Type: application/json' \
--data-raw '{
    "id": "d7c08124-d852-408f-8d46-0466312f6007",
    "status": "DONE"
}'
```

Example

BasicAuthentication

CURL representation of the POST request with basic authentication to the callback URL of the customer:

```
curl --location --request POST 'https://callback.url/notify-callback' \
--header 'Content-Type: application/json' \
--header 'Authorization: Basic dGVzdC11c2VyOnRlc3QtcGFzc3dvcmQ=' \
```

```
--data-raw '{
    "id": "d7c08124-d852-408f-8d46-0466312f6007",
    "status": "FAILED"
}'
```

Example

OAuth2 Client Credentials

CURL representation of the POST request with OAuth2 client credentials to the callback URL of the customer:

```
curl --location --request POST 'https://callback.url/notify-callback' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer
eyJhbGciOiJSUzI1NiIsImprdSI6Imh0dHBzOi8vc2FwLXByb3Zpc2lvbmluZy5hdXRoZW50aWNhdGlvb
i5zYXAuaGFuYS5vbmRlbWFuZC5jb20vdG9rZW5fa2V5cyIsImtpZCI6ImtleS1pZC0xIiwidHlwIjoiSl
dUIn0.eyJqdGkiOiIxNzBhYzY2jU0YmQwOTE0NDhkNjBhZDcyMDQzNyIsImV4dF9hdHRyIjp7ImVuaGFu
Y2VyIjoiWFNVQUEiLCJ6ZG4iOiJzYXAtcHJvdmlzaW9uaW5nI6InNiLXRlbmFudC1vbmJvYXJkaW5nIXQ
xMyIsInNjb3BlIjpbImRveC14c3VhYS1pbnQtdCFiOTM4MC5DYWxsYmFjayJdLCJjbGllbnRfaWQiOiJz
Yi10ZW5hbnQtb25ib2FyZGluZyF0MTMiLCJjaWQiOiJzYi10ZW5hbnQtb25ib2FyZGluZyF0MTMiLCJhe
nAiOiJzYi10ZW5hbnQtb25ib2FyZGluZyF0MTMiLCJncmFudF90eXBlIjoiY2xpZW50X2NyZWRlbnRpYW
xzIiwicmV2X3NpZyI6Ijc3MWQ1DDFmIiwiaWF0Njk4LCJleHAiOjE1ODUxNzQ4OTgsImlzcyI6Imh0dHA
6Ly9zYXAtcHJvdmlzaW9uaW5nLmxvY2FsaG9zdDo4MDgwL3VhYS9vYXV0aC90b2tlbiIsInppZCI6InNh
cC1wcm92aXNpb25pbmciLCJhdWQiOlsic2ItdGVuYW50LW9uYm9hcmRpbmchdDEzIiwiZG94LXhzdWFhL
WludC10IWI5MzgwIl19.ROCb2LQZOGTFE7ZKQVC8T-
kuvzb8DtMjetY8vqeJUt9GC1UA24siGkiagTGPYNzalvlBwLW2b1Thx7WA3OkVIMLiWwG_7AHm6ONjoUz
Ew8v35NMlHALrY97oRPgSZOSCWFzhzKnL6t1Y0G0m83ctQAJaml-wd5NdDSbHyoIkJ3i5qhXC-
rVaNsAnfX9eerJtjYwxvqvIYi9rEewTg-EcRBdWndvB962RFDGDZco_92ZNP4uYN238_0-
ylFKYFF8mdlSivwc8SNscXCojlCAgk_4kYqiM_3ai5FkuXwyZunoPtrNnr77yK5HUyuZUuYmhzy7F6GJI
59VCrPYnELJPiw' \
--data-raw '{
    "id": "d7c08124-d852-408f-8d46-0466312f6007",
    "status": "DONE"
}'
```

13.2.5 Callback Response Status

The status of the callback response should be 200 “OK”, as you can see in the curl response below. Statuses less than 400 are also accepted.

Request

Callback request from SAP Document AI:

```
curl --verbose --location --request POST 'https://callback.url/notify-callback'
\
--header 'Authorization: Basic dGVzdC11c2VyOnRlc3QtcGFzc3dvcmQ=' \
--header 'Content-Type: application/json' \
--data-raw '{
"id": "d7c08124-d852-408f-8d46-0466312f6007",
"status": "DONE"
```

```
}'
```

Response

```
< HTTP/1.1 200 OK
< Content-Type: application/json; charset=utf-8
< Date: Thu, 16 Apr 2020 06:55:41 GMT
<
{}
```

> **Note**
>
> The body of the callback response is not relevant to SAP Document AI, only the response status of 200.

14 Using the SAP Document AI Basic UI (Base Edition and Premium Edition)

Find out how to subscribe to, access, and use the SAP Document AI basic UI.

Related Information

Subscribing to the SAP Document AI Basic UI [page 285]
Using the Key Features of the SAP Document AI Basic UI [page 291]
Best Practices (Base Edition and Premium Edition) [page 364]

14.1 Subscribing to the SAP Document AI Basic UI

To use the SAP Document AI basic UI and other features, you need to subscribe to the service UI application in SAP Business Technology Platform (SAP BTP).

Context

Use either the default identity provider, a custom identity provider, or the Identity Authentication service to handle authentication and authorization tasks in SAP BTP.

- The SAP ID service is the default identity provider for both platform users and business users (in applications) in SAP BTP. You can start using it without further configuration. You can also use a custom identity provider. To do so, you need to integrate trust between the SAP BTP subaccount and any SAML 2.0 identity provider. For more information, see Default Identity Provider, Establish Trust and Federation with UAA Using Any SAML Identity Provider, and Subscribing to the SAP Document AI Basic UI With Identity Providers [page 286].
- The Identity Authentication service provides features that the default identity provider doesn't, such as the ability to connect your corporate identity provider or to define security policies. For more information, see SAP Cloud Identity Services - Identity Authentication and Subscribing to the SAP Document AI Basic UI With the Identity Authentication Service [page 289].

> **Note**
>
> You can create multiple service instances for SAP Document AI. However, we recommend creating only one, unless there's a compelling reason for having more.

> If you do use more than one instance, you can change between instances by choosing *Settings* (*cogwheels icon*) *Change Instance* on the SAP Document AI basic UI. You can specify the instance by entering its name or its ID.

14.1.1 Subscribing to the SAP Document AI Basic UI With Identity Providers

Subscribe to the SAP Document AI basic UI using the default identity provider or a custom identity provider to handle authentication and authorization tasks in SAP BTP.

Prerequisites

- You have an SAP BTP global account and a Cloud Foundry or Kyma subaccount.
- You're a global account administrator.
- You've created a service instance for SAP Document AI.
- You've created business users and user groups in your identity provider.

> **Note**
>
> SAP ID service is the default identity provider, but you can also add a custom identity provider.
>
> For more information, see Establish Trust and Federation with UAA Using Any SAML Identity Provider.

Context

> **→ Tip**
>
> You can also use the *Set up account for SAP Document AI* booster in the SAP BTP cockpit to automate the process. In this case, you don't need to perform the steps for subscribing to the SAP Document AI basic UI described here. See Boosters and the tutorial Use Free Tier to Set Up Account for SAP Document AI and Go to Application.

To manually subscribe to the SAP Document AI basic UI using the default identity provider or a custom identity provider, do the following.

Procedure

1. Open the SAP BTP cockpit and go to your subaccount.

2. Click *Service Marketplace* under *Services* on the left navigation pane.
3. Search for **SAP Document AI** and click the tile with the following description: *Automate your document information extraction processes - SAP Authorization and Trust Management service version* (*appName*: `document-information-extraction-application`).

   The *Overview* page appears.
4. Click *Create*.

   The *New Instance or Subscription* dialog appears.

   > → Remember
   >
   > Before proceeding, check whether you've created an instance for SAP Document AI. If you haven't, create the service instance before continuing with the following steps. Creating a service instance is a prerequisite for using the SAP Document AI basic UI.
5. Choose the *Subscriptions default* plan.
6. Click *Create*.
7. Follow the steps described in Assign Users to Role Collections to assign users to the relevant role collections for SAP Document AI. See Role Collections [page 287].
8. Click *Instances and Subscriptions* on the left navigation pane.
9. Click the three dots at the right end of the row with the SAP Document AI application and select *Go to Application* from the dropdown.

   The logon screen appears.
10. Enter your *User* and *Password*, previously created in your identity provider, to log on.

    > ⓘ Note
    >
    > You may not have to log on explicitly at this point if the following is true:
    > - You've configured your user to log in with a certificate.
    > - Your user already has an active session on your identity provider.

    The SAP Document AI basic UI appears.

14.1.1.1 Role Collections

Find out about the role collections that you can use with the SAP Document AI basic UI. You can assign users from default identity providers, and from custom identity providers, to a role collection.

SAP Document AI provides default role collections that you can assign to users. These role collections determine which actions a user can carry out on the SAP Document AI basic UI.

The default role collections and associated actions are as follows:

Role Collection	Actions
`Document_Information_Extraction_UI_Document_Viewer`	View documents in the UI application.

Role Collection	Actions
`Document_Information_Extraction_UI_End_User`	View documents, edit extraction results, and use schemas and templates when uploading documents.
`Document_Information_Extraction_UI_Templates_Admin`	Manage the template and schema lifecycle. View documents and edit extraction results.

The default role collections grant users the following read/write permissions:

	Document		Template/Schema	
	Read	Write	Read	Write
`Document_Information_Extraction_UI_Document_Viewer`	✓			
`Document_Information_Extraction_UI_End_User`	✓	✓	✓ **Note** This role allows users to select schemas and templates when uploading documents on the *Document* UI. However, it doesn't provide access to the *Schema Configuration* and *Template* UIs.	
`Document_Information_Extraction_UI_Templates_Admin`	✓	✓	✓	✓

14.1.2 Subscribing to the SAP Document AI Basic UI With the Identity Authentication Service

Subscribe to the SAP Document AI basic UI using the Identity Authentication service to handle authentication and authorization tasks in SAP BTP.

Prerequisites

- You have an SAP BTP global account and a Cloud Foundry or Kyma subaccount.
- You're a global account administrator.
- You've created a service instance for SAP Document AI.
- You have a tenant of SAP Cloud Identity Services.
  For more information, see Tenants.
- The SAP Cloud Identity Services tenant is associated with the customer IDs of the relevant global account of SAP BTP.
  For more information, see Reuse SAP Cloud Identity Services Tenants for Different Customer IDs.
- You've established trust and federation between SAP Authorization and Trust Management service and SAP Cloud Identity Services.
  For more information, see Establish Trust and Federation Between SAP Authorization and Trust Management Service and SAP Cloud Identity Services.

Context

To manually subscribe to the SAP Document AI basic UI using the Identity Authentication service, do the following.

Procedure

1. Open the SAP BTP cockpit and go to your subaccount.
2. Click *Service Marketplace* under *Services* on the left navigation pane.
3. Search for **SAP Document AI** and click the tile with the following description: *Automate your document information extraction processes - Identity Authentication service version* (*appName*: `document-information-extraction-application-ias`).

   The *Overview* page appears.
4. Click *Create*.

   The *New Instance or Subscription* dialog appears.

> → Remember
>
> Before proceeding, check whether you've created an instance for SAP Document AI. If you haven't, create the service instance before continuing with the following steps. Creating a service instance is a prerequisite for using the SAP Document AI basic UI.

5. Choose the *Subscriptions default* plan.
6. Click *Create*.
7. Sign in to the administration console for SAP Cloud Identity Services.
8. Follow the steps described in Assign Authorization Policies to assign to users the relevant authorizations for SAP Document AI. See Authorization Policies [page 290].
9. Go back to the SAP BTP cockpit and go to your subaccount.
10. Click *Instances and Subscriptions* under *Services* on the left navigation pane.
11. Click the three dots at the right end of the row with the SAP Document AI application and select *Go to Application* from the dropdown.

    The logon screen appears.
12. Enter your Identity Authentication service *Email or User Name* and *Password* to log on.

    The SAP Document AI basic UI appears.

14.1.2.1 Authorization Policies

Find out about the authorization policies that you can use with the SAP Document AI basic UI. You can assign authorizations to users from the Identity Authentication service.

SAP Document AI provides default authorization policies that you can assign to users. These authorization policies determine which actions a user can carry out on the SAP Document AI basic UI.

The default authorization policies and associated actions are as follows:

Authorization Policy	Actions
`doxDocumentViewer`	View documents in the UI application.
`doxEndUser`	View documents, edit extraction results, and work with schemas and templates.
`doxTemplateAdmin`	Manage the template and schema lifecycle. View documents and edit extraction results.

The default authorization policies grant users the following read/write permissions:

	Document		Template/Schema	
	Read	Write	Read	Write
`doxDocumentViewer`	✔			

`doxTemplateAdmin`	✓	✓	✓	
`doxTemplateAdmin`	✓	✓	✓	✓

14.2 Using the Key Features of the SAP Document AI Basic UI

Find out how to use the SAP Document AI basic UI features for documents, schemas, and templates.

Use the following features to handle a wide range of tasks:

- Document [page 295]
- Schema Configuration [page 306]
- Template [page 320]

> **Note**
>
> For recommendations on getting better extraction results, see Optical Character Recognition (OCR): Best Practices [page 364].

For instructions on how to set the language of the SAP Document AI basic UI, see Set Screen Language [page 293].

For information about how to use the integrated digital assistant to find answers to support-related questions, see Built-In Support [page 294].

14.2.1 UI Settings

Find out about the UI settings for the SAP Document AI basic UI.

You can change UI settings by choosing the dropdown for your user name at the top right of the screen and then choosing *User Settings* > *UI Settings*.

Here, you can set the thresholds for the extraction confidence ranges (high, medium, and low) and the color associated with each range.

You can also activate features that aren't available by default on the SAP Document AI basic UI.

Related Information

Activate Features [page 292]

Change Confidence Range Settings [page 293]

14.2.1.1 Activate Features

Find out how to activate features that aren't available by default on the SAP Document AI basic UI.

Context

Some features of the SAP Document AI basic UI aren't available by default. If you wish to use these features, you must first activate them.

To do so, proceed as follows:

Procedure

1. Open the dropdown for your user name at the top right of the screen.
2. Select *User Settings* (, *settings*).
3. Select *UI Settings* (, *customize*)
4. Select *Feature Activation*.

   > **Note**
   >
   > Currently, *Schema Field Categories* is the only feature available here.

5. Set *Schema Field Categories* to *On* if you wish to use field categories in addition to the standard features.

   > **→ Remember**
   >
   > This setting is browser specific: If you enable the feature in one browser and later open the SAP Document AI basic UI in another, you must repeat the preceding steps before you can use the feature.

14.2.1.2 Change Confidence Range Settings

Find out how you can customize confidence ranges and the associated color coding on the SAP Document AI basic UI.

Context

When you use the *Document* feature to view the extraction results for documents uploaded to SAP Document AI, you see the extraction confidence ranges for header fields and line items.

The default colors for these ranges are green for high, orange for medium, and red for low.

By default, the lower thresholds for the confidence ranges are as follows:

- High: 80%
- Medium: 51%
- Low: 0%

You can change the default color and the lower threshold of each confidence range by doing the following:

Procedure

1. Open the dropdown for your user name at the top right of the screen.
2. Select *User Settings* (*, settings*).
3. Select *UI Settings* (*, customize*)
4. Choose *Confidence Level*.
5. Set the lower threshold for one or more of the confidence ranges *High*, *Medium*, and *Low*, as desired.
6. Set the color for one or more of the confidence ranges, as desired.
7. Choose *Apply* when you've completed your changes.

   If you wish to revert to the default settings, choose *Reset*.

14.2.2 Set Screen Language

Select the screen language for the SAP Document AI basic UI.

Context

The SAP Document AI basic UI is currently available in the following languages:

Language	Language Code
German	`de`
English	`en`
Spanish	`es`
French	`fr`
Italian	`it`
Japanese	`ja`
Korean	`ko`
Portuguese	`pt`
Russian	`ru`
Chinese Simplified	`zh_CN`
Chinese Traditional	`zh_TW`

> **Note**
>
> The SAP Companion in-app help is also available in the language that you select for the UI. Display this help by choosing *(question mark)* in the top right of the screen.

To set the screen language, do the following:

Procedure

1. Open the dropdown for your user name at the top right of the screen.
2. Select *Languages*.
3. Select your preferred language.
4. Complete your entries by choosing *Apply*.

14.2.3 Built-In Support

Use the integrated digital assistant on the SAP Document AI basic UI to quickly find answers to your support-related questions.

Context

The SAP Document AI basic UI includes Built-In Support, an embedded digital assistant that allows you to search for support-related information without leaving the UI.

> **Note**
>
> If you have an s-user ID and the associated authorizations, Built-In Support also allows you to report issues, review cases, and chat with an expert or a chatbot.

Procedure

1. Choose *Built-In Support* (*headset icon*).

   The Built-In Support initial screen appears. This screen gives you access to the basic support functions that are available to all users. Here, you can enter keywords in the intelligent search field to find relevant information in the documentation for SAP Document AI basic UI. You can also call up recommended information about the service directly via the links provided.

2. Choose the *Help Information* (*hint icon*).

   The *Contextual Help* screen appears. Here, you can access information, including tutorial videos, the Built-In Support documentation, the privacy statement, and the terms of use.

3. Choose *(person icon)* to view system context information.

   If you have an s-user ID, you can sign in to access more Built-In Support functions. These functions allow you to report issues via case or by chatting with an expert. In addition, you can review your cases.

14.2.4 Document

Use this SAP Document AI basic UI feature to upload documents to the service and get machine learning predictions for the extracted header fields and line items.

Context

Use this feature to do the following:

- Add Document [page 296]
- View and Edit Extraction Results [page 298]
- Delete Documents [page 298]

For additional information on working with documents, see the best practices under Document: Best Practices [page 375].

14.2.4.1 Add Document

Procedure

1. Open the SAP Document AI basic UI, as described in Subscribing to the SAP Document AI Basic UI [page 285].
2. Click the *Document* icon in the left navigation pane.
3. Click *Upload Document* (+ *add icon*) at the top right of the screen.

   The *Select Document* area appears. Here, you can upload a maximum of 50 files. Add files individually or select a folder containing multiple files. Each file can have a maximum size of 50 MB and 100 pages. The service supports the following document types: invoice, payment advice, purchase order, and custom in PDF, JPG, PNG, and TIFF format.
4. Select the document type.
5. Select a schema. This step is mandatory.

   > ⓘ Note
   >
   > The SAP Document AI basic UI automatically proposes an SAP schema that matches the selected document type. Preconfigured SAP schemas are available for the following standard document types: purchase order, payment advice, and invoice. In addition, there's an SAP schema for custom documents (`SAP_OCROnly_schema`).
   >
   > If your administrator has created and activated other schemas for the selected document type, you can select one from the *Schema* dropdown.
6. Select a schema version.

   > ⓘ Note
   >
   > This step is optional. If you don't select a version, the SAP Document AI basic UI uses version 1 of the schema that you selected. In this case, if version 1 is inactive an error message appears.
7. Optionally choose a template, making sure that it matches the document type and schema that you selected. You can also use the *Detect automatically* function to get the service to search for the correct template.

   > → Remember
   >
   > Templates are available only if your administrator has created and activated them.
8. Upload one or more document files by dragging and dropping them or by clicking + *(add icon)*.
9. Click *Confirm*

   You now see the documents that you've uploaded, with *Document Name*, *Upload Date*, and *Status*. When the header fields and line items defined in the selected schema have been extracted, the document status changes from "PENDING" to "DONE". You can now review the extraction results and make any corrections. If an error occurs during document processing, the status changes from "PENDING" to "FAILED". In this case, you must upload the document again.

10. In the top right of the screen, you see the `clientId` (c_00, for example) of the listed uploaded documents. Click *Change Client* and select another `clientId` (c_01, for example) to see the list of uploaded documents that have a different `clientId`.

    Before you can change clients, there must be at least one client in addition to *Default*. You can't create clients on the SAP Document AI basic UI. To add new clients, use the endpoint Create Client [page 150].

    > **Note**
    >
    > You can restrict user access to specified clients by using the `clientSegregation` configuration key. For more details and guidance, see Configuration Keys [page 161] and Client Segregation in Document Information Extraction: A Brief Guide.

14.2.4.1.1 Download Troubleshooting Data

Find out how to download data needed to troubleshoot issues with adding documents to the SAP Document AI basic UI.

Context

For each document that you add to the SAP Document AI basic UI, you can download a zip folder with files for troubleshooting.

Procedure

1. Choose the *Document* icon in the navigation on the left of the screen.
2. Now, choose a document to display its details.

   The details pane appears on the right of the screen.
3. Choose *(Download Troubleshooting Data)* to the right of the document status at the top of the details pane.

   The SAP Document AI basic UI downloads a zip folder to your local machine. The files in the folder include the document that you uploaded as well as details of the document, template, and schema.

   You can either upload this data to an SAP support incident or use it to do your own troubleshooting.

14.2.4.2 Delete Documents

Procedure

1. In the left navigation pane, click the *Document* icon.
2. On the *Documents* overview screen, select the documents you want to delete by choosing the relevant checkboxes.

   To select all the documents in the list, choose the checkbox above the table.
3. Click *Delete* and then click *OK* to delete the documents you selected. These documents are then removed from the *Documents* list.

   You can also delete individual documents by choosing *Delete* on the document detail screen.

   > → Remember
   >
   > You can't delete documents that are associated with templates. In such cases, you must first navigate to the *Template* overview screen and dissociate the document from the template. For further details, see Add Documents and Activate/Deactivate Template [page 322].

14.2.4.3 View and Edit Extraction Results

Context

> → Remember
>
> SAP Document AI typically provides extraction results for an average document in about 30 seconds.
>
> However, processing can take longer if the task involved is more complex – for example, if the documents processed are large.
>
> Before you use the service for important or time-sensitive tasks, we strongly recommend running mass tests to assess the performance of the service and make sure it meets your requirements.

Procedure

1. Click the *Document* icon in the left navigation pane.
2. Choose the row on the *Documents* screen with the document that you want to view. You now see the page preview of the document file and the extraction results for header fields and line items.

> **Note**
>
> If your device has a small screen, and you have difficulty checking the fields in the page preview, download the PDF document for full-screen display.

You can also see the *Extraction Confidence Range* classified by colors: red (confidence between 0% and 50%), orange (confidence between 51% and 79%), and green (confidence between 80% and 100%).

> **Note**
>
> You can set the lower threshold and change the color for each extraction confidence range under *UI Settings*. For further information, see Change Confidence Range Settings [page 293].

> **Tip**
>
> Use the filters at the top of the *Edit* pane to set which extraction confidence ranges to display. You can select either a single range or all of them.

To view the extraction confidence score for each header field and line item extracted, as well as the field name and description, hover over a field name, for example *Invoice Number*.

Hovering over a field name also displays the raw value for that field – in other words, the value before postprocessing. Raw values can differ from extraction results. For example, if the *Delivery Date* field of a purchase order contains "ASAP", SAP Document AI can't convert this text into a date and therefore returns a null value. Viewing raw values enables you to identify the content of fields that couldn't be extracted.

> **Tip**
>
> If the `label` property is defined for schema fields, user-friendly names for header fields and line items are displayed in the extraction results. For further information, see Add Fields to Schema Version [page 249].

> **Note**
>
> If you've activated the *Schema Field Categories* and assigned fields to categories in the schema used for the extraction, the fields appear under their respective categories.
>
> If you've used the Enrichment Data API [page 213] to create enrichment data entities, and if these entities match fields extracted from your document, the pane where you see extraction results for your document includes an *Enrichment Fields* section. This section shows the enrichment data matched to extracted fields. If you don't use the Enrichment Data API, the *Enrichment Fields* section doesn't appear on the UI.

Hovering your cursor over the label of an enrichment field displays a tooltip showing the ID and confidence as well as the enrichment method used. Information about the method helps you quickly troubleshoot any issues with your master data. To find out more about the methods available, see Get Result [page 183].

3. If corrections are required, and the document status is "DONE", you can edit the extraction results under *Header Fields* and *Line Items*.

   To download the unedited results, click ⭳ *(download icon)* and choose *csv*, *json*, or *txt*.

4. Click *Edit*.

> → Tip
>
> To avoid losing your work if there's an outage, activate *Autosave*. The service then saves your edits automatically every 10 seconds.

You can edit extracted values manually on the right of the screen. You can also select them from the page preview in the middle of the screen. To do the latter, hover your mouse over the page preview. The mouse pointer changes to a crosshair cursor. Position the cursor at the corner of the value that you wish to select. Then, hold down the left mouse button. Move the cursor diagonally to the opposite corner to draw a bounding box around the value you want to select. On the *Assign Field* dialog, select the appropriate field type, either *Header* or *Line Item*. Then, select the field name from the *Field* dropdown. Finally, add or change the value, as necessary. If the field type is *Line Item*, set the number in the *Row Index* field. Make sure that the number that you enter here matches the appropriate line item in the *Label* column on the right of the screen. Click *Apply* on the *Assign Field* dialog to confirm your edits.

> ⓘ Note
>
> To prevent SAP Document AI from extracting unwanted or irrelevant characters, you can also draw bounding boxes around parts of the field values. In this case, you must edit the value so that it includes only the values in the bounding box. If you associate documents edited in this way with templates, the templates extract only those characters in the part of the field defined by the bounding box. This approach can be useful if you want to exclude punctuation from the extraction, for example.

> → Tip
>
> If you've uploaded your documents without a template, you can create a template here using the extraction values you've edited.
>
> For instructions on how to do so, see Create Template from Document Extraction Results [page 325].
>
> Note that this option is no longer available after you confirm the document.
>
> Alternatively, you can associate the document with an existing template by choosing *Add to Template*.

> → Remember
>
> If you associate a document with a template and then use that template to extract information from the same document, the extraction values can differ from the ones you entered and confirmed during editing.
>
> The technical reason for differences of this kind is that the SAP Document AI basic UI extracts data based on heuristics and not on exact matching of bounding boxes.

5. Delete any bounding boxes that you don't need. In *Edit* mode, hover over the tooltip for the relevant bounding box in the page preview. Double-click the tooltip to display the *Assign Field* dialog and then choose *Delete* to remove the bounding box and its coordinates.
6. Save your changes.

   To download your edited results, click ⭳ *(download icon)* and choose *csv*, *json*, or *txt*.
7. You can also confirm the document here. To do so, choose *Edit* again and then choose *Confirm*. When you confirm documents, the extraction confidence score of all header and line item fields is set to 1.0 (100%).

> ⚠ Caution
>
> Do not confirm unreviewed documents, which can include incorrect extraction results. Once the document status changes from “DONE” to “CONFIRMED”, you can no longer change the extraction results.
>
> For additional considerations when you confirm documents, see Confirm Documents [page 301].

14.2.4.3.1 Confirm Documents

There are a few points to bear in mind when you confirm documents.

- SAP reserves the right to use confirmed documents in the reporting of accuracy values and for analytics.
- By default, SAP Document AI doesn’t use your documents to retrain the solution's machine learning models. To allow SAP to use your documents for this purpose, set the `dataFeedbackCollection` configuration key at API level to *true*. A checkbox appears on the UI requesting your consent each time you confirm documents.
- If you allow SAP to use your documents for retraining, SAP Document AI automatically checks them for any personally identifiable information (PII). If a document contains PII data, it isn’t used for retraining. You can deactivate these checks by setting the `performPIICheck` subconfiguration at API level to *false*.

For further details of API-level settings, see Create Configuration [page 159] and Configuration Keys [page 161].

14.2.4.4 Instant Learning (Premium Edition)

Find out how to use the instant learning feature of the SAP Document AI basic UI to improve information extraction using generative AI.

The instant learning feature is available with the premium edition service plan. It helps you quickly and easily improve extraction results returned by generative AI.

> → Remember
>
> Before you can use instant learning, you must first activate the feature using the `enableInstantLearning` configuration key. For step-by-step guidance on how to do so, see Activate the Instant Learning Feature with Swagger UI. For further details, see Create Configuration [page 159] and Configuration Keys [page 161].

With instant learning, when you edit extraction results for a document and confirm your entries, SAP Document AI learns from your feedback immediately and uses it to improve extraction quality the next time you upload a document that includes fields of the type that you edited.

In addition, instant learning uses your feedback to find the model that’s best suited to your particular needs. It also takes your input into account when determining extraction confidence ranges for fields in a particular document layout. When you repeatedly confirm a value for a field in the same document layout, the confidence rating for that entry increases accordingly. If the field appears in a different document layout, you must confirm the field value in this new layout to increase its confidence rating.

You can use instant learning with the preconfigured SAP schemas for the following standard document types: invoice, payment advice, and purchase order.

> → Remember
>
> If you copy and edit an SAP schema and add fields for use with instant learning, these fields must have the setup type *auto*.

If you prefer, you can work with the instant learning feature by using the following API endpoints:

- Create Schema [page 232]
- Add Fields to Schema Version [page 249]
- Upload Document [page 172]
- Get Result [page 183]
- Save Ground Truth [page 199]
- Confirm Document [page 202]

Related Information

Create Schema for Instant Learning and Add Data Fields [page 302]
Add Document and Edit Extraction Results for Instant Learning [page 303]
Instant Learning (Premium Edition): Best Practices [page 381]

14.2.4.4.1 Create Schema for Instant Learning and Add Data Fields

Create your own schemas for use with the instant learning feature.

Context

To create your own schema for use with instant learning, do the following.

> ⓘ Note
>
> You can also use instant learning with copies of the preconfigured SAP schemas for the standard document types invoice, payment advice, and purchase order.
>
> If you add fields to a copy of an SAP schema for use with instant learning, these fields must have the setup type *auto*.

Procedure

1. Open the SAP Document AI basic UI.
2. In the left navigation pane, choose *Schema Configuration*.
3. In the top right of the screen, click *Create*.
4. Enter a name and a description for the new schema.

   > → Remember
   >
   > For extraction using generative AI, the description acts as the prompt for document processing.

5. Select the document type.
6. Select the OCR engine type *Document*.
7. Choose *Create*.
8. Choose the row containing your new schema to display the details pane.
9. Add the fields for which you want to edit extractions for instant learning.

   > → Remember
   >
   > To use a schema for instant learning, you must include at least one field with the setup type *auto*. Select this setup type for all fields with which you want to use instant learning.
   >
   > You can also include fields with the setup type *manual* in your schema. However, these fields can't be used with instant learning.

10. After completing your entries, activate your new schema.

Related Information

Add Document and Edit Extraction Results for Instant Learning [page 303]

14.2.4.4.2 Add Document and Edit Extraction Results for Instant Learning

Find out how to edit extraction results and have your changes used by instant learning.

Context

Improve extraction results by editing field values and using your changes for instant learning.

Procedure

1. Open the SAP Document AI basic UI.
2. Click the *Document* icon in the left navigation pane.
3. Click *Upload Document* (+ *add icon*) at the top right of the screen.
4. Select the document type.
5. Choose the schema that you created for instant learning.

   You can also use a template to extract information from fields that can't be used for instant learning. However, for simplicity's sake, we won't use a template in this example.
6. Upload one or more document files by dragging and dropping them or by clicking + *(add icon)*.
7. Click *Confirm*.
8. Wait until the document you uploaded has the status "DONE" before going on to the next step.
9. Choose the row on the *Documents* screen with the document that you just uploaded.

   You now see the page preview of the document file and the extraction results for header fields and line items.
10. Click *Edit* to edit the extraction results for the fields that you want to use for instant learning.
11. On the panel on the right of the screen, select the label of a field defined in the schema you created for instant learning.
12. If the value for this field is incorrect, enter the correct value in the *Value* column.
13. Repeat the preceding 2 steps until you have made all the necessary edits to fields used for instant learning.
14. Save your changes.
15. Complete your entries by clicking *Confirm*.

> **Note**
>
> Because you're using instant learning, you don't have to click in the checkbox to grant permission to use your extraction results for model training.

Results

Your edits are now used to improve the extraction results for the relevant fields.

14.2.4.4.3 Export/Import Documents

Export documents that you've edited and confirmed for instant learning in one client or instance and import them for use in another.

Context

Your feedback for instant learning only enhances extraction in the client or instance in which you originally edited and confirmed the relevant documents. To use this feedback in a different client or instance, you must first export the documents along with all the relevant information and then import them to the new context.

Procedure

1. Open the SAP Document AI basic UI.
2. Click the *Document* icon on the left navigation pane.
3. Select a document that you've edited and confirmed for instant learning and now want to use in another client or instance.
4. Click *Export Document* in the top right of the page preview for the document.

   If the button isn't immediately visible, click ••• *(overflow icon)*.

   A `.zip` folder is downloaded to your machine.
5. Click *Change Client* and choose a different client.

   Alternatively, if multiple instances are available, click *Settings* (⚙ *cogwheels icon)* and then *Change Instance*.
6. Click ↑ *(Upload Document)* on the document overview page to import the `.zip` folder that includes the document that you exported in step 4.

   > **Note**
   >
   > This folder also includes the schema associated with the document in its original context. If a schema with the same name already exists in the new context, you're prompted to rename the schema before importing it.

   > **→ Tip**
   >
   > You can also forward exported files to support for use in troubleshooting.

Results

The feedback that you entered for the imported document can now be used by instant learning to enhance extraction in the new client or instance.

Related Information

Getting Support [page 446]

14.2.5 Schema Configuration

Use this SAP Document AI basic UI feature to create schemas containing data fields found in standard or custom document types. As an administrator, you can use these schemas as a basis for creating templates. End users must select a schema and can also select a corresponding template when adding documents.

Context

> **Note**
>
> This feature is available only to users with the administrator role (role collection `Document_Information_Extraction_UI_Templates_Admin`).
>
> For additional information on using schemas, see the best practices under Schema Configuration: Best Practices [page 365].

A schema contains a list of header fields and line item fields representing the target information that you want to extract from a particular type of document. You must select a schema when you add documents to the SAP Document AI basic UI.

> **→ Tip**
>
> The SAP Document AI basic UI provides preconfigured SAP schemas for the following standard document types: purchase order, payment advice, and invoice. You can use these schemas unchanged to upload documents.
>
> You can't edit original SAP schemas. For standard document types, always create a copy of the appropriate SAP schema and then change the default fields, as required.
>
> In addition to the SAP schemas for standard document types, the *SAP_OCROnly_schema* is available for extracting information from images. You can't copy this schema because it has no fields.

> **Note**
>
> To extract text from images captured by camera, create a schema for a custom document type and use the OCR engine type *Scene Text*.
>
> Extraction results for scene text appear in the API, not on the SAP Document AI basic UI.

For details of extracted header fields and line items, see the following sections of the SAP Document AI documentation:

- Extracted Header Fields (Base Edition and Premium Edition) [page 387]

- Extracted Line Items (Base Edition and Premium Edition) [page 402]

For information about limitations on extraction from tables, see Technical Constraints [page 383].

Use this feature to do the following:

- Create Schema [page 307]
- Edit Schema [page 308]
- Create Copy of Schema [page 309]
- Add Data Fields [page 309]
- Use Schema Field Categories [page 314]
- Activate/Deactivate Schema [page 315]
- Delete Schema [page 317]
- Use Schema Versions [page 318]

14.2.5.1 Create Schema

Procedure

1. Open the SAP Document AI basic UI, as described in Subscribing to the SAP Document AI Basic UI [page 285].
2. In the left navigation pane, choose *Schema Configuration*.
3. In the top right of the screen, click *Create*.
4. Enter a name and optionally a description for the new schema.

   > → Tip
   >
   > To get better results for extractions with generative AI (available with the premium edition service plan), you can use the schema description value. This value is used in the prompt for document processing with large language models (LLMs).

5. Select the appropriate type of document.

   If you select *Custom* here, you must also select an OCR engine type. To extract text from images, select *Scene Text*; otherwise, select *Document*.

   > → Remember
   >
   > Extraction results for scene text recognition appear in the API, not on the SAP Document AI basic UI.

6. Choose *Create*.

   The SAP Document AI basic UI creates your new schema with the version number 1.

7. Choose the row containing your new schema to display the details pane. Here, you can add data fields and also edit, copy, activate/deactivate, or delete the schema, as described in the following sections.

> → Remember
>
> You can't add data fields to schemas created with document type *Custom* and OCR engine type *Scene Text*.
>
> In schemas created using document type *Custom* and OCR engine type *Document*, you can add data fields. In this case, no default extractors are available.

14.2.5.2 Edit Schema

Procedure

1. In the left navigation pane, choose *Schema Configuration*.
2. On the *Configurations* screen, choose the row containing the schema that you want to edit.

   You now see the schema details.
3. To change the schema, click *Edit*.
4. In the *Edit Schema* dialog, you can change the name of your schema and add, remove, or edit the description.

> → Remember
>
> If a schema is currently active, deactivate it before editing. When you deactivate a schema, its status on the *Configurations* screen changes to "INACTIVE".
>
> You can't deactivate schemas that provide the basis for templates. Otherwise, any changes to the schema affect the field definitions for the relevant templates.
>
> Before deactivating a schema of this kind, first deactivate all templates based on it and then delete them.
>
> Once you've completed your changes, activate the schema again.

> → Remember
>
> You can edit the name only for version 1 of a schema. In this case, all versions, including 1, must be in a state other than "ACTIVE". Any changes that you make to the schema name apply across all versions.
>
> You can edit the descriptions of individual versions provided that they don't have the state "ACTIVE". Any changes that you make to descriptions only affect the versions that you edited.

14.2.5.3 Create Copy of Schema

Use this feature to copy SAP or custom schemas. With the exception of *SAP_OCROnly_schema*, SAP schemas support standard document types.

Context

You can use preconfigured SAP schemas unchanged to add documents and create templates. You can also copy and edit SAP schemas as a basis for configuring schemas of your own.

> **Note**
>
> You can't copy *SAP_OCROnly_schema*. This schema is available for custom documents and OCR (optical character recognition) output only and has no fields.

Procedure

1. In the left navigation pane, choose *Schema Configuration*.
2. Click *(copy icon)* in the row of the schema you want to copy on the *Configurations* screen.

   In the *Copy Schema* dialog, the original schema name, followed by "_copy", appears automatically.
3. Edit the name as required and add an optional description.
4. Click *Copy*.

   The copy you've created now appears in the *Schemas* list, with the status "INACTIVE".

14.2.5.4 Add Data Fields

Find out how to add header fields and line items to your schemas.

Procedure

1. In the left navigation pane, choose *Schema Configuration*.
2. On the *Schemas* screen, choose the row containing the schema you want to add data fields to.
   You now see the schema details.
3. If the schema has the status "ACTIVE", you must deactivate it before you can add data fields. In this case, click *Deactivate*.

> → Remember
>
> You can't deactivate schemas that provide the basis for templates. Otherwise, any changes to the schema would affect the field definitions for the relevant templates.
>
> Before deactivating a schema of this kind, first deactivate all templates based on it and then delete them.

4. To add a header field to the schema, click *Add* for *Header Fields*.
5. On the *New Field* panel, enter the name of the header field you want to extract, an optional field label, and an optional description.

> → Tip
>
> Use the *Label* option to define user-friendly names for header and line item fields. Any field labels that you enter here replace the technical field names in the pane where you see extraction results for a document in the *Document* feature of the SAP Document AI basic UI.

> ⓘ Note
>
> If you've enabled the *Schema Field Category* feature, you can also assign the data field to an appropriate category. For more information, see Assign Schema Fields to Categories [page 315].

6. Next, select the data type – either *country/region*, *currency*, *discount*, *date*, *number*, *string*.

> → Remember
>
> If you use the premium edition service plan, you can also select the data type *list of values*. For details of this data type, see .

> ⓘ Note
>
> The data type *country/region* extracts the values in a two-letter code (alpha-2) ISO 3166 format. For example, DE for Germany, FR for France, GB for United Kingdom, and US for United States.

7. In the *Setup Type* dropdown, use the prefilled value (*auto* or *manual*) or change it in line with your needs.

> ⓘ Note
>
> Which setup type you select here depends on a number of factors, including document type, preferred extraction method, and which service plan you're using.
>
> For details of setup types and associated factors, see Setup Types [page 311].

8. Click *Add*.
   On the *Configurations* panel on the left of the screen, the status of the schema changes to "DRAFT".
9. If you want to edit the data field, click either the link in the *Field Name* column or the ✎ *(edit icon)* in the relevant row under *Action*.
10. To add line item fields to the schema, click *Add* for *Line Item Fields*.
11. Enter the data for the new line item field in the same way as you did for the header field.

Related Information

Setup Types [page 311]

14.2.5.4.1 Setup Types

Learn about the setup types available when you add data fields to schemas. Find out how these setup types relate to document types, extraction methods, and default extractors.

Available Setup Types

When you add data fields to a schema on the SAP Document AI basic UI, you can select one of the following setup types:

- *auto*
- *manual*

These setup types support extraction using different methods, depending on whether the schema was created for a standard or for a custom document type.

Default Values

When you first call up the *Add Data Fields* dialog, the service prefills the *Setup Type* field. The default values depend on the document type and which edition of SAP Document AI you use:

- Premium edition
  - Schemas for standard and custom document types: *auto*
- Base edition
  - Schemas for standard document types: *auto*
  - Schemas for custom document types: *manual*

You can change these prefilled values in line with your needs.

Document Types, Setup Types, Extractions Methods, and Default Extractors

The following table shows the various combinations of document type and setup type and how they relate to the use of default extractors. These combinations determine which extraction method SAP Document AI uses:

Document Type for Schema	Setup Type	Select Default Extractor?	Extraction Method
Standard	*auto*	Yes	Solution's machine learning models
		No	Generative AI
	manual	Not applicable	Template
Custom	*auto*	Not applicable	Generative AI
	manual	Not applicable	Template

→ Remember

If you've activated the instant learning feature (available only with the premium edition service plan), any fields that you want to use it with must have the setup type *auto*.

→ Tip

The setup type *auto* without default extractor (extraction method: generative AI) is available with the premium edition service plan. See Service Plans [page 104] and Metering and Pricing [page 108].

However, if you want to try out extraction using generative AI, you can do so with an SAP BTP trial account. Simply follow the steps in the tutorial: Use Trial to Extract Information from Custom Documents with Generative AI and SAP Document AI

→ Remember

If rows in your document include multiple lines, SAP Document AI can't accurately extract individual elements.

⚠ Caution

Always validate information extracted using generative AI before using it for critical applications.

To extract information from documents **without using generative AI**, do the following when adding fields to your schema:

- Select setup type *auto* with a default extractor (standard document types only).
- Alternatively, select setup type *manual* (standard and custom document types).

In the first case, SAP Document AI uses the solution's machine learning models; in the second, you use a template.

As of October 9, 2023, the setup type *default* is no longer available for new schemas. If an existing schema includes fields added before this date with the setup type *default*, you can use only this setup type when

adding new fields. Schemas created before this date that don't yet include any fields offer you the choice of *auto* or *manual* as setup type.

If you copy SAP schemas for standard document types or old custom schemas that include fields with the setup type *default*, the copied fields and any new ones that you add also support the setup types *auto* and *manual*.

Related Information

Add Fields to Schema Version [page 249]
Extraction Using Generative AI (Premium Edition): Best Practices [page 379]

14.2.5.4.2 List of Values Data Type (Premium Edition)

Find out about the list of values data type and how to use it.

The premium edition service plan offers you an additional data type not provided with the base edition: list of values. You can use this data type to classify documents by restricting the values extracted for a header or line item field to ones that you've defined as a list.

When you select *list of values* as the data type for a schema field, the *List Values* section appears on the *New Field* panel. Here, you add the relevant values in much the same way that you add new header and line item fields. In addition to the mandatory name, you can enter an optional label and description for each value. You can add a total of 20 values here.

Example

Let's say that your organization handles three distinct types of documents: invoices, purchase orders, and delivery notes. To classify incoming files accordingly, you could do the following:

- Create a schema with the document type *Custom* and the name **`documentType`**.
- Add a header field named **`DocumentType`**.
- Assign this field the data type *list of values*.
  Unlike other schema fields, this field applies to the entire document, not just to individual header or line item fields.
- Define values for your document types **`invoice`**, **`purchaseOrder`**, and **`deliveryNote`** in the *List Items* section for your field.
- Save your entries and activate the schema.

You can now use your new schema to classify incoming documents by type.

If you want to edit results for a document classified in this way, click the relevant entry in the *Value* column for the field. A dropdown opens, showing the list of values that you defined when configuring the schema: in this case, *invoice*, *purchaseOrder*, and *deliveryNote*.

14.2.5.5 Use Schema Field Categories

Find out about schema field categories, how they help you manage data fields more easily, and how to activate the relevant feature in the SAP Document AI basic UI.

If your schemas include many data fields, you can use the *Schema Field Categories* feature to group data fields. Using categories means that you no longer have to scroll through a long list to find the specific fields you're looking for. Instead, you can quickly and easily pinpoint and edit fields by finding and expanding the relevant category.

> ⓘ Note
>
> The *Schema Field Categories* feature isn't activated by default. If you wish to use it, you must first activate it. For guidance on how to do so, see Activate Features [page 292].

14.2.5.5.1 Create Schema Field Categories

Create a category to group together schema data fields.

Prerequisites

You've enabled the *Schema Field Categories* feature, as described in Activate Features [page 292].

Context

If your schemas include many different data fields, you can create categories to group data fields. Doing so avoids long lists of field names and makes it easier to find specific fields.

Procedure

1. On the left navigation pane, choose *Schema Configuration*.
2. On the *Configurations* screen, choose the row containing the schema you want to add field categories to. You now see the schema details.
3. If the schema has the status "ACTIVE", you must deactivate it before you can add categories. In this case, click *Deactivate*.

   > → Remember
   >
   > You can't deactivate schemas that provide the basis for templates. Otherwise, any changes to the schema would affect the field definitions for the relevant templates.

> Before deactivating a schema of this kind, first deactivate all templates based on it and then delete them.

4. To add a category to the schema, click *Add* for *Category*.
5. On the *New Category* panel, enter a suitable name for your new category, an optional description, and an optional label.
6. Save your entries.

   You can see the name of your new category as a link in the *Category Name* column. Clicking on this link allows you to view the category details, edit them, or delete the category.

   You can also use the icons in the *Action* column to edit or delete categories.

14.2.5.5.2 Assign Schema Fields to Categories

Find out how to group data fields in schemas by category.

You've enabled the *Schema Field Categories* feature, as described in Activate Features [page 292], and have created at least one category.

With *Schema Field Categories* enabled, the steps for creating, viewing, and editing data fields are largely the same as the ones described in Add Data Fields [page 309].

The main difference is that when you create, view, or edit a header field or line item, the panel on the right of the screen includes the *Category* dropdown. You can use this dropdown to select the category that you wish to assign your data field to.

If your schema includes many data fields, assigning fields to categories eliminates long lists, making it easier to find individual fields.

14.2.5.6 Activate/Deactivate Schema

Procedure

1. In the left navigation pane, choose *Schema Configuration*.
2. On the *Configurations* screen, choose the row containing the schema you want to activate.

   You now see the schema details.
3. To activate the schema, click *Activate*. On the *Configurations* screen, the schema status changes to "ACTIVE".

   If a schema doesn't yet have any data fields, the *Activate* button is grayed out.
4. When a schema has the status "ACTIVE", the *Deactivate* button replaces the *Activate* button.

> **Note**
>
> If you wish to change or delete a schema that is active, you must first click *Deactivate*. When you deactivate a schema, its status on the *Configurations* screen changes to "INACTIVE". To enter your changes, choose *Edit* *(pen icon)* Once you've completed your changes, activate the schema again.

> **→ Remember**
>
> You can't deactivate schemas that provide the basis for templates. Otherwise, any changes to the schema would affect the field definitions for the relevant templates.
>
> Before deactivating a schema of this kind, first deactivate all templates based on it and then delete them.

14.2.5.7 Export/Import Schema

Context

You have a schema that you want to use in a different client. To do so, you must first export the schema from the current client and then import it to the other one.

The steps presented here assume the following:

- You're initially in the test client.
- You've selected your schema from the *Schemas* list and are now on the screen showing the schema details.

Procedure

1. Choose *Export*.

   SAP Document AI downloads the schema to your local machine as a JSON file.
2. Choose *Change Client* and select the production client to which you want to import your schema.

   The SAP Document AI basic UI displays the *Schema* list for the production client.
3. Choose *(upload icon)* and navigate to the JSON file that you downloaded in Step 1.
4. Select the file and choose *Open*.

   > **Note**
   >
   > If your client already includes a schema with the same ID as the one you want to import, you can either have the SAP Document AI basic UI to create a new schema or cancel the import.

> If your client already includes a schema with the same name as the one you want to import, you can do one of the following:
>
> - Have the schema renamed automatically
> - Edit the schema name
> - Cancel the import

The new schema appears in the list. Users can now select this schema when adding documents of the appropriate type to the SAP Document AI basic UI.

14.2.5.8 Delete Schema

Procedure

1. In the left navigation pane, choose *Schema Configuration*.
2. On the *Configurations* screen, select the checkbox for the row containing the schema you want to delete.

   You can't delete a schema that has the value "YES" in the *SAP Schema* column.
3. If the schema has the status "ACTIVE", you must deactivate it before you can delete it. In this case, click *Deactivate*.

   > → Remember
   >
   > Deleting version 1 of a schema also deletes all other versions. If a schema has multiple versions, some of which have the status "ACTIVE", you can force deletion of version 1 and with it all the other versions.
   >
   > You can delete all versions other than version 1 individually, provided they have the status "INACTIVE".

   > → Remember
   >
   > You can't deactivate schemas that provide the basis for templates. Otherwise, any changes to the schema would affect the field definitions for the relevant templates.
   >
   > Before deactivating a schema of this kind, first deactivate all templates based on it and then delete them.
4. Click *Delete* and then *Yes* to delete the selected schema.

   The schema is removed from the *Schemas* list.

14.2.5.9 Use Schema Versions

Find out about schema versions and how to create and manage them in the SAP Document AI basic UI.

When you configure, save, and activate a new schema, the SAP Document AI basic UI saves it automatically as version 1. You can use this initial version as the basis for creating additional versions of the same schema. All schema versions share the same name.

Using versions is helpful if you process documents that have many of the fields provided in the original schema but also include others . You can also use different labels, descriptions, data types, and setup types for fields in different versions.

For each schema listed on the initial *Schema Configuration* screen, you see the following information:

- The total number of versions available
- The number of the latest version
- The status of the latest version

To display details of a schema version, choose *Go to Version* and select the relevant version number.

The details screen includes the number and status of the selected schema version. You can use the most recent active version of a scheme to create a new version, as described in the next section.

Related Information

Create Schema Version [page 318]
Make Changes to Schema Versions [page 319]

14.2.5.9.1 Create Schema Version

Use this feature to create a new version of an existing schema.

Procedure

1. In the left navigation pane, choose *Schema Configuration*.
2. Select the latest active version of the schema for which you want to create a new version.

   > ⚠ Restriction
   >
   > To create a new schema version, you must use the latest active schema version.

3. Choose *Create Version*.

   > → Remember
   >
   > If this button is grayed out, you're not using the latest active schema version.

4. Add or remove data fields and make any other settings for the new version in line with your needs.
5. If you want to work with the new version immediately, complete you entries by choosing *Activate*.

> ⓘ Note
>
> If you don't activate your new version at this point, the SAP Document AI basic UI saves it automatically with the status "DRAFT".

14.2.5.9.2 Make Changes to Schema Versions

Context

You may find that you need to change schema versions from time to time: for example, by adding or removing fields or changing field labels, descriptions, data types, and setup types.

> → Remember
>
> You can only make changes of this kind if the selected schema version has the status "INACTIVE" or "DRAFT".

Procedure

1. In the left navigation pane, choose *Schema Configuration*.
2. Go to the row with the relevant schema.
3. Select the schema version that you want to change.
4. On the details screen for the selected schema version, check the status and choose *Deactivate*, if necessary.
5. Make changes in line with your needs.
6. If you intend to use the changed version immediately, choose *Activate*.

> ⓘ Note
>
> If you don't activate your changed version at this point, the SAP Document AI basic UI saves it automatically with the status "INACTIVE".

Related Information

Edit Schema [page 308]

Add Data Fields [page 309]

14.2.6 Template

Use this SAP Document AI basic UI feature to create, reuse, edit, and delete templates based on schemas and document types. End users can select templates together with a corresponding schema to extract information from business documents of the appropriate type and structure.

Context

> ⓘ Note
>
> This feature is available only to users with the following administrator role:
>
> - `Document_Information_Extraction_UI_Templates_Admin`
>
> For additional information on using templates, see the best practices under Template [page 370].

Templates are based on schemas and enable you to show the position of extraction fields in a particular document layout. After creating a template, you use the *Document* feature to associate one or more documents with it. You then edit the extraction results for these documents, indicating the location of fields and their values.

Templates are essential for processing custom document types. However, you can also use them with standard document types to fine-tune extraction results.

> → Tip
>
> If you follow the guidance in General Recommendations and Limitations [page 371], you only have to edit the extraction results for one document that you associate with your template.

Use this feature to do the following:

- Add Template [page 321]
- Add Documents and Activate/Deactivate Template [page 322]
- Export/Import Template [page 324]
- Create Template from Document Extraction Results [page 325]
- Delete Template [page 326]

14.2.6.1 Add Template

Procedure

1. Open the SAP Document AI basic UI, as described in Subscribing to the SAP Document AI Basic UI [page 285].
2. Click the *Template* icon in the left navigation pane.
3. Click *Create a new template* (+ *add icon*) at the top right.
4. Enter a name and optionally a description for the new template.
5. Select the appropriate document type (either *Invoice*, *Payment Advice*, *Purchase Order*, or *Custom*).
6. Select the schema that you wish to use as a basis for the new template.
7. Select a schema version.

   > **Note**
   >
   > This step is optional. If you don't select a version, the SAP Document AI basic UI uses version 1 of the schema that you selected. In this case, if version 1 is inactive an error message appears.

8. Click *Create*.
9. Choose *OK* to see the template details.

   The *Extraction Fields* tab shows the header fields and line item fields from the schema that you specified. You can sort the entries in the *Field Names* column in ascending or descending order and use the filter to display only specific fields.

10. > **Note**
    >
    > This step and the ones that follow are optional.

    Choose the *Extraction Fields* tab and then choose *Edit* on that tab.

11. Enter a value that you wish to associate with all instances of a particular field.

    For example, if you intend to use your template only for documents from one supplier, you could enter the name of that supplier as the fixed value for the *senderName* field.

12. Repeat the preceding step for any other fields that you want to assign fixed values to.
13. Set the extraction method for all fields or for individual fields. Set extraction to *Template with AI*, *AI Only*, or *Template Only*, depending on your needs.

    The *Template with AI* method uses the template and falls back to the pretrained global model if extraction fails. The *AI Only* method uses the pretrained global model. And the *Template Only* method uses the template but doesn't fall back to the pretrained global model if extraction fails.

14. Save your entries.

Related Information

General Recommendations and Limitations [page 371]

14.2.6.2 Add Documents and Activate/Deactivate Template

Context

To add documents to a template, you use the *Document* feature of the SAP Document AI basic UI. Adding documents to templates, as described here, helps improve accuracy.

> → Remember
>
> The document and the template that you wish to add it to must share the same schema. If the document and template have different schemas, you can't add the document to the template.

Procedure

1. Choose the *Document* icon in the left navigation pane.
2. Add a document or documents as described in the chapter Add Document [page 296].
3. Choose the row with the document that you want to work with.

   You now see the document details. It's best if the file has at least 2 line items.

   > ⓘ Note
   >
   > To enable SAP Document AI to identify the date format accurately, make sure that the date in documents that you associate with templates is greater than the 12th of the month. Doing so prevents confusion between month and day.

4. Edit the extraction results for the document as described in View and Edit Extraction Results [page 298].

   You can confirm the document at this point. It's not necessary to save the document. When you associate a document with a template, the SAP Document AI basic UI saves the extraction results automatically.

   > → Remember
   >
   > If you associate a document with a template and then use that template to extract information from the same document, the extraction values can differ from the ones you entered and confirmed during editing.
   >
   > The technical reason for differences of this kind is that the SAP Document AI basic UI extracts data based on heuristics and not on exact matching of bounding boxes.

5. To add this document to a template, choose *Add to Template* at the top of the pane on the right of the screen.
6. Select the relevant template from the dropdown and choose *Add*.

   The document file is added to the template that you selected. It's displayed as an associated document on the details page for this template.

   > → Tip
   >
   > You can edit and confirm extraction results for the associated document by choosing it on the details page for the template. For details of how to edit extraction results, see View and Edit Extraction Results [page 298].

7. Repeat the preceding steps to add more documents to your template.

   > ⓘ Note
   >
   > You can add a maximum of 5 documents to a template.

8. If you want to remove associated documents from a template, first choose the *Template* icon in the left navigation pane.
9. Then select the relevant template.
10. Choose the *(broken link)* icon in the *Action* column of the *Associated Documents* tab.
11. Finally, choose *OK* to confirm the action.
12. Activate a template in status "DRAFT" to use it to extract results from documents similar to the ones associated with it.

    The template status changes from "DRAFT" to "ACTIVE".
13. Deactivate a template in status "ACTIVE" to edit it, delete it, or make it no longer available for SAP Document AI.

    The template status changes from "ACTIVE" to "DRAFT".

14.2.6.3 Edit Template

Find out how to make changes to templates.

Context

If you want to make changes to a template, you can do so using the *Edit* function. You can change the template name and description. In addition, you can select a different schema for the template. Changing the schema makes a new set of extraction fields available for the template.

> → Remember
>
> If a template is currently active, you must deactivate it before you can edit it.

Procedure

1. Click the *Template* icon in the left navigation pane.
2. Select the template that you want to edit.
3. Click *Edit*.

   The *Edit Template* dialog appears. Here, you can change the name and description by editing the corresponding fields.

   You can also select a different schema for your template. To change the schema, do the following.
4. Choose the *Schema* dropdown and select a schema from the list.

   > ⓘ Note
   >
   > This list includes only schemas that match the document type for which the template was originally created.
5. Click *Save* to complete your changes.

   > → Remember
   >
   > If you've already edited extraction result for sample documents associated with your template, these edits are preserved following the change of schema only for fields that appear in both the old and the new schema. After changing the schema, you can annotate the newly added fields in your existing sample documents.

14.2.6.4 Export/Import Template

Avoid duplicated effort by reusing existing templates in different clients.

Context

You've created a template in a test client by following the steps in Add Template [page 321] and Add Documents and Activate/Deactivate Template [page 322]. You're now happy with your new template and want to export it from the current client before importing it into your production client.

The steps presented here assume the following:

- You're still in the test client.
- You've selected your new template from the *Templates* list and are now on the screen showing the template details.

Procedure

1. Choose *Export*.

   SAP Document AI downloads the template to your local machine. The download includes the `schema.json` and `template.json` files and a folder with the associated documents.
2. Choose *Change Client* and select the production client to which you want to import your template.

   The SAP Document AI UI displays the *Templates* list for the production client.
3. Choose ↑ *(upload icon)* and navigate to the folder you downloaded in Step 1.
4. Select the folder and choose *Open*.

   The new template appears in the list. Users can now select this template when adding documents of the appropriate type to the SAP Document AI basic UI.

14.2.6.5 Create Template from Document Extraction Results

This feature allows you to quickly and easily create templates when adding documents to the SAP Document AI basic UI.

Context

You've added a document by following the steps in Add Document [page 296] and View and Edit Extraction Results [page 298].

> → Remember
>
> To create a template based on document extraction results, you must use a schema when adding the document.

Before creating a template from the document extraction results, make sure that the document you want to base your template on has the status "DONE".

Procedure

1. Choose *Create Template* on the *Documents* UI.
2. Enter a name for your template (mandatory) and a description (optional), then choose *Create*.

   The template detail screen appears, showing your new template with the preprocessing status "DONE".

   You can now use your template in the same way you'd use one created directly using the *Template* feature.
3. Activate, edit, export, or delete your template, as described in Add Documents and Activate/Deactivate Template [page 322], Export/Import Template [page 324], and Delete Template [page 326].

14.2.6.6 Delete Template

Procedure

1. In the left navigation pane, click the *Template* icon.
2. On the *Templates* screen, click the row containing the template you want to delete.

   You see the template details.

   > → Remember
   >
   > If a template is currently active, you must deactivate it before you can delete it.

3. Click *Delete* and then *OK* to delete the selected template.

   The template is removed from the *Templates* list.

15 Using the SAP Document AI Workspace (Embedded Edition)

Find out how to subscribe to, access, and use the SAP Document AI workspace.

Related Information

Subscribing to the SAP Document AI Workspace With the Identity Authentication Service [page 327]
Using the Key Features of the SAP Document AI Workspace [page 330]

15.1 Subscribing to the SAP Document AI Workspace With the Identity Authentication Service

Subscribe to the SAP Document AI workspace using the Identity Authentication service to handle authentication and authorization tasks in SAP BTP.

Prerequisites

- You have an SAP BTP global account and a Cloud Foundry or Kyma subaccount.
- You're a global account administrator.
- You've created a service instance and a service key for SAP Document AI.

  > **Note**
  >
  > Choose the service plan `embedded_edition` when creating your service instance.

- You have a tenant of SAP Cloud Identity Services.
  For more information, see Tenants.
- The SAP Cloud Identity Services tenant is associated with the customer IDs of the relevant global account of SAP BTP.
  For more information, see Reuse SAP Cloud Identity Services Tenants for Different Customer IDs.
- You've established trust and federation between SAP Authorization and Trust Management service and SAP Cloud Identity Services.
  For more information, see Establish Trust and Federation Between SAP Authorization and Trust Management Service and SAP Cloud Identity Services.

Context

To manually subscribe to the SAP Document AI workspace using the Identity Authentication service, do the following.

Procedure

1. Open the SAP BTP cockpit and go to your subaccount.
2. Click *Service Marketplace* under *Services* on the left navigation pane.
3. Search for **SAP Document AI** and click the tile with the following description: *Automate your document information extraction processes - Identity Authentication service version* (*appName*: `document-information-extraction-application-ias`).

   The *Overview* page appears.
4. Click *Create*.

   The *New Instance or Subscription* dialog appears.

   > → Remember
   >
   > Before proceeding, check whether you've created an instance for SAP Document AI. If you haven't, create the service instance before continuing with the following steps. Creating a service instance is a prerequisite for using the SAP Document AI workspace.
5. Choose the *Subscriptions default* plan.
6. Click *Create*.
7. Sign in to the administration console for SAP Cloud Identity Services.
8. In *Users & Authorizations*, add the users that should be able to access the SAP Document AI workspace.
9. Follow the steps described in Assign Authorization Policies to assign to users the relevant authorizations for SAP Document AI. See Authorization Policies [page 329].
10. Optionally, follow the steps described in Create an Authorization Policy to create restriction policies for SAP Document AI.
11. Go back to the SAP BTP cockpit and go to your subaccount.
12. Click *Instances and Subscriptions* under *Services* on the left navigation pane.
13. Click the navigation arrow in the *Instances* section to open the details of your service instance for SAP Document AI.
14. Click the three dots at the right end of the service key row to view or download your service key
15. Copy the "tenantuiurl" value and paste it into your text editor. Then, paste "/workspace" onto the end of the "tenantuiurl" value. Finally, copy the entire string, paste it into the address bar of your web browser, and press *Enter* to access the SAP Document AI workspace.

    The logon screen appears.
16. Enter your Identity Authentication service *Email or User Name* and *Password* to log on.

    The SAP Document AI workspace appears.

15.1.1 Authorization Policies

Find out about the authorization policies that you can use with the SAP Document AI workspace. You can assign authorizations to users from the Identity Authentication service.

SAP Document AI provides default authorization policies that you can assign to users. These authorization policies determine which actions a user can carry out on the SAP Document AI workspace.

The default authorization policies and associated actions are as follows:

Authorization Policy	Actions
`DocumentAI.Admin`	View, create, edit, and delete channels, configurations, and schemas. View, upload, edit, and delete documents
`DocumentAI.DocumentAdmin`	View, upload, edit, and delete documents with limited read access to configurations and schemas without access to the *Manage Configuration* and the *Schemas* features
`DocumentAI.DocumentEditor`	View, upload, and edit your own documents with limited read access to configurations and schemas without access to the *Manage Configuration* and the *Schemas* features
`DocumentAI.DocumentViewer`	View your own documents with limited read access to configurations and schemas without access to the *Manage Configuration* and the *Schemas* features
`DocumentAI.ChannelAdmin`	View, create, edit, and delete channels with limited read access to configurations and schemas without access to the *Manage Configuration* and the *Schemas* features
`DocumentAI.SchemaAdmin`	View, create, edit, and delete schemas with limited read access to configurations without access to the *Manage Configuration* feature

The default authorization policies grant users the following read/write/delete permissions:

	Channels			Configurations			Documents			Schemas		
	Read	Write	Delete	Read	Write	Delete	Read	Write	Delete	Read	Write	Delete
`DocumentAI.Admin`	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
`DocumentAI.DocumentAdmin`				✔ (limited)			✔	✔	✔	✔ (limited)		

`DocumentAI.DocumentEditor`				✓ (limited)			✓	✓		✓ (limited)	
`DocumentAI.DocumentViewer`				✓ (limited)			✓			✓ (limited)	
`DocumentAI.ChannelAdmin`	✓	✓	✓	✓ (limited)						✓ (limited)	
`DocumentAI.SchemaAdmin`				✓ (limited)						✓	✓	✓

15.2 Using the Key Features of the SAP Document AI Workspace

Find out how to use the SAP Document AI workspace features for documents, schemas, channels, and configuration.

Use the SAP Document AI workspace to handle a wide range of activities throughout the document extraction lifecycle. The solution supports tasks including uploading and managing documents, creating and configuring schemas and channels, and tailoring general settings to your specific needs.

User Menu [page 331]
The user menu of the SAP Document AI workspace lets you change various settings, including display and language options.

Overview [page 332]
The *Overview* screen of the SAP Document AI workspace supports efficient document processing and management. It gives you rapid access to document extractions and administrator settings, making it easy to manage and monitor documents, schemas, channels, and document statuses.

Upload New Documents [page 333]
Upload documents to the SAP Document AI workspace manually.

All Documents [page 334]

The *All Documents* feature allows you to view, filter, sort, edit, and export documents uploaded to the SAP Document AI workspace. It provides a convenient way to manage documents throughout the extraction lifecycle.

Schemas [page 337]
: The *Schemas* feature allows you to view, enable, create, configure, and activate the schemas needed for uploading documents to the SAP Document AI workspace.

Channels [page 351]
: The *Channels* feature lets you manage inbound and outbound channels for the SAP Document AI workspace. It supports automatic extraction of information from documents as well as the output of notifications and callbacks.

Documents by Schema Version [page 359]
: Find out how to view documents associated with a schema version and upload additional documents manually using that schema version.

Settings [page 360]
: Use the *Settings* menu to make configuration settings that affect all the features of the SAP Document AI workspace. In addition, you can change instance and change client.

15.2.1 User Menu

The user menu of the SAP Document AI workspace lets you change various settings, including display and language options.

The user menu is located at the top right of the screen. It displays the user name and includes the following information and settings:

- The current user's name and e-mail address
- Theme settings for the UI
- Language settings for the UI
- Log off option

Parent topic: Using the Key Features of the SAP Document AI Workspace [page 330]

Related Information

Overview [page 332]
Upload New Documents [page 333]
All Documents [page 334]
Schemas [page 337]
Channels [page 351]
Documents by Schema Version [page 359]
Settings [page 360]

15.2.2 Overview

The *Overview* screen of the SAP Document AI workspace supports efficient document processing and management. It gives you rapid access to document extractions and administrator settings, making it easy to manage and monitor documents, schemas, channels, and document statuses.

The *Overview* screen is your single point of entry to a variety of information, settings, and features. You can call it up from any screen by choosing the *(home)* icon.

You can also access the key features of the SAP Document AI workspace via the icons on the navigation bar, which are available on all screens.

The *Overview* screen has the familiar look and feel of the SAP Fiori launchpad and includes the following groups of tiles:

- *My Document Extractions*
- *My Admin Settings*

> **Note**
>
> This group is only displayed if you have the necessary authorizations. For further information, see Authorization Policies [page 329].

My Document Extractions

The tiles here provide rapid access to and at-a-glance information about the following:

- All of your documents
- Your documents with status *Review Needed*

In addition, you can see the percentage of your documents with status *Confirmed* and *Review Needed* and manually upload documents to the SAP Document AI workspace.

My Admin Settings

If you have the necessary authorizations, the tiles in this group provide rapid access to and at-a-glance information about the following:

- Your schemas
- Your channels

You can also see the number of documents with the statuses *Processed* and *Open*.

Parent topic: Using the Key Features of the SAP Document AI Workspace [page 330]

Related Information

User Menu [page 331]
Upload New Documents [page 333]
All Documents [page 334]
Schemas [page 337]

Channels [page 351]
Documents by Schema Version [page 359]
Settings [page 360]

15.2.3 Upload New Documents

Upload documents to the SAP Document AI workspace manually.

Prerequisites

At least one active version of a schema is available for the document type that you want to upload.

Context

The SAP Document AI workspace can upload documents automatically via defined inbound channels. In addition, you can upload documents in other formats manually via the *Upload New Documents* tile.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose *Upload New Documents*.
2. Choose *Upload Document*.
3. Select the entries for the following fields:
   a. *Document Type*
   b. *Schema*
   c. *Schema Version*
4. Browse to the location of the document or documents that you want to upload.
5. Select one or more documents.
6. Choose *Upload*.

> **Note**
>
> You can also upload documents via the navigation bar. To do so, expand the bar and choose one of the *(document-text)* icons after *Channels*. A screen showing documents already uploaded using a particular schema is displayed. Make sure that the document type of the schema matches that of the document you want to upload. Choose *Upload Document*.
>
> In this case, the SAP Document AI workspace provides the correct document type, schema, and schema version automatically. You only have to select the document or documents for upload.

Results

The SAP Document AI workspace uploads your documents. You can start working with these documents as soon as they have the status *Review Needed*.

Task overview: Using the Key Features of the SAP Document AI Workspace [page 330]

Related Information

User Menu [page 331]
Overview [page 332]
All Documents [page 334]
Schemas [page 337]
Channels [page 351]
Documents by Schema Version [page 359]
Settings [page 360]

15.2.4 All Documents

The *All Documents* feature allows you to view, filter, sort, edit, and export documents uploaded to the SAP Document AI workspace. It provides a convenient way to manage documents throughout the extraction lifecycle.

Provided you have the necessary authorizations, you can use the *All Documents* feature to perform a wide range of tasks, including the following:

- Display all documents uploaded to SAP Document AI
- Filter documents by criteria such as status
- Sort documents by various criteria
- View only documents uploaded using a particular schema and schema version
- Delete uploaded documents.
- Copy worklist rows to your clipboard for use elsewhere
- View document details, including extraction results and confidence ranges
- View additional information about individual fields and the information extracted from them
- Edit extraction results for documents
- Download documents
- Export worklists as .csv files

You call up *All Documents* as follows:

- On the *Overview* screen, by choosing the *All Documents* tile
- On any screen, by choosing the first *(document-text)* icon on the navigation bar.

Parent topic: Using the Key Features of the SAP Document AI Workspace [page 330]

Related Information

User Menu [page 331]
Overview [page 332]
Upload New Documents [page 333]
Schemas [page 337]
Channels [page 351]
Documents by Schema Version [page 359]
Settings [page 360]
Authorization Policies [page 329]

15.2.4.1 View and Edit Documents Needing Review

View and edit documents with the status *Review Needed* and their details. Check and edit extracted data, correct errors, add missing values, and confirm extraction results quickly and easily.

Prerequisites

There must be at least one document in the SAP Document AI workspace with the status *Review Needed*.

Context

Check whether the SAP Document AI workspace has correctly extracted document data from uploaded documents needing review. Edit extracted data, where necessary. If you have the appropriate authorization, you can also delete documents on the *All Documents* or document details screen.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose the *Review Needed* tile.

   You can also access all documents with this status from the *All Documents* screen. To do so, navigate to the screen and select the quick filter *Review Needed*. You can also use the quick filters to view and edit documents with the status *Failed* and view documents with the status *Confirmed*.
2. Choose the row with the document that you want to view.

3. On the document details screen, compare the document displayed on the left with the extracted values on the right.

   To display the panes one above the other, choose the *(rotate)* icon.
4. Choose *Edit* to make changes.
5. Correct any incorrectly extracted values in the fields on the panel on the right of the screen.
6. Add any missing values by drawing a bounding box around them on the panel on the left of the screen, making the necessary entries on the *Assign Field* dialog, and choosing *Assign*.
7. Complete your entries by saving them if you want to continue editing later. Alternatively, confirm them if you've made all the necessary changes. You can also discard the draft if you don't want to keep your changes or want to start over again.

   > ⚠ Caution
   >
   > Do not confirm unreviewed documents, which can include incorrect extraction results. Once the document status changes from "Review Needed" to "Confirmed", the *Edit* button is no longer available. You can still view documents with the status "Confirmed", but you can no longer change extraction results.
8. **Optional:** Choose *Download* to save the current document.
9. **Optional:** Choose *Export* and select *JSON*, *CSV*, or *TXT* to export the document in the corresponding format.

   > ⓘ Note
   >
   > If you start editing a document and navigate away from the details screen without saving your latest changes, the document remains in draft mode until you either save or discard your changes. You can also toggle between the draft and saved versions of a document by choosing *Draft* > *Saved Version*.

15.2.4.2 Delete Documents

Delete unneeded documents from the SAP Document AI workspace to help avoid clutter.

Prerequisites

To delete documents, you must have the relevant authorizations. For details, see Authorization Policies [page 329].

Context

If you no longer need documents, you can delete them via the *All Documents* feature.

Procedure

1. Call up the *All Documents* screen.
2. Use the search function or filters to find the document or documents you want to delete.
3. Select the document or documents for deletion.

   > → Tip
   >
   > If you want to view the details of a document before deleting it, choose the relevant row. You can also delete individual documents on the details screen.

4. Choose *Delete*.
5. Confirm the deletion.

15.2.5 Schemas

The *Schemas* feature allows you to view, enable, create, configure, and activate the schemas needed for uploading documents to the SAP Document AI workspace.

You can upload documents to the SAP Document AI workspace only if they're associated with an appropriate schema.

> → Remember
>
> To create, edit, and delete schemas, you must have the necessary administrator authorizations. For users who need to view schemas as part of their day-to-day work, authorization policies with limited viewing rights are also available. See Authorization Policies [page 329] for further details.

You can use the *Schemas* feature to perform various actions, including the following:

- Display lists of schemas
- Filter, sort, and group list entries
- View all versions of a schema and the associated settings
- Make changes to a schema or schema version
- Add entities to a schema
- Edit settings for entities in a schema
- Define which entities are displayed in the worklist or the object header in the *All Documents* feature
- Enter processing instructions for the schema as a whole and for individual fields
- Defining confidence ranges at document or field level for automated confirmation of data extraction

The SAP Document AI workspace supports the following schema types:

- Content schemas
- User schemas

Content Schemas

Content schemas are delivered with the SAP Document AI workspace. Schemas of this type all have names that end with *_STANDARD*.

Each content schema is preconfigured to extract information from a specific type of document. Schemas are currently available for the following document types:

- Bill of exchange
- Business card
- Business partner certificate
- Custom
- Delivery note
- Gas plant statement
- In-house service
- Invoice
- National ID
- Payment advice
- Procurement quality certificate
- Purchase order
- Shipping document

> → Remember
>
> You can't use content schemas to process documents, nor can you edit these schemas. Instead, you must first enable the relevant content schema. When you do so, the SAP Document AI workspace copies the schema, creating a new editable user schema. You can then use this new schema to extract information from documents of the corresponding type.

Once you've enabled a standard content schema, you can either use the resulting user schema unedited or adapt it in line with your needs. For further information, see Enable Content Schema [page 339] and Configure Schema [page 341].

User Schemas

User schemas include the following:

- Schemas that you create from scratch and configure in line with your specific requirements
- Schemas created by enabling content schemas, irrespective of whether you make any changes to the predefined configuration

For further information, see Create Schema [page 340] and Configure Schema [page 341].

Parent topic: Using the Key Features of the SAP Document AI Workspace [page 330]

Related Information

User Menu [page 331]
Overview [page 332]
Upload New Documents [page 333]
All Documents [page 334]
Channels [page 351]

Documents by Schema Version [page 359]
Settings [page 360]

15.2.5.1 Enable Content Schema

Enable the standard content schemas delivered with the SAP Document AI workspace. You can either use enabled schemas unchanged or configure them in line with your specific needs.

Context

Before you can work with the predefined content schemas delivered with the SAP Document AI workspace, you must enable them, as described here. Enabling a content schema copies the original schema and creates a new editable user schema.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose *My Schemas*.

   You can also access the *Schemas* feature by choosing the *(provision)* icon on the navigation bar.
2. Choose *Content* above the table to filter the schemas displayed.
3. Choose the content schema that matches the document type you want to process – for example, invoice, purchase order, or payment advice.
4. Choose *Enable*.
5. Enter the name and version of the schema.

   > → Remember
   >
   > It's best to change the original name to distinguish the content schema from your new user schema.
   >
   > Schemas names must not include whitespaces. Only the following characters are permitted: letters (lowercase and uppercase), numbers, underscore ("_"), hyphen ("-"), period ("."), comma (","), ampersand ("&"), dollar sign ("$"), hashtag ("#"), and tilde ("~").
6. **Optional:** If you want to start using your schema immediately, without changing the standard configuration, choose *Activate*.
7. Choose *Create*.

Results

When you set the table filter to *User*, you can see the schema that you created by enabling the content schema. If you want to change the standard configuration of your new schema, follow the steps in Configure Schema [page 341].

15.2.5.2 Create Schema

Create your own schemas from scratch in the SAP Document AI workspace.

Prerequisites

To create schemas, you must have one of the following authorizations:

- `DocumentAI.Admin`
- `DocumentAI.SchemaAdmin`

Context

In addition to enabling content schemas to create corresponding user schemas, you can create your own schemas and configure them in line with your specific needs. All schemas that you create in this way have the type *User*.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose *My Schemas*.

   You can also access the *Schemas* feature by choosing the *(provision)* icon on the navigation bar.
2. Choose *Create Schema*.
3. Enter a name for your schema.

   > → Remember
   >
   > Schema names must not include whitespaces. Only the following characters are permitted: letters (lowercase and uppercase), numbers, underscore ("_"), hyphen ("-"), period ("."), comma (","), ampersand ("&"), dollar sign ("&"), hashtag ("#"), and tilde ("~").
4. Select the appropriate document type.
5. **Optional:** Enter a description for your schema.

   The description briefly explains the nature and purpose of the schema. It plays no part in processing documents.

6. Save your entries.

Results

Your new schema now appears in the list in the *Schemas* feature. You can now go ahead and configure the schema as explained in Configure Schema [page 341].

15.2.5.3 Configure Schema

Use the *Schemas* feature to configure a new schema or change the configuration of an existing schema in line with your needs.

Prerequisites

Make sure that the schema version you want to edit has the status *Inactive*. Otherwise, you can't change any configuration settings that affect how the SAP Document AI workspace extracts information from documents.

You can only edit the configuration of schemas that have the type *User*. These schemas can either be ones created from scratch or by enabling content schemas delivered with the SAP Document AI workspace.

Context

Configure or reconfigure schemas to meet your specific requirements.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose *My Schemas*.

   You can also access the *Schemas* feature by choosing the *(provision)* icon on the navigation bar.
2. Choose *User* above the table to filter the schemas displayed.
3. Choose a schema that matches the type of document that you want to process.
4. Choose the schema version that you want to configure.
5. If the schema version has the status *Active*, deactivate it.
6. Make the relevant entries on the various tabs. For details, see Configuration Settings [page 342].

> **Note**
>
> If the schema has been created from scratch, it may not yet include any configuration. In this case, make all the necessary settings. If a schema is already configured, adapt the existing settings as needed.

7. Save your entries.
8. Activate the schema.

Results

You can now use your configured schema to extract information from documents of the appropriate type.

15.2.5.4 Configuration Settings

Tailor schemas to your needs by configuring them in the SAP Document AI workspace.

The *Schemas* feature lets you configure a variety of settings for your schemas. You enter and edit these settings on the details page for the schema version.

The following table provides an overview of the tabs on the details page for schema versions and briefly explains the associated configuration tasks. You can find more information about each tab in the linked topics.

Schema Configuration Tabs

Tab	Configuration Tasks
Entities	Specify all fields for extraction. Define the hierarchical structure for displaying these fields on the document details screen. See Entities [page 343].
Display Entities	Select the schema entities that SAP Document AI displays in the document object header and in the list of documents uploaded using the relevant schema version. See Display Entities [page 346].
Processing Instructions	Provide tailored prompts to enhance the extraction of data at document and individual field level. See Processing Instructions [page 346].
Automation	Enable automatic confirmation of documents. Define the confidence scores that trigger automatic confirmation at document and individual field level. See Automation [page 347].

Tab	Configuration Tasks
Outbound Channels	Select the outbound channels for notifications and extensions. See Outbound Channels [page 348].

15.2.5.4.1 Entities

You use schema entities to define and organize the data extracted from documents uploaded to the SAP Document AI workspace.

The term "entities" designates the various elements of the hierarchical structure for defining and organizing document fields in the SAP Document AI workspace. You configure entities on the details screen for the relevant schema version.

Configuring entities in line with your needs not only enables you to extract the necessary information from documents; it also helps you find the fields and values that you're looking for faster and more easily. The catalog and group entities are especially useful if your documents include many fields of different types.

The schema entities in the SAP Document AI workspace are as follows:

- Categories
- Groups
- Fields

As the topmost hierarchy level, categories include one or more groups. Groups, in turn, include multiple fields of a specific type.

> **Example**
>
> The *INVOICE_STANDARD* content schema comprises multiple preconfigured categories. One of these categories is *Invoice Data*, which, in turn, includes multiple groups, such as *Taxes* and *Amounts*. Each of these groups includes corresponding fields, such as *Tax Name* and *Gross Amount*.

If you have the necessary authorizations, you can easily add entities by choosing *Add* and selecting the appropriate entity type.

> **→ Remember**
>
> You can only add entities to schemas that are inactive.

If your schema has no entities, start by adding at least one category, then add one or more groups, and finally add fields. When adding a new group, assign it to the appropriate category. When adding a new field, assign it to the appropriate group.

Using categories and groups means that you don't have to scroll though long lists of fields to find what you're looking for. Instead, you can quickly and easily pinpoint and edit extracted fields finding the relevant category and group on the document details page in the *All Documents* feature.

Related Information

Entities by Content Schema (Embedded Edition and Premium Edition) [page 413]

15.2.5.4.1.1 Add Entities

Add entities to a schema to extract information from documents and define how extraction results are displayed on the document details screen.

Prerequisites

The schema must be inactive before you can add entities.

Context

Add categories, groups, and fields to a schema in line with your requirements.

Procedure

1. On the *Schemas* screen, choose the relevant schema.
2. In the versions list, select the schema version that you want to edit.
3. Choose *Add*.
4. Select an entity and make the necessary entries.

   > → Remember
   >
   > If the schema doesn't yet include entities, add them in the following order: category, group, field.
   >
   > You can only add groups if there's already at least one category to assign them to. You can only add fields if there's already at least one group to assign them to.

   a. For category, enter a name and label.
   b. For group, enter a name and label and select a category.
   c. For field, enter a name, label, group, and data type. You can optionally select a reference entity.
5. **Optional:** Choose *Edit Settings* for any entity to add a description, then save your entries.

Results

After completing your additions, you can activate the schema and use it to extract information from documents of the corresponding type.

Related Information

Entities by Content Schema (Embedded Edition and Premium Edition) [page 413]

15.2.5.4.1.2 Edit Entities

Make the settings for schema entities in accordance with your requirements.

Prerequisites

If you want to edit field settings that affect extraction, the schema must be inactive.

Context

Create or adapt configurations for entities in line with your needs.

Procedure

1. On the *Schemas* screen, choose the appropriate schema.
2. In the versions list, select the schema version for which you want to edit entities.
3. Select an entity and make the necessary changes on the *Entity Details* pane.
   a. For category, edit the name, label, and description.
   b. For group, edit the name, label, and description. If you want to move the group within the schema structure, select an appropriate category.
   c. For field, edit the name, label, and description. If you want to move the field within the schema structure, select an appropriate category and group. You can also use drag and drop to change the position of the field within its current group.
4. Edit the following field settings, as needed.
   a. Data Type

      This setting depends on the type of data extracted from the field.

b. Reference Entity

   The available entities are determined by the data type.

c. Processor Type

   Select *Auto*, *Manual*, and *Model*.

d. Authorization Relevant

   Minimum Occurrence

e. Mandatory

   Minimum Occurrence

5. Save your entries.

Results

After completing your edits, you can activate the schema and use it to extract information from documents of the corresponding type.

15.2.5.4.2 Display Entities

Use the *Display Entities* settings to define additional information displayed in the document object header and in the list of documents uploaded using the relevant schema version.

You can configure schemas so that a maximum of 5 selected fields and their values are included in the object header of documents on the document details screen.

You can also select a maximum of 5 fields for display as columns in the list of all documents uploaded using a particular schema version.

> **Note**
>
> Fields selected under *Display Entities* for a particular schema version don't appear in the list on the *All Documents* screen.

Including field information in object headers and document lists lets users see important information at a glance.

15.2.5.4.3 Processing Instructions

Find out about adding processing instructions to prompt schemas to extract information from entire documents and individual fields.

In the SAP Document AI workspace, processing instructions are user-defined prompts for the large language model (LLM) used when extraction is performed by generative AI.

Adding processing instructions enhances automation by reducing the amount of manual postprocessing. You can enter processing instructions for the schema as a whole and for individual fields.

Processing Instructions: Schema Level

When writing processing instructions for use at schema level, it's good practice to define a role for the schema that is associated with the extraction task.

> Example
>
> Let's say that you want the SAP Document AI workspace to extract information from purchase orders issued by company X for product Y. For this purpose, you could configure a schema with purchase order as the document type.
>
> On the *Processing Instructions* tab, you could add a schema-level prompt in the *Processing Instructions* section as follows: `You are an expert in extracting information from purchase orders issued by company X for product Y.`

Processing Instructions: Field Level

To define processing instructions for individual fields, first find the label of the relevant field in the *Processing Instructions per Entity* section. Then, add your prompt for the LLM in the text box.

> Example
>
> To reduce subsequent manual processing, you could prompt the SAP Document AI workspace to output extracted field values in the required format, as follows:
>
> `Output the extracted value in uppercase characters.`

15.2.5.4.4 Automation

Find out about the settings for automating document deletion and the confirmation of extracted documents.

In the SAP Document AI workspace, you can configure schemas so that documents associated with them are deleted automatically after a defined number of days. In addition, you can have documents confirmed automatically if conditions defined in the schema are met

Retention Period

Automate housekeeping by entering the number of days after which documents associated with the current schema are automatically deleted.

Auto Confirm

Reduce manual tasks by activating autoconfirmation for documents processed using the schema.

Score for Auto Confirm

If you want to trigger autoconfirmation of documents only if fields have a certain confidence score, you can specify the necessary values. You can either select a predefined confidence score or enter your own custom-defined percentage. In either case, the value here applies to all fields specified in the schema.

Increase Automation

If you want to define confidence scores for individual fields extracted using the schema, you can do so here. You can first define a value that applies to all fields, as described under *Score for Auto Confirm*. In a next step, you can enter values for individual fields, as needed.

> **Example**
>
> If only a small number of fields in a document type have critical values, you can define a low confidence score for fields generally. In addition, you can specify higher scores for the critical ones. In this way, you can make sure that the SAP Document AI workspace only confirms critical fields if the stricter confidence criteria are met.

15.2.5.4.5 Outbound Channels

Understand the settings for outbound channels in the SAP Document AI workspace.

Outbound channels output different types of information to a defined target system. The following types of outbound channels are available for schemas:

- Channels for notification
- Channels for extension

The configuration settings that you enter when adding channels of this kind to a schema apply to all documents processed using the schema.

> **Note**
>
> The target system for notifications and extensions is defined in the outbound channel. For details, see Create Outbound Channel [page 357].

Channels for Notification

Channels of this type provide information but don't initiate action in the target system. You can add one or more of these channels to a schema and configure them in line with your needs.

Each channel can be configured so that the SAP Document AI workspace outputs a notification to a defined destination when documents have one or more of the following statuses:

- Open
- In Progress
- Review Needed
- Ready for Posting
- Confirmed
- Obsolete
- Failed
- Rejected

There's also an option that lets you include processing results in the notification payload.

Channels for Extension

Channels of this type provide callbacks that initiate action in the target system. You can add one or more of these channels to a schema and configure them in line with your needs.

Each channel can be configured so that the SAP Document AI workspace outputs a callback to a defined destination when documents have one or more of the following statuses:

- After Prediction
- Validation

There's also an option that lets you include processing results in the callback payload.

> **Note**
>
> You can define channels for notifications, for extensions, or for both.

15.2.5.4.5.1 Add Outbound Channels for Notifications

Learn how to add outbound channels to schemas to output notifications to defined target systems.

Prerequisites

At least one outbound channel must be available in the SAP Document AI workspace before you can configure your schema to output notifications. See Create Outbound Channel [page 357].

Context

Add outbound channels so that the solution outputs notifications when documents have defined statuses.

Procedure

1. On the *Schemas* screen, choose the relevant schema.
2. In the versions list, select the schema version that you want to edit.
3. Choose *Outbound Channels*.
4. Choose *Add* in the *Outbound Channels for Notification* section.
5. Select a channel.
6. Select a document status or statuses.

   You can select between one and eight statuses here.
7. Save your entries.

8. **Optional:** Repeat the three preceding steps, adding channels to output notifications for different document statuses or combinations of document statuses, as needed.
9. **Optional:** Choose *Receive Processing Results* if you want the SAP Document AI workspace to include the processing results in the notification payload.
10. Confirm your entries.

15.2.5.4.5.2 Add Outbound Channels for Extensions

Learn how to add outbound channels to schemas to output callbacks to defined target systems.

Prerequisites

At least one outbound channel must be available in the SAP Document AI workspace before you can configure your schema to output callbacks. See Create Outbound Channel [page 357].

Context

Add outbound channels for extensions so that the solution outputs callbacks when documents have a defined status or statuses.

Procedure

1. On the *Schemas* screen, choose the relevant schema.
2. In the versions list, select the schema version that you want to edit.
3. Choose *Outbound Channels*.
4. Choose *Add* in the *Outbound Channels for Extension* section.
5. Select a channel.
6. Select a type.

   You can select either one or both of the available types here.
7. Save your entries.
8. **Optional:** Repeat the three preceding steps, adding channels to output callbacks for different types, depending on your needs.

   For example, you can add one channel each for *After Prediction* and *Validation* and a third for both types.
9. **Optional:** Choose *Receive Processing Results* if you want the SAP Document AI workspace to include the processing results in the callback payload.
10. Confirm your entries.

15.2.6 Channels

The *Channels* feature lets you manage inbound and outbound channels for the SAP Document AI workspace. It supports automatic extraction of information from documents as well as the output of notifications and callbacks.

There are two types of channel in the SAP Document AI workspace – inbound and outbound. The solution uses these channels to receive incoming documents for processing and to output information, respectively.

> → Remember
>
> To create, edit, and delete channels, you must have the necessary authorizations. For details, see Authorization Policies [page 329].

The SAP Document AI workspace uses inbound channels to upload documents and extract information from them automatically.

> ⓘ Note
>
> At present, inbound channels support only email received via a Microsoft Outlook account.
>
> The information for extraction must be in the body of the email. Attachments are not currently supported.

Every five minutes, the solution reads the first 100 documents from the specified email folder.

Outbound channels can be configured to output notifications when documents reach defined statuses in their processing lifecycle. These channels can also be configured for extensions. In this case, they output callbacks that notify the target system to perform specified actions. In addition, outbound channels can be configured to include processing results in the notification payload once the extraction results are available.

The *Channels* feature lets you perform various actions, including the following:

- Display a list of channels and search for or filter list entries
- View details of individual channels
- Create new channels
- Edit channels
- Activate and deactivate channels
- Share a link to the channels screen via email
- Delete channels

Parent topic: Using the Key Features of the SAP Document AI Workspace [page 330]

Related Information

User Menu [page 331]
Overview [page 332]
Upload New Documents [page 333]
All Documents [page 334]

Schemas [page 337]
Documents by Schema Version [page 359]
Settings [page 360]

15.2.6.1 Configuring Inbound Channels: Technical Information

Find out about the technical information needed to configure inbound channels.

When configuring inbound channels, you need the following kinds of information:

- Basic information, such as the email account and email folder from which the SAP Document AI workspace receives incoming mails
- Technical information, including the client ID and secret for email access

This section explains how to get the necessary technical information.

> **Note**
>
> Before using an email account in an inbound channel, deactivate two-factor authentication.

15.2.6.1.1 Register an Email App in Azure Portal and Copy Credentials

Register an email app in Azure Portal and copy the credentials needed for configuring inbound channels in SAP Document AI workspace.

Prerequisites

To complete these tasks, you must have the following:

- A Microsoft account (personal, work, or school)
- An Azure subscription (for example, Free Trial, Pay-As-You-Go, or via your organization)
- Access to a supported Azure Active Directory (AAD) tenant

In addition, your account must have one of the following permissions to register apps in Azure AD:

- Application Administrator
- Cloud Application Administrator
- Global Administrator

Context

Register an email app and copy the necessary credentials for use when configuring inbound channels in the SAP Document AI workspace.

Procedure

1. Go to the Azure Portal .
2. Choose *App registrations*.
3. On the *App registrations* screen, choose *New registration*.
4. Enter a name of your choice for the email application in the *Name* field.
5. Choose *Register*.
6. After registering, copy the following credentials and save them for later:
   a. *Application (client) ID*
   b. *Directory (tenant) ID*

   You need this information and the client secret for configuring inbound channels.

15.2.6.1.2 Create and Copy Client Secret and Set API Permissions

Get the client secret needed to create an inbound channel and set the relevant API permissions.

Prerequisites

You've registered your app and copied the relevant credentials, as described in the preceding topic.

Context

Get the client secret and define the API permissions for inbound channels in the SAP Document AI workspace.

Procedure

1. Choose *Manage* on the navigation bar.
2. Then, choose *Certificates & secrets*.

3. Choose *Client secrets*.
4. Next, choose *New client secret*.
5. Enter expiry details for the new client secret.
6. Choose *Add*.
7. Copy the client secret value and save it for later.
8. Choose *API permissions* on the navigation bar.
9. Choose *Add a permission*.
10. Select *Microsoft Graph*.
11. Select *Application permissions*.
12. Then, select the following for background or daemon apps:
    a. *Mail.Read (Application)*
    b. *Mail.ReadWrite (Application)*
13. Choose *Add permissions*.
14. Choose *Grant admin consent for MSFT*.
15. Choose *Yes* to grant the necessary admin consent.

15.2.6.2 Create Inbound Channel

Create an inbound channel for extracting information from incoming documents. Use the channel to associate emails from a specified account and folder with a defined schema version, automating information extraction and saving time and effort.

Prerequisites

You've completed the necessary steps on Azure Portal and copied the relevant technical information. See Configuring Inbound Channels: Technical Information [page 352].

> → Remember
>
> Before using an email account in an inbound channel, deactivate two-factor authentication.

Context

Create a channel for forwarding incoming documents to the SAP Document AI workspace for extraction.

> ⓘ Note
>
> At present, inbound channels support only email received via a Microsoft Outlook account.
>
> The information for extraction must be in the body of the email. Attachments are not currently supported.

> ⚠ Caution
>
> The solution processes the body text of all emails fetched from the specified folder of the defined account. Always make sure that these emails do not include sensitive information.
>
> SAP Document AI cannot detect spam and malicious emails, or prevent the processing of these emails. If included in the specified folder of the defined account, spam and malicious emails are also processed and charged.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose *My Channels*.

   You can also access the *Channels* feature by choosing *(bbyd-dashboard)* on the navigation bar.
2. Choose *Create Channel*.
3. Make the following entries on the dialog:
   a. Enter a name for your channel.
   b. Select *Inbound*.
   c. Select *Internet* as the proxy.
   d. Set the channel type.

      Currently, the only available type is *MAIL*.
   e. Enter the address of mailbox from which the SAP Document AI workspace fetches mails.
   f. Enter the name of the email folder from which mails are fetched.

      > → Tip
      >
      > Specify a folder at the root level of the folder structure. Inbound channels can't fetch mails from subfolders.
      >
      > We recommend using dedicated folders for different document types and, if applicable, for different customers or vendors.

      > ⚠ Caution
      >
      > For security reasons, the use of certain email folders is forbidden. For details, see Inbound Channels: Forbidden Email Folders [page 356].
   g. Set the target to which documents from incoming mails are routed.

      Currently, the only available target type is *SchemaVersion*.
   h. Enter the UUID of the relevant schema version.

      > ⓘ Note
      >
      > You can get this ID via the GET API. Alternatively, you can find it in parentheses at the end of the URL on the configuration screen for the relevant schema version.
      >
      > Choose *Schemas*, then choose the relevant schema and version, and copy the ID from the address bar.

i. Set the authentication type.

   Currently, the only available authentication type is *OAuth2ClientCredentials*.

   For the following entries, use the technical information that you copied and saved from Azure Portal.

j. Enter the client secret.
k. Enter the client ID.
l. Enter the token service URL.
m. Enter the OAuth tenant ID.
n. **Optional:** Enter a description.
o. Enter the destination name.

   This name is freely definable and is used to create the destination in SAP Business Technology Platform.

4. Choose *Create* to complete your entries.

Results

Your new inbound channel is now available. By default, it has the status *Inactive*. To activate it for use, choose it in the list. Then choose *Activate* on the details screen.

15.2.6.2.1 Inbound Channels: Forbidden Email Folders

Find out about the email folders that you can't use with inbound channels.

For security reasons, the use of the following email folders is forbidden in the SAP Document AI workspace:

- Archive
- Deleted Items
- Draft
- Important
- Inbox
- Junk Email
- Outbox
- Personal
- Promotions
- Sent
- Sent Items
- Social
- Spam
- Trash

Bear these restrictions in mind when configuring your inbound channels. If you try to add one of these folders to the configuration, SAP Document AI workspace prevents you from doing so.

15.2.6.3 Create Outbound Channel

Create an outbound channel in the SAP Document AI workspace for notifications or callbacks to other systems.

Context

Create an outbound channel for notifications and for callbacks indicating whether action is needed from target systems.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose *My Channels*.

   You can also access the *Channels* feature by choosing *(bbyd-dashboard)* on the navigation bar.
2. Choose *Create Channel*.
3. Make the following entries on the dialog:
   a. Enter a name for your channel.
   b. Select *Outbound*.
   c. Select the proxy – either *Internet* or *OnPremise*.

      > **Note**
      >
      > Internet: for applications that can connect to an external REST or SOAP service on the Internet
      >
      > OnPremise: for applications that can connect to an on-premise back-end system through the Cloud Connector
      >
      > See the link to related information at the end of this topic.

   d. Select the channel type.

      Currently, the only available type is *HTTP*.
   e. Enter the URL of the target system.
   f. Enter the authentication type: either *NoAuthentication*, *BasicAuthentication*, or *ClientCertificateAuthentication*, depending on your needs.
   g. **Optional:** Enter a description.
   h. Enter the destination name.

      This name is freely definable and is used to create the destination in SAP Business Technology Platform.
4. Choose *Create* to complete your entries.

Results

Your new outbound channel is now available. By default, it has the status *Inactive*. To activate it, choose the relevant entry in the list and then choose *Activate* on the details screen.

Related Information

HTTP Destinations

15.2.6.4 Edit Channels

Edit channels in the SAP Document AI workspace to change non-technical information quickly and easily.

Prerequisites

There must be at least one channel defined in the SAP Document AI workspace.

Context

If you want to change non-technical information for a channel, you can do so on the relevant *Channel Details* page.

> → Remember
>
> You can't edit technical details of an existing channel, such as proxy, authentication, and destination. If you need to change details of this kind, create a new channel and delete the existing one.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose *My Channels*.

   You can also access the *Channels* feature by choosing *(bbyd-dashboard)* on the navigation bar.
2. Choose the channel that you want to edit.
3. Choose *Edit*.

   If a channel is active, you don't have to deactivate it before making changes.
4. Change the label and description, as necessary.

5. Save your entries.

15.2.6.5 Delete Channels

Find out how to delete one or more channels in the SAP Document AI workspace.

Prerequisites

There must be at least one channel defined in the SAP Document AI workspace.

Make sure that all channels for deletion have the status *Inactive*. If a channel that you want to delete has the status *Active*, choose the channel from the overview, then deactivate it on the *Channel Details* screen.

Context

You can delete one or more channels from the overview list in the *Channels* feature. In addition, you can delete channels individually from their details pages.

Procedure

1. On the *Overview* screen of the SAP Document AI workspace, choose *My Channels*.

   You can also access the *Channels* feature by choosing *(bbyd-dashboard)* on the navigation bar.
2. Select one or more channels from the table.
3. Choose *Delete*.
4. Alternatively, choose the channel that you want to delete in the table.
5. Choose *Delete* on the *Channel Details* screen.

15.2.7 Documents by Schema Version

Find out how to view documents associated with a schema version and upload additional documents manually using that schema version.

The SAP Document AI workspace lets you view all documents uploaded using a specific schema version. You can access this information by choosing one of the icons that follow *Channels* on the navigation bar.

To see the names of the schemas, expand the navigation bar by choosing the ☰ *(hamburger) icon.* .

Choosing one of the *(document-text)* icons for schemas displays all associated versions that have been used to upload documents to the SAP Document AI workspace. Choosing one of these schema versions displays a list of the uploaded documents.

You can sort, group, and filter this list. In addition to the column headers included in *All Documents*, it includes columns for fields added in the configuration for the schema version under *Display Entities*.

You can also view details of individual documents and edit extraction results, depending on the document status. For more information, see View and Edit Documents Needing Review [page 335].

Additionally, you can upload documents manually here, as described in Upload New Documents [page 333]. In this case, you simply select the document or documents directly, without having to specify the schema and version.

Parent topic: Using the Key Features of the SAP Document AI Workspace [page 330]

Related Information

User Menu [page 331]
Overview [page 332]
Upload New Documents [page 333]
All Documents [page 334]
Schemas [page 337]
Channels [page 351]
Settings [page 360]
Display Entities [page 346]

15.2.8 Settings

Use the *Settings* menu to make configuration settings that affect all the features of the SAP Document AI workspace. In addition, you can change instance and change client.

The *Settings* menu provides the following options:

- *Manage Configuration*
- *Change Instance*
- *Change Client*

Provided you have the necessary authorization, you can use the *Manage Configuration* feature to enter the settings for the following:

- Document
- Learning
- Feedback
- Threshold
- Activation

- Notification
- Additional settings

For more information about authorizations, see Authorization Policies [page 329]. For details of configuration settings, see Manage Configuration [page 361].

Change Instance and *Change Client* let you select a different instance or client, as necessary.

Parent topic: Using the Key Features of the SAP Document AI Workspace [page 330]

Related Information

User Menu [page 331]
Overview [page 332]
Upload New Documents [page 333]
All Documents [page 334]
Schemas [page 337]
Channels [page 351]
Documents by Schema Version [page 359]
Authorization Policies [page 329]

15.2.8.1 Manage Configuration

Use the *Manage Configuration* feature to make general settings for the SAP Document AI workspace.

Prerequisites

To manage configuration settings, you must have the necessary authorizations. For details, see Authorization Policies [page 329].

Context

Make settings that apply across all features in the SAP Document AI workspace.

> ⓘ Note
>
> All the settings described here are optional. If the default settings meet your needs, you can use them unchanged.

> ⚠ Caution
>
> The SAP Document AI solution is not intended to support the collection, processing, and storage of sensitive personal data. Do not use the features for instant learning or data feedback collection with custom documents that include sensitive personal data.

Procedure

1. On the navigation bar of the SAP Document AI workspace, choose ⚙ *(action-settings)*.
2. Choose *Manage Settings*.
3. Change settings as needed.
   a. *Document*: Specify the number of days for which documents are retained before the SAP Document AI workspace deletes them.

      Default setting null: Documents aren't deleted and are retained forever.
   b. *Learning*: Activate or deactivate instant learning.

      When instant learning is active, your confirmed extraction results are used to improve the quality of information extraction using generative AI.

      Default setting: *Inactive*.
   c. *Feedback*: Activate or deactivate data feedback collection.

      When data feedback collection is active, SAP is permitted to use data collected from your documents to retrain machine learning models.

      Default setting: *Inactive*
   d. *Threshold*: Set the threshold for data enrichment.

      - *Low* yields more matches, increasing the possibility of false-positives.
      - *Medium* is a balanced setting.
      - *High* returns only matches with high confidence scores and has lower tolerance for differences between document content and master data.

      Default setting: *Low*
   e. *Activation*: Activate or deactivate manual data activation.

      Here, you can select manual activation instead of the default automatic refresh of enrichment data, which takes place every 4 hours.

      Default setting: *Inactive*
   f. *Notifications*: Activate or deactivate document notifications.

      When document notifications are active, you get notifications about the status of your processed documents without having to constantly send requests to the SAP Document AI workspace.

      Default setting: *Inactive*
   g. Under *Additional Settings*, make the following settings:

      - *Coordinate Format*
        Select one of the following options to define the format of the bounding box coordinates in the extraction results:

- *Default*
- *Normalized*
- *Absolute*

  Default setting: *Default*

- *Client Segregation*
  Activate to restrict user access to specified clients.
  Default setting: *Inactive*
- *Perform PII Check*
  Activate to have the SAP Document AI workspace automatically scan documents for personally identifiable information (PII) and exclude any document with this information from being used for improving the solution. Deactivate if you want all documents to be used for improving the solution.
  Default setting: *Active*

16 Best Practices (Base Edition and Premium Edition)

Find out about recommended approaches for optical character recognition, the main features of SAP Document AI, data enrichment, and extraction using generative AI.

The quality of your extraction results depends on a wide range of factors. This section is intended to help you get the best out of SAP Document AI. It includes the following information:

- General recommendations on how to get better extraction and enrichment results using OCR best practices.
- Decision procedures, recommendations, and tips on how to use the schema configuration, template, and document features of SAP Document AI.
- Important considerations when using the SAP Document AI machine learning models, generative AI, and the instant learning feature to extract information from documents.

Related Information

Optical Character Recognition (OCR): Best Practices [page 364]
Schema Configuration: Best Practices [page 365]
Template: Best Practices [page 370]
Document: Best Practices [page 375]
Data Enrichment: Best Practices [page 376]
Extraction Using the Solution's Machine Learning Models: Best Practices [page 378]
Extraction Using Generative AI (Premium Edition): Best Practices [page 379]
Instant Learning (Premium Edition): Best Practices [page 381]

16.1 Optical Character Recognition (OCR): Best Practices

To get better extraction and enrichment results, bear in mind the following when uploading document files to SAP Document AI:

- Use page size A4 (Europe) or letter (United States).
- Portrait orientation is preferable.
- Use a high-quality scan.
- A handwriting detection feature is available. At present, this feature detects only handwriting in English. For better extraction, ensure that handwriting is clear and doesn't overlap with printed text.

- The ideal resolution is 300 dpi. For good quality, at least 150 dpi is needed. Higher resolution (> 300 dpi) generally has no effect on extraction results. Very large files take longer to preprocess because they're scaled back to 300 dpi. In addition, the service ignores colors and converts images to grayscale.
- Make sure that the text isn't blurred. For better extraction results, ensure that the text is large and visibly recognizable.
- The service extracts dark text on a light background more accurately than light text on a dark background.
- Avoid handwritten additions, such as texts, numbers, checkmarks, or underlining, as well as highlighting with marker pens. Additions of this kind can lead to poor OCR and extraction results.
- Words that are oriented differently (for example, rotated 90 degrees) or have a much larger or much smaller font than the words on the rest of the page aren't detected.
- Very small fonts can result in poor OCR and extraction results.
- Letters that are visually ambiguous in certain fonts can cause extraction issues.
- Where text takes up only a small area of the page, excessive zoom-in or cropping can cause extraction issues.
- Ensure that you have adequate spacing between different entities in your documents. If there is insufficient spacing, two separate entities may be mistakenly identified as one, which can negatively impact the accuracy of extraction results.

→ Tip

- See Supported Document Types [page 118] and Supported File Types [page 121].
- See also Supported Languages [page 125] and Technical Constraints [page 383].

16.2 Schema Configuration: Best Practices

Learn about best practices for using schemas to upload documents to the SAP Document AI basic UI.

You must always use a schema when uploading documents to the SAP Document AI basic UI.

ⓘ Note

To use the *Schema Configuration* feature to create, copy, and edit schemas, you must have the administrator rights provided by the following role collection:

- `Document_Information_Extraction_UI_Templates_Admin`

If you have the `Document_Information_Extraction_UI_End_User` role, you can use any available schemas, except SAP schemas, to upload documents.

The steps involved in adding a schema differ depending on whether the document type is standard or custom. For details of the respective processes, see the subtopics in this section.

Related Information

Standard Document Types [page 366]

Custom Document Types [page 368]

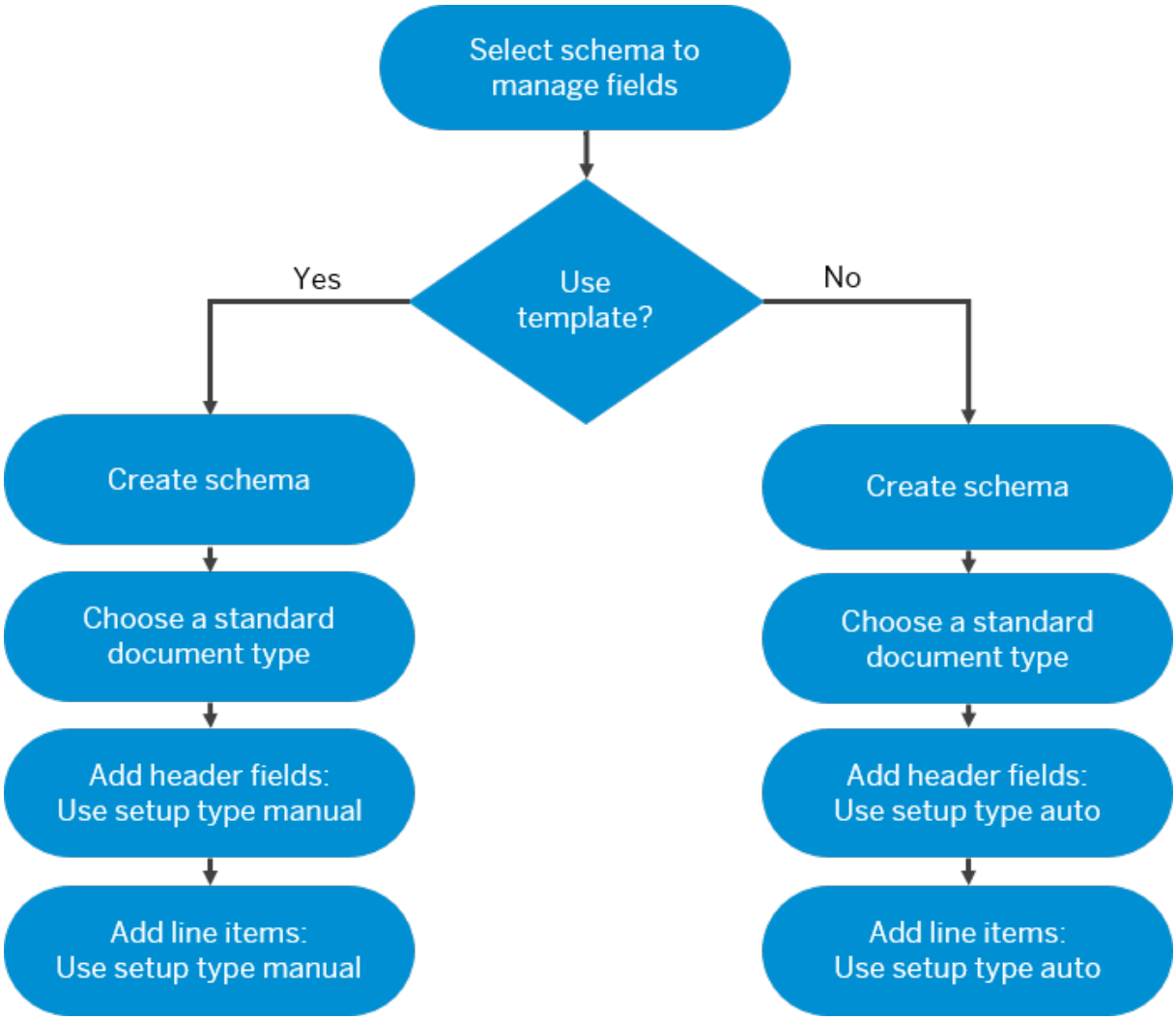
16.2.1 Standard Document Types

Configure schemas for standard document types.

The SAP Document AI basic UI supports the following standard document types:

- Invoice
- Payment advice
- Purchase order

The following image outlines the steps and settings for processing standard document types with or without a template.



- Template: Best Practices [page 370]
- Create Schema [page 307]
- Create Schema [page 307]
- Setup Types [page 311]
- Setup Types [page 311]
- Add Document [page 296]

> → Remember
>
> The SAP schemas for standard document types provide a set of typical fields with default extractors. If you don't want to configure schemas for standard document types from scratch, you can select the appropriate SAP schema unedited when you add a document or create a template on the SAP Document AI basic UI. No configuration is needed when you use SAP schemas in this way.
>
> You can also create your own schema by copying the SAP schema for the relevant standard document type. You can then edit this copy, choosing some or all the fields from the SAP schema as a basis for your own schema and adding custom fields, as required.

Extraction Methods, Setup Types, and Default Extractors

You can use the following extraction methods for header fields in schemas for standard document types:

- Template: setup type *manual* without default extractor
- Machine learning models of SAP Document AI: setup type *auto* with default extractor
- Generative AI: setup type *auto* without default extractor

> → Remember
>
> The generative AI extraction method is available with the premium edition service plan.

Default Extractors

Templates generally deliver better results for custom header fields than for custom line items. To get the best extraction results when using a template or the machine learning models of SAP Document AI with standard document types, configure default extractors for header and line item fields as follows:

- Header fields: Don't use default extractors for custom header fields. You can then use a template to edit them.
- Line items: Use default extractors, wherever possible.

To access the default extractors when configuring a schema, choose *Header Fields* or *Line Item Fields* and then choose *Add*. Next, select the relevant data type and the setup type *auto*. You can now select the appropriate extractor for the data type from the *Default Extractor* dropdown.

Related Information

Custom Document Types [page 368]

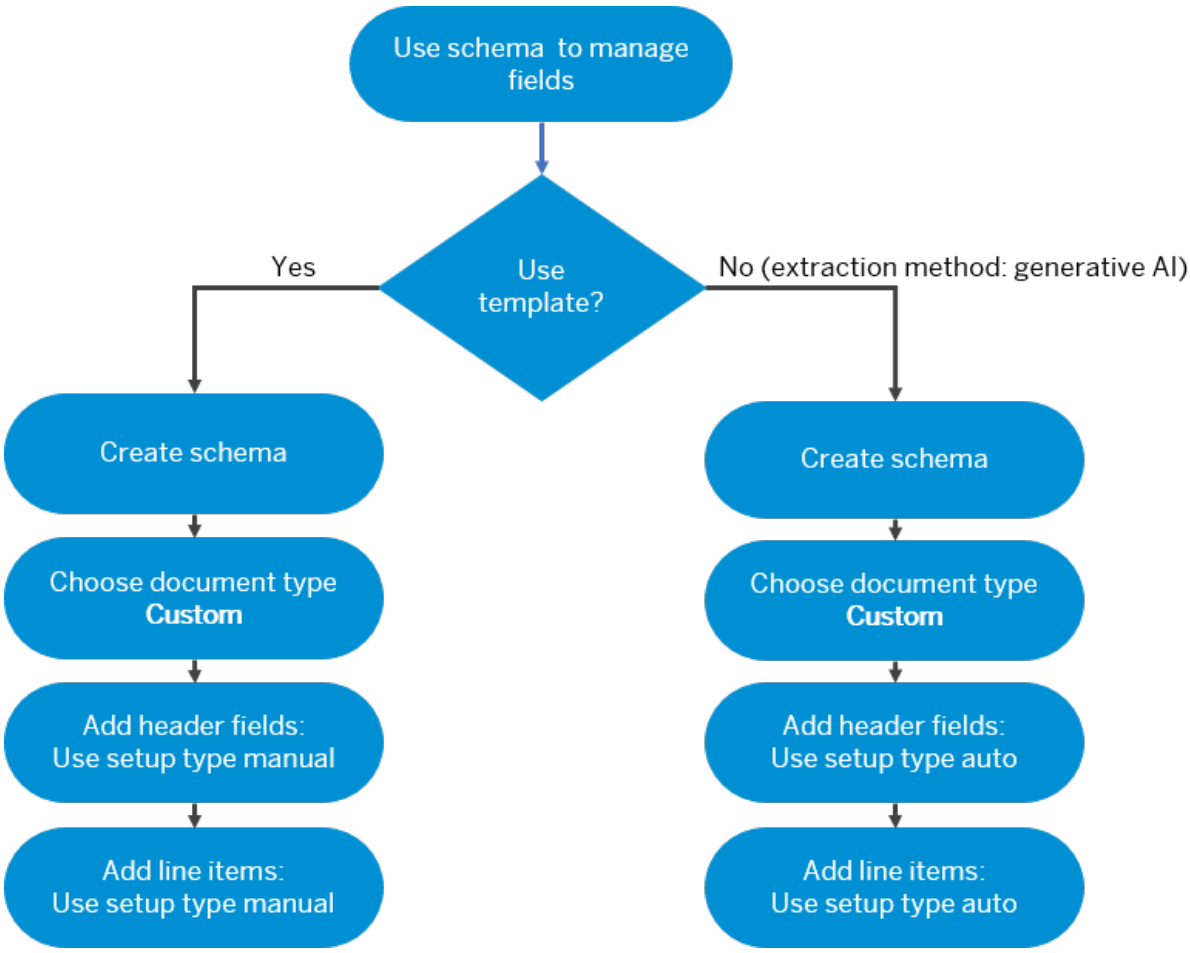
Add Data Fields [page 309]
Setup Types [page 311]

16.2.2 Custom Document Types

Configure schemas for custom document types.

Custom documents are documents that don't belong to the standard document types in SAP Document AI. There are many different types of custom document: Common examples include powers of attorney, birth certificates, and résumés.

The following image outlines the steps and settings for processing custom document types with and without a template.



- Create Schema [page 307]
- Create Schema [page 307]
- Template: Best Practices [page 370]

- Setup Types [page 311]
- Setup Types [page 311]

Extraction Methods and Setup Types

You can use the following combinations of extraction methods and setup types for header fields in schemas for custom document types:

- Template: setup type *manual*
- Generative AI: setup type *auto*

> → Remember
>
> The generative AI extraction method is available with the premium edition service plan.

> ⓘ Note
>
> Default extractors aren't available for custom document types.

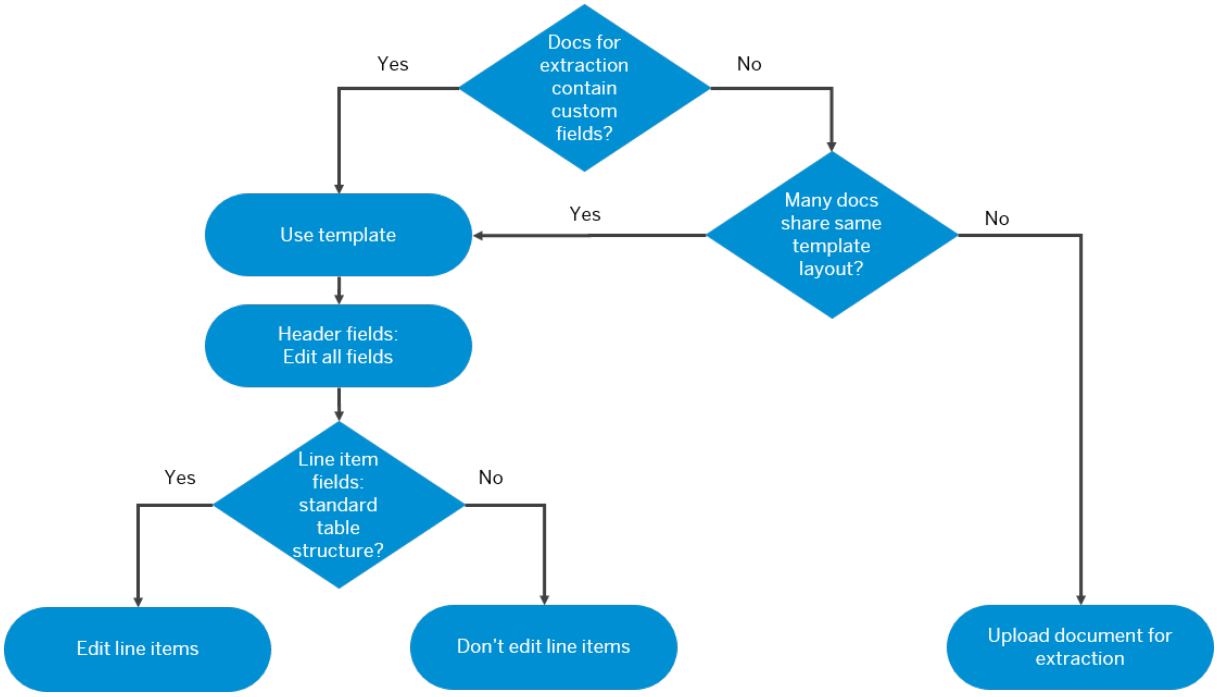
Related Information

Add Data Fields [page 309]
Setup Types [page 311]

16.3 Template: Best Practices

Decide whether to use a template when uploading documents to the SAP Document AI basic UI and make the relevant settings.

When uploading documents to the SAP Document AI basic UI, you must select a schema. In addition, you have the option of using a template. The associated decision procedure is as follows:



- Template: Best Practices [page 370]
- Standard and Custom Tables [page 372]
- Add Document [page 296]

> **Note**
>
> To use the *Template* feature to create templates, you must have the administrator rights provided by the following role collection:
>
> - `Document_Information_Extraction_UI_Templates_Admin`

The SAP Document AI basic UI delivers best results with standard table structures. If your documents include custom fields, we recommend using a template. This approach allows you to edit extraction results for fields that don't have default extractors. Edit all custom header fields. If the line items in your documents are in a standard table structure, also edit the line items. However, if the table has a custom structure, don't edit the line items.

If the documents don't include custom fields, and only a few of the documents share the same template layout, don't use a template. In this case, upload the documents using a schema only.

If your documents don't include custom fields, but many of them share the same template layout, use a template. If the line items in your documents are in a standard table structure, edit the line items. However, if the table has a custom structure that is likely to cause issues with the template approach, don't edit the line items.

> **Note**
>
> If there are extraction errors when using templates, refer to the subsections of these template best practices.

Related Information

General Recommendations and Limitations [page 371]
Standard and Custom Tables [page 372]

16.3.1 General Recommendations and Limitations

Follow best practices and be aware of limitations when using templates to extract information from custom and standard document types.

Templates are essential when extracting information from custom document types, for which SAP Document AI has no pretrained models. In addition, templates can help you fine-tune results when extracting information from standard document types. (See Standard Document Types [page 366].)

Whether you use templates to extract information from custom or standard document types, note the recommendations here and in Standard and Custom Tables [page 372]:

- Use templates only with well-structured form-like documents such as the following: structured forms, application forms, certificates, prescriptions, and personal IDs.
- If possible, process one-page documents only. Otherwise, the results can be less accurate.

Note the following constraints on header and line item fields:

- If the same header field appears on more than one page, the SAP Document AI basic UI extracts this field only once.
- Templates support multiple tables per page, provided they all have a standard structure and the same table headers. Multiple tables that are horizontally placed aren't supported.
- Nested table structures (with items grouped in the same line) cause issues.
- Items that overlap horizontally (for example, different items in the same column) also cause problems.
- Header and line item fields with identical or very similar formatting prevent the template from distinguishing the header from the main part of the table. As a result, the template can't detect where the table starts.
- If adjacent columns are too close to each other, the SAP Document AI basic UI can't distinguish them. In such cases, the service extracts the contents of multiple columns as a single value.
- If texts in table are centered vertically, it can be difficult to separate them into distinct rows across multiple cells. As a result, SAP Document AI basic UI may fail to detect the table correctly.

⚠ Caution

If there are extraction errors when using templates, check for the following issues:

- Document for upload has significant page rotation/tilt (15 degrees or more).
- Size of pages and margins differs between document for upload and associated document.
- Position of image differs between document for upload and associated document.
- Line items in the document for upload differ slightly from the line items in the associated document.
- Images include scanning noise – for example, background images and bleed through, where text on the back of the document is visible on the front.
- OCR results are poor.

These issues result in fields failing to map to their expected positions. In such cases, extraction can either be incorrect (wrong value) or fail entirely (no value). If extraction fails, the system falls back to the pretrained global model, which can result in incorrect extraction.

Related Information

Standard and Custom Tables [page 372]
Optical Character Recognition (OCR): Best Practices [page 364]
Technical Constraints [page 383]

16.3.2 Standard and Custom Tables

Compare the tables in your documents with examples of standard and custom structures.

If you use a template to extract information from tables, you get the best results from simple, well-structured layouts (standard tables). By contrast, custom tables can cause issues.

Before using a template, compare the tables in your documents with the following examples of standard and custom tables.

→ Remember

Whether you're extracting information from standard or custom tables, bear the following layout-related points in mind:

- If you use a template, make sure that the header and line item fields are formatted differently from each other. If they have very similar or identical formatting, the template can't distinguish the header from the main part of the table and therefore can't detect where the table starts.
- Make sure that adjacent table columns aren't too close to each other. If they are, the SAP Document AI basic UI can't distinguish them. As a result, it extracts the contents of multiple columns as a single value.

Standard Tables

For best results, use tables with the standard structures shown here.

In the following examples, the column headings correspond to the header fields, and the line items appear directly under them.

Headers Arranged Horizontally from Left to Right

Material number	Description	Quantity	Unit price	Total price
123	Product 1	1	EUR 12.35	EUR 12.35
234	Product 2	2	EUR 2.35	EUR 2.35

Headers Arranged Horizontally from Left to Right: No Nested Structures

Material number	Description	Quantity	Unit price	Total price
123	Product 1 Description covering several lines	1	EUR 12.35	EUR 12.35
234	Product 2 Description covering several lines	2	EUR 2.35	EUR 2.35

As shown in both of the preceding tables, headers are arranged horizontally from left to right in standard tables. If a column includes content that covers more than one line (as in the **Description** column of the second table), this content isn't nested. In other words, it's not spread across multiple columns.

See the contrasting examples in the **Custom Tables** section.

Custom Tables

Tables structured as shown in this section can cause issues during extraction and deliver poorer results.

Headers Arranged Vertically

Material number	123	234
Description	Product 1	Product 2
Quantity	1	2
Unit price	EUR 12.35	EUR 2.35
Total price	EUR 12.35	EUR 2.35

Nested Structures

--- I N V O I C E ---

Date - Sat 3rd. Jul 2021

Week Ending - Sat 5th. Jun 2021 ---------- Owing from Previous Period = 29.80
Less Payments Made =

Item -	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Qty		Price		
Semi Skimmed1Pt Glas	CAN	CAN	CAN	CAN	CAN	CAN	4	4	@	0.70	=	2.80
6 Large Eggs	CAN	CAN	CAN	CAN	CAN	CAN	1	1	@	1.30	=	1.30
										Weeks Total	=	£4.10
										Sub Total	=	4.10

Week Ending - Sat 12th. Jun 2021 ---------- Owing from Previous Period = 4.10

Item -	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Qty		Price		
Semi Skimmed1Pt Glas			4		3		4	11	@	0.70	=	7.70
6 Large Eggs							1	1	@	1.30	=	1.30
										Weeks Total	=	£9.00
										Sub Total	=	13.10

Week Ending - Sat 19th. Jun 2021 ---------- Owing from Previous Period = 13.10

Item -	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Qty		Price		
Semi Skimmed1Pt Glas			4		3		4	11	@	0.70	=	7.70
6 Large Eggs							1	1	@	1.30	=	1.30
										Weeks Total	=	£9.00
										Sub Total	=	22.10

Week Ending - Sat 26th. Jun 2021 ---------- Owing from Previous Period = 22.10

Item -	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Qty		Price		
Semi Skimmed1Pt Glas			4		3		4	11	@	0.70	=	7.70
6 Large Eggs							1	1	@	1.30	=	1.30
										Weeks Total	=	£9.00
										Sub Total	=	31.10

Week Ending - Sat 3rd. Jul 2021 ---------- Owing from Previous Period = 31.10

Item -	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Qty		Price		
Semi Skimmed1Pt Glas			4		3		4	11	@	0.70	=	7.70
6 Large Eggs							1	1	@	1.30	=	1.30
										Weeks Total	=	£9.00
										Sub Total	=	40.10

Items Overlapping Horizontally

Artikel	Product/Eenheid	Korting Hoeveelheid	Eenheidsprijs	Totale Prijs	BTW	Uw Ref
000010	Z0251-500G	1,0	EUR	EUR		
- 10						
ZINC SULFATE HEPTAHYDRATE CELL CULTURE*T		1	143,00 /EA		21,0	
% korting		5,0-%	7,15-	135,85		
	Estimated delivery date	04.02.2021				
000020	429430-5G	2,0	EUR	EUR		
- 20						
Zinc chloride, anhydrous, powder, 99.995		2	83,00 /EA	166,00	21,0	
	Estimated delivery date	05.02.2021				

> → Tip
>
> If your documents include custom tables, we recommend using default extractors for all line items when configuring the corresponding schema. If you then decide to use the *Template* function with your schema, you don't have to edit the extraction results for the line items.

> ⓘ Note
>
> If you follow the guidance in this subsection but still have extraction errors, refer to the general recommendations for using templates.

Related Information

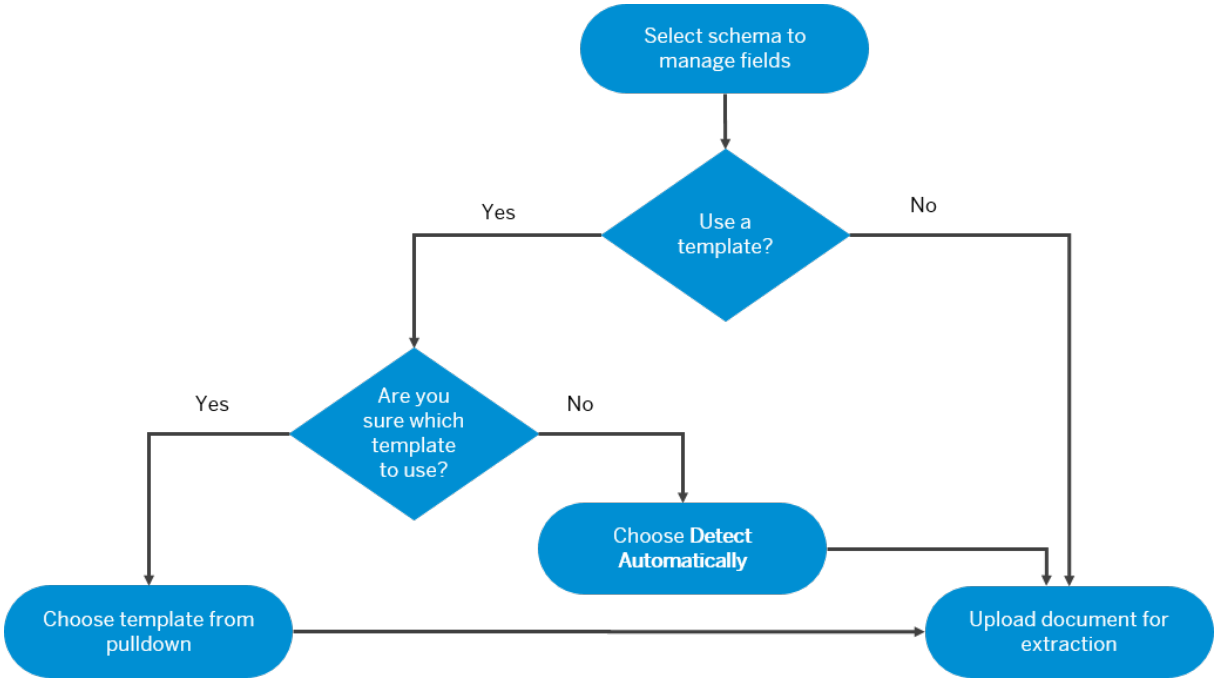
General Recommendations and Limitations [page 371]

16.4 Document: Best Practices

Make the recommended settings for uploading documents to the SAP Document AI basic UI.

You must always use a schema when uploading documents to the SAP Document AI basic UI. Schemas enable you to manage fields for extraction centrally, reducing manual effort, and inconsistencies.

When you add documents, the decision procedure is as follows:



- Add Document [page 296]
- Schema Configuration: Best Practices [page 365]
- Template: Best Practices [page 370]

If you want to use a schema without a template, simply select the appropriate schema and then upload your documents to the SAP Document AI basic UI.

If you want to use a schema with a template and know the template name, select the template from the dropdown in the *Select Document* step. If you're unsure which template to use, choose *Detect Automatically*. The service then finds the best template for your document.

> → Tip
>
> When uploading documents using a schema, you may find that a suitable template isn't available. In this case, you can create a template based on the extraction results for your documents. For details of how to do so, see Create Template from Document Extraction Results [page 325].
>
> To create templates in this way, you need the admin rights provided by the following role collection:
>
> - `Document_Information_Extraction_UI_Templates_Admin`

16.5 Data Enrichment: Best Practices

Data enrichment is a powerful feature that matches vendors, customers, employees, and products found on a document with master data uploaded to SAP Document AI.

To improve the performance of the data enrichment feature, make sure that your master data is up to date and activated. To get the best possible matching results, observe the following recommendations:

- Don't use placeholder values for individual fields that lack a value. Remove these fields instead.
- Always include the keys `name` and `address1` and populate them with a valid supplier or customer name and address. Otherwise, the enrichment is unlikely to work as intended.
- Whenever possible, include `taxId` and `bankAccount` information in the `businessEntity` field. These two fields have benefits for the enrichment.
- To get better enrichment results, you can alter the behavior of data enrichment. Use the `enrichmentConfidenceThreshold` configuration key to adjust the similarity confidence threshold for data enrichment either to low, high or medium.
  For further details, see Create Configuration [page 159] and Configuration Keys [page 161].
- Always keep in mind that uploaded master data must be activated before it can be used for enrichment. If automatic activation (default) is enabled, this process can take up to four hours.

  > → Tip
  >
  > With large numbers of data records and for better control, use manual data activation. While automatic data activation is more convenient in many cases, it can lead to unexpected results, especially if triggered during the upload of new data records.
  >
  > Use the `manualDataActivation` configuration key to set data activation to manual. For details, see Create Configuration [page 159] and Configuration Keys [page 161].

- Make sure to select the correct subtype when uploading the data (`supplier` for vendors or senders, and `customer` for buyers or receivers).
- Currently, products are matched by `materialNumber` only. This means that data enrichment only works for product line items that include a `materialNumber` on the document.
- If you upload a product entity without a `materialNumber`, this entity won't be matched. Always include a valid `materialNumber` when uploading product master data.
- To take advantage of ongoing normalization improvements, reupload the entire master data from time to time – for example, once a quarter. To optimize the matching of values, we make improvements of this kind continuously.

Request Examples

Not recommended – Create Enrichment Data [page 214] request payload:

```
payload:
{
   "value":[
      {
         "id":"BE0001",
         "name":"Emma Dowerg",
         "accountNumber":"SK2421",
         "address1":"Amalie-Klemm-Platz 0/9, 48581, Geithain",
         "address2":"none",     Do not add custom placeholder values
         "city":"Geithain",
         "countryCode":"DE",
         "postalCode":"48581",
         "state":"unknown",     Do not add custom placeholder values
         "email":"e.dowerf@mustermail.com",
         "phone":"",     Do not leave empty values
         "bankAccount":"DE345982837402",
         "taxId":"DE435531312"
      }
   ]
}
type: businessEntity
clientId: c_00
subtype: supplier
```

Recommended – Create Enrichment Data [page 214] request payload (do not use fields with custom placeholders or empty values):

```
payload:
{
   "value":[
      {
         "id":"BE0001",
         "name":"Emma Dowerg",
         "accountNumber":"SK2421",
         "address1":"Amalie-Klemm-Platz 0/9, 48581, Geithain",
         "city":"Geithain",
         "countryCode":"DE",
         "postalCode":"48581",
         "email":"e.dowerf@mustermail.com",
         "bankAccount":"DE345982837402",
         "taxId":"DE435531312"
      }
   ]
}
type: businessEntity
clientId: c_00
subtype: supplier
```

Related Information

Enrichment Data API [page 213]
Data Variants [page 219]
Data Duplicates [page 220]

16.6 Extraction Using the Solution's Machine Learning Models: Best Practices

To achieve better extraction and enrichment results, bear in mind the following when uploading document files for extraction using the solution's machine learning models as the extraction method.

- All line items must be aligned vertically with the top of their respective cells. Line items that are aligned vertically with the middle of their cells can cause extraction issues. See the following examples:

  Correct Alignment of Line Items

Header 1	Header 2	Header 3
Line item 1	Line item 1 Line item 1	Line item 1 Line item 1 Line item 1
Line item 2	Line item 2 Line item 2	Line item 2 Line item 2 Line item 2

  Problematic Alignment of Line Items

Header 1	Header 2	Header 3
Line item 1	Line item 1 Line item 1	Line item 1 Line item 1 Line item 1
Line item 2	Line item 2 Line item 2	Line item 2 Line item 2 Line item 2

- Ensure that line items don't spill over from one page onto the next. Otherwise, extraction may be poor.
- Ensure that there are line item headers on all pages. If headers are missing from the second and subsequent pages, the line items may not be extracted completely.
- Dates: To prevent misinterpretation, ensure that the extended ISO 8601 date format is used: YYYY-MM-DD. Check documents for the following, which can cause extraction issues:
  - Uncommon or nonstandard date formats – for example, calendar weeks. SAP Document AI may not parse formats of this kind correctly.
  - The date formats MDY and DMY, which can be ambiguous.
  - Dates that omit information such as the year (31/01) or the day (12/2025).
- Currencies: To prevent misinterpretation, check for ambiguous symbols that denote multiple currencies: for example, $. The best extraction results are achieved with standard three-character combination codes,

such as USD, EUR, and AUD. Any other currency conventions must be unambiguous: for example, AU$ 100 or A$ 100, not $100.

Related Information

Setup Types [page 311]
Extracted Header Fields (Base Edition and Premium Edition) [page 387]
Optical Character Recognition (OCR): Best Practices [page 364]

16.7 Extraction Using Generative AI (Premium Edition): Best Practices

Find out about best practices for using generative AI to extract information from documents.

> → Remember
>
> Extraction using generative AI is available with the premium edition service plan. See Service Plans [page 104] and Metering and Pricing [page 108].
>
> You can also use an SAP BTP trial account to try out extraction using generative AI. Follow the tutorial: Use Trial to Extract Information from Custom Documents with Generative AI and SAP Document AI.

> ⚠ Caution
>
> Bear the following in mind when using SAP Document AI to process documents using generative AI:
>
> **Confidence Scores**: SAP Document AI returns confidence scores for extracted results. These values are usually reliable when the service uses a pretrained model. Be aware, however, that they can't be relied on when the service uses generative AI to extract information.
>
> **Coordinates**: Result objects returned by the API and the SAP Document AI basic UI include coordinates indicating the assumed location of extracted items of information on the page. These coordinates are intended to let users see where the service extracted information and check manually for errors. Even if the extraction results are correct, some coordinates can be missing or incorrect. Therefore, coordinates can't be relied on when the service extracts information automatically using generative AI.
>
> See also Get Result [page 183] and View and Edit Extraction Results [page 298].

The better you describe the information that you want to extract using generative AI, the better your results are.

When adding fields to a schema, pay particular attention to their names and associated descriptions.

> → Tip
>
> When entering field names, it's often useful to imagine that you're explaining what you want to extract to a person with no prior knowledge. This approach is important when wording your schema descriptions since SAP Document AI uses these descriptions as prompts for the LLM.

With these points in mind, we recommend the following best practices:

- Consider the wording of names and descriptions carefully, making sure that they're accurate, complete, and unambiguous.

  > **Example**
  >
  > Say you wanted the schema to extract information in a certain way from line item fields in a pharmaceutical certificate of analysis (CoA). To prompt the LLM to deliver the desired results, word the schema description as follows:
  >
  > ```
  > Extract relevant information from the following three line item fields
  > of a pharmaceutical CoA: Parameter, Specification, Result. Sometimes test
  > parameters have a title (for example, related substances) and a subtitle. If
  > this is the case, group the title and subtitle together and extract them as
  > one value.
  > ```

- Write your definitions in English, even if documents for extraction are in a different language.
- Make sure that field names are self-explanatory and don't include abbreviations or acronyms.

  > **Example**
  >
  > Use `purchaseOrderNumber`, not `pon` or `id1`.

- If one field can have different names, include as many of these names as possible in your description.

  > **Example**
  >
  > The *Order Number* field can be called *Your Reference* in some documents.

- If there are multiple fields with similar names, add all the fields to your schema, even if only one is needed in the downstream application. Doing so simplifies processing because you can be sure of extracting a value automatically, which you can later correct manually, if necessary.

  > **Example**
  >
  > The field names *receiver material number* and *sender material number* are very similar and therefore could be confused with each other.

- Use generic terms rather than business roles in field names.
  If a document doesn't include labels indicating business roles, such as *vendor* or *customer*, there's a risk of the extraction model not knowing these roles. So, if you want to extract a vendor address from an invoice document it's best to use `senderAddress`, rather than `vendorAddress`.
- To simplify subsequent processing, make sure that your description includes the desired output format for results.

  > **Example**
  >
  > If you want a value extracted from a document to be output in uppercase, you can specify this formatting in the description.

Related Information

Add Fields to Schema Version [page 249]
Setup Types [page 311]

16.8 Instant Learning (Premium Edition): Best Practices

Find out how to get the best results from the instant learning feature.

The instant learning feature of SAP Document AI can help you enhance extraction accuracy and increase the efficiency of document processing. You can use it with schemas that you've created yourself and with the preconfigured SAP schemas for the following standard document types: invoice, payment advice, and purchase order. For more details, see Create Schema for Instant Learning and Add Data Fields [page 302].

> → Remember
>
> Before you can use instant learning, you must first activate the feature using the `enableInstantLearning` configuration key. For step-by-step guidance on how to do so, see Activate the Instant Learning Feature with Swagger UI. For further details, see Create Configuration [page 159] and Configuration Keys [page 161].

To get the most out of the instant learning feature, apply the following best practices.

Ensure that Documents Are of Sufficiently High Quality

If the documents that you confirm for instant learning are of poor quality, the feature won't work as intended. Make sure that the documents you use meet the requirements in terms of resolution and text orientation, for example. For more about the various factors that can impair extraction results, see Optical Character Recognition (OCR): Best Practices [page 364].

Pay Particular Attention to the Layout of the First Page

The layout of documents is critical in instant learning. When you upload a document for extraction, SAP Document AI selects a confirmed document with an identical or almost identical layout. This confirmed document acts as an example of correct extraction, improving extraction accuracy.

The layout of the first page of a document is especially important because it provides the foundation for accurate data extraction across the document as a whole.

- Always take great care to validate fields and values on the first page of any document and correct any errors or omissions before confirming the document.

Validate All Line Item Values

Validated line item values are essential since they provide the examples that instant learning uses to improve extraction accuracy.

- Validate and confirm all line item values in your documents. If it's not possible to do so, validate and confirm at least all the line item values on the first page.
- If you validate and confirm only the line items on the first page of a multipage document, delete any unvalidated rows from subsequent pages to avoid including incorrect values in the confirmed document.

> → Tip
>
> For optimal accuracy with multipage documents, validate and confirm line items across all pages.

Use Documents with Different Page Counts

When you upload a document for extraction, instant learning uses the most recent confirmed document with the same layout and a similar page count. The page count helps ensure that instant learning uses the most relevant example in any particular case. It's therefore important that you confirm documents of various lengths.

- When validating, editing, and confirming documents that share the same layout, make sure they have a range of different page counts, wherever possible.

Following these best practices helps enhance the reliability and efficiency of instant learning in your document processing workflows.

Related Information

Instant Learning (Premium Edition) [page 301]

17 Technical Constraints

All SAP Document AI endpoints exposed to the end user have strict technical limits. See details in the following table.

> **Note**
>
> The technical limits listed here are relevant only to users of the service plans base edition and premium edition for enterprise accounts. See Service Plans [page 104].

Variable	Maximum Limit
Document file size	50 MB
Uploaded documents per hour per tenant	10,000
Pages per document	100
Number of rows in `businessCard`, `invoice`, `purchaseOrder`, and `custom` document types in Excel file type	1000
Number of rows in `paymentAdvice` document type in Excel file type	2000
Number of columns in Excel files	49
Number of clients created per tenant	5000
Number of clients created in one API call	5000
Number of enrichment data records per tenant	100,000
Number of schemas per client	1000
Number of header fields and line items per schema (Premium Edition)	500
Number of header fields per schema (Base Edition)	500
Number of line items per page (Base Edition)	99
Number of categories per schema	500
Number of templates per schema	1000
Number of associated documents per template	5

> **Note**
>
> SAP Document AI supports extraction from single or multiple tables. A single table can extend across multiple pages. It's not possible to extract information from multiple tables if they have different sets of line item fields.

> **→ Tip**
>
> See the following sections of the SAP Document AI documentation for other useful information:
>
> - Supported Document Types [page 118]
> - Supported File Types [page 121]
> - Supported Languages [page 125]
> - Optical Character Recognition (OCR): Best Practices [page 364]

> **→ Remember**
>
> Use **only** the following types of characters for the IDs of clients, enrichment data records, system and company codes, and the name of templates, schemas, and schema header and line item fields:
>
> - letters (lowercase and uppercase)
> - numbers
> - underscore "_"
> - hyphen "-"
> - period "."
> - comma ","
> - ampersand "&"
> - dollar sign "$"
> - hashtag "#"
> - tilde "~"

Related Information

Free Tier Option and Trial Account Technical Constraints [page 385]

17.1 Free Tier Option and Trial Account Technical Constraints

When using the free tier option for SAP Document AI or a trial account, be aware of the following technical limits:

> **Note**
>
> The technical limits listed here are relevant only to users of the free service plan for enterprise accounts and the premium edition service plan for trial accounts. See Service Plans [page 104].

Variable	Maximum Limit
Uploaded document pages per tenant in a rolling period of 30 days **→ Tip** The rolling period consists of the past 30 days. The total number of document pages available at any time is calculated based on how many pages you've uploaded during these 30 days. Let's say that you upload your first documents to the service on June 1, when you add 5 document pages. Up to and including June 29, you then upload 35 more pages. Because of the 50-page limit for the rolling 30-day period, you can upload only 10 more document pages on June 30. If you don't upload any pages on June 30 and wait until July 1, you can now add up to 15 more pages to the service. This is because the 5 pages you uploaded on June 1 are no longer considered since they now fall outside of the 30-day rolling period.	50
Document file size	50 MB
Pages per document	40
Number of rows in `businessCard`, `invoice`, `purchaseOrder`, and `custom` document types in Excel file type	1000
Number of rows in `paymentAdvice` document type in Excel file type	2000
Number of columns in Excel files	49

Variable	Maximum Limit
Number of clients created per tenant → Tip A `default` client is created following tenant provisioning, enabling you to use the service immediately.	1
Number of enrichment data records per tenant	10
Number of schemas per client	1000
Number of header fields and line items per schema	500
Number of categories per schema	500
Number of templates per tenant	3
Number of associated documents per template	5

> **Note**
>
> You can't change the details of the `default` client, a previously created customized client, and enrichment data records. Delete the client and data records, and then create new ones with the updated details. For more information, see Client API [page 150] and Enrichment Data API [page 213].

See also Tutorials (Base Edition and Premium Edition) [page 140].

18 Extracted Header Fields (Base Edition and Premium Edition)

See all of the standard header fields supported by the SAP Document AI basic UI and the APIs listed in API Rerence.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
amounts	*currencyCode*	*Currency Code*	Three-character combination codes representing each one of the world currencies in circulation: for example, USD for U.S. Dollar, EUR for Euro, and AUD for Australian Dollar	`invoice` `paymentAdvice` `purchaseOrder`	String	
amounts	*grossAmount*	*Gross Amount*	Invoice amount including taxes and shipping/handling costs	`invoice`	Number	
amounts	*grossAmount*	*Payment Amount*	Amount to be paid	`paymentAdvice`	Number	
amounts	*grossAmount*	*Total Amount*	Sum of subtotal, taxes, special handling charges, and shipping charges, without discounts, or total amount due and payable	`purchaseOrder`	Number	
amounts	*netAmount*	*Net Amount*	Invoice amount without taxes and shipping/handling costs	`invoice`	Number	
amounts	*netAmount*	*Subtotal Amount*	Amount without taxes and shipping/handling costs	`purchaseOrder`	Number	
amounts	*shippingAmount*	*Shipping Amount*	Shipping and handling charges	`invoice`	Number	
amounts	*taxAmount*	*Tax Amount*	The tax amount applied to this document	`invoice`	Number	
amounts	*taxId*	*Supplier Tax ID*	The number used to identify the supplier's company for tax purposes	`invoice`	String	Used for BusinessEntity [page 217] sender and receiver enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
amounts	*taxId*	*Business Partner Tax ID*	Tax identifier of the business partner sending the payment advice	`paymentAdvice`	String	Used for BusinessEntity [page 217] sender and receiver enrichment.
amounts	*taxId*	*Tax ID*	Tax identifier of the buyer's business entity: unique to each buyer. Also known as Value Added Tax (VAT) number	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender and receiver enrichment.
amounts	*taxIdNumber*	*Tax ID Number*	Tax identifier number of the buyer's business entity: unique to each buyer **Note** This header field is only relevant for purchase orders from Germany.	`purchaseOrder`	String	
amounts	*taxName*	*Tax Description*	A brief description of the tax: for example, California sales tax	`invoice`	String	
amounts	*taxRate*	*Tax Rate*	Primary tax rate applied to the document	`invoice`	Number	
contact	*barcode*	*Barcode*	The decoded content of the QR code for business cards supports the vCard standard. Also known as VCF (Virtual Contact File), a vCard is a file format standard for electronic business cards. It can contain name and address information, phone numbers, email addresses, URLs, logos, photographs, and audio clips.	`businessCard`	String	
contact	*buildingName*	*Building Name*	Name of the building in the address	`businessCard`	String	
contact	*city*	*City*	Name of the city in the address	`businessCard`	String	

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
contact	*departmentName*	*Department*	The area in which a person works in a company	`businesCard`	String	
contact	*email*	*Email*	Email address	`businesCard`	String	
contact	*faxNumber*	*Fax Number*	Fax phone number	`businesCard`	String	
contact	*firstName*	*First Name*	The name that stands first in a person's full name	`businesCard`	String	
contact	*fixedLine*	*Fixed Line*	Landline phone number	`businesCard`	String	
contact	*houseNumber*	*House Number*	Number of the house in the address	`businesCard`	String	
contact	*lastName*	*Last Name*	Surname or family name	`businesCard`	String	
contact	*middleName*	*Middle Name*	Name between a person's first name and surname	`businesCard`	String	
contact	*mobile*	*Mobile Phone*	Mobile phone number	`businesCard`	String	
contact	*namePrefix*	*Name Prefix*	Title used before a person's name	`businesCard`	String	
contact	*nameSuffix*	*Name Suffix*	Title used after a person's name	`businesCard`	String	
contact	*organizationName*	*Organization Name*	Company name	`businesCard`	String	
contact	*poBox*	*Post Office Box Number*	Post office box number	`businesCard`	String	
contact	*role*	*Role*	The position a person has in a company	`businesCard`	String	
contact	*state*	*State*	Name of the state in the address	`businesCard`	String	
contact	*streetName*	*Street Name*	Name of the street in the address	`businesCard`	String	
contact	*website*	*Website*	Set of related web pages located under a single domain name, typically created by a single person or company	`businesCard`	String	

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
contact	*zipCode*	*Zip Code*	Postal code in the address	`businesCard`	String	
details	*barcode*	*Barcode*	The decoded content of the QR code or barcode: for example, a URL (or some other text) that can be used for further processing. For more information, see Barcode Header Field in Invoice Documents [page 399].	`invoice`	String	
details	*invoiceReferenceNumber*	*Invoice Reference Number*	Reference number of the invoice **Note** This header field is only relevant for e-invoices from India and is extracted from a barcode in the documents.	`invoice`	String	
details	*purchaseOrderNumber*	*Purchase Order*	Number of the buyer's purchase order	`invoice`	String	

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
details	*quantity* ⚠ Caution The *quantity* header field has been deprecated and is no longer available for `purchaseOrder` documents. The preconfigured SAP schema `SAP_purchaseOrder_schema` still includes this header field. However, if you use it, SAP Document AI returns no extraction result for *quantity*.	*Quantity*	**DEPRECATED**. The *Quantity* header field has been deprecated and is no longer available for purchase order documents.	`purchaseOrder`	Number	
document	*documentDate*	*Invoice Date*	Date of the invoice document	`invoice`	Date	

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
document	*documentDate*	*Payment Date*	Date of the payment advice document	`paymentAdvice`	Date	
document	*documentDate*	*Purchase Order Date*	Date of the purchase order document	`purchaseOrder`	Date	
document	*documentNumber*	*Invoice Number*	Number that identifies this invoice	`invoice`	String	
document	*documentNumber*	*Payment Reference*	Number of the payment advice that references the payment	`paymentAdvice`	String	
document	*documentNumber*	*Purchase Order Number*	Number that identifies this purchase order	`purchaseOrder`	String	
payment	*discount*	*Discount*	Amount deducted from *grossAmount*	`invoice`	String	
payment	*dueDate*	*Due Date*	Expected date of payment in extended ISO 8601 format (YYYY-MM-DD)	`invoice`	Date	
payment	*paymentTerms*	*Payment Terms*	Payment terms as found in the invoice document. Payment terms are a combination of the payment due date and the discount rate or penalty rate.	`invoice`	String	
payment	*paymentTerms*	*Payment Terms*	Indicate when payments should be made and how	`purchaseOrder`	String	
receiver	*receiverAddress*	*Buyer Address*	Address of the buyer: only one box for the street, city, and country/region of the buyer	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverCity*	*Buyer City*	City or town name in the buyer's address	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverContact*	*Buyer Contact*	Name of the employee that should receive this invoice	`invoice`	String	Used for Employee [page 218] enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
receiver	*receiverCountryCode*	*Buyer Country Code*	Country/region code in the buyer's address	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverDistrict*	*Buyer District*	District name in the buyer's address	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverExtraAddressPart*	*Buyer Extra Address*	Any part of the buyer's address not included in the other address fields	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverHouseNumber*	*Buyer House Number*	House number in the buyer's address	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverId*	*Supplier ID*	A unique code that identifies the supplier	`purchaseOrder`	String	
receiver	*receiverName*	*Buyer Name*	Name of the buyer	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverPostalCode*	*Buyer Postal Code*	Postal code in the buyer's address	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
receiver	*receiverState*	*Buyer State*	State or province name in the buyer's address	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverStreet*	*Buyer Street*	Street name in the buyer's address	`invoice`	String	Used for BusinessEntity [page 217] receiver enrichment.
receiver	*receiverTaxId*	*Buyer Tax ID*	Tax identifier of the buyer's business entity: unique to each buyer **Note** This header field is only relevant for e-invoices from India and is extracted from a barcode in the documents.	`invoice`	String	
sender	*senderAddress*	*Supplier Address*	Address of the organization generating this invoice: only one box for the street, city, and country/region of the supplier	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderAddress*	*Business Partner Address*	Address of the business partner sending the payment advice: only one box for the street, city, and country/region of the business partner	`payment Advice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderAddress*	*Buyer Address*	Address of the buyer: only one box for the street, city, and country/region of the buyer	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
sender	*senderBankAccount*	*Supplier Bank Account*	Bank account details of the organization generating this invoice	`invoice`	String	Used for BusinessEntity [page 217] sender and receiver enrichment.
sender	*senderBankAccount*	*Buyer Bank Account*	Bank account details of the buyer	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender and receiver enrichment.
sender	*senderCity*	*Supplier City*	City or town name in the supplier's address	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderCity*	*Buyer City*	City or town name in the buyer's address	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderCountryCode*	*Supplier Country Code*	Country/region code in the supplier's address	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderCountryCode*	*Buyer Country Code*	Country/region code in the buyer's address	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderDistrict*	*Supplier District*	District name in the supplier's address	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
sender	*senderDistrict*	*Buyer District*	District name in the buyer's address	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderEmail*	*Buyer Email*	Email address of the buyer	`purchaseOrder`	String	
sender	*senderExtraAddressPart*	*Supplier Extra Address*	Any part of the supplier's address not included in the other address fields	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderExtraAddressPart*	*Buyer Extra Address*	Any part of the buyer's address not included in the other address fields	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderFax*	*Buyer Fax*	Fax number of the buyer	`purchaseOrder`	String	
sender	*senderHouseNumber*	*Supplier House Number*	House number in the supplier's address	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderHouseNumber*	*Buyer House Number*	House number in the buyer's address	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderId*	*Buyer ID*	A unique code that identifies the buyer	`purchaseOrder`	String	
sender	*senderName*	*Supplier Name*	Name of the supplier	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
sender	*senderName*	*Business Partner Name*	Name of the business partner	`payment Advice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderName*	*Buyer Name*	Name of the buyer	`purchase Order`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderPhone*	*Buyer Phone*	Phone number of the buyer	`purchase Order`	String	
sender	*senderPostal Code*	*Supplier Postal Code*	Postal code in the supplier's address	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderPostal Code*	*Buyer Postal Code*	Postal code in the buyer's address	`purchase Order`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderState*	*Supplier State*	State or province name in the supplier's address	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderState*	*Buyer State*	State or province name in the buyer's address	`purchase Order`	String	Used for BusinessEntity [page 217] sender enrichment.
sender	*senderStreet*	*Supplier Street*	Street name in the supplier's address	`invoice`	String	Used for BusinessEntity [page 217] sender enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
sender	*senderStreet*	*Buyer Street*	Street name in the buyer's address	`purchaseOrder`	String	Used for BusinessEntity [page 217] sender enrichment.
shipTo	*deliveryDate*	*Delivery Date*	Date of the delivery in extended ISO 8601 format (YYYY-MM-DD)	`invoice` `purchaseOrder`	Date	
shipTo	*deliveryNoteNumber*	*Delivery Note Number*	Unique identifier on the invoice following the goods	`invoice`	String	
shipTo	*shippingTerms*	*Ship-to Party Terms*	Indicate when the goods should be delivered and how	`purchaseOrder`	String	
shipTo	*shipToAddress*	*Ship-to Party Address*	Address where the goods will be shipped to: only one box for the street, city, and country/region	`purchaseOrder`	String	
shipTo	*shipToCity*	*Ship-to Party City*	City or town name in the ship-to party address	`purchaseOrder`	String	
shipTo	*shipToCountryCode*	*Ship-to Party Country Code*	Country/region code in the ship-to party address	`purchaseOrder`	String	
shipTo	*shipToDistrict*	*Ship-to Party District*	District name in the ship-to party address	`purchaseOrder`	String	
shipTo	*shipToEmail*	*Ship-to Party Email*	Email address of the ship-to party	`purchaseOrder`	String	
shipTo	*shipToExtraAddressPart*	*Ship-to Party Extra Address*	Any part of the ship-to party address not included in the other address fields	`purchaseOrder`	String	
shipTo	*shipToFax*	*Ship-to Party Fax Number*	Fax number of the ship-to party	`purchaseOrder`	String	
shipTo	*shipToHouseNumber*	*Ship-to Party House Number*	House number in the ship-to party address	`purchaseOrder`	String	
shipTo	*shipToName*	*Ship-to Party Company Name*	Company name of the ship-to party	`purchaseOrder`	String	
shipTo	*shipToPhone*	*Ship-to Party Phone Number*	Phone number of the ship-to party	`purchaseOrder`	String	

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
shipTo	*shipToPostalCode*	*Ship-to Party Postal Code*	Postal code in the ship-to party address	`purchaseOrder`	String	
shipTo	*shipToState*	*Ship-to Party State*	State or province name in the ship-to party address	`purchaseOrder`	String	
shipTo	*shipToStreet*	*Ship-to Party Street*	Street name in the ship-to party address	`purchaseOrder`	String	

18.1 Barcode Header Field in Invoice Documents

When the barcode header field is requested for extraction, SAP Document AI scans the whole document for 1D and 2D barcodes and provides the extracted content of the barcode as a string value. The service can detect multiple barcodes in the same document and provide all the detected content in the extracted results. The most common types of 1D and 2D barcodes are supported by this field, for example:

- Code39
- Code128
- DataMatrix
- EAN
- Interleaved 2 of 5
- PDF417
- QRCode
- UPC

Document Quality and Extraction

The document quality affects the result of the extraction. For example, a low quality (low resolution) image of a scanned document with a barcode may not return any barcode header field extraction, if the barcode in the document is not identifiable. Therefore, the quality of a decoded barcode interferes in the extraction confidence score of the barcode header field. Use high quality (high resolution) images to increase the chance of extraction for barcodes in the document.

Related Information

Barcode Extracted Fields in Invoice Documents [page 400]

18.1.1 Barcode Extracted Fields in Invoice Documents

See the extracted fields for barcodes in `invoice` documents.

SAP Document AI supports the following countries/regions, and extracted fields for barcodes in `invoice` documents:

Barcode Country/Region	Extracted Fields
Argentina	• *currencyCode* • *documentDate* • *documentNumber* • *grossAmount*
Basque	• *documentNumber* • *grossAmount*
Brazil	• *currencyCode* • *grossAmount* • *senderName*
China	• *documentDate* • *documentNumber* • *netAmount*
Colombia	• *documentDate* • *documentNumber* • *grossAmount* • *netAmount* • *receiverTaxId* • *taxAmount*
EPC QR code (European Payments Council Quick Response Code including Austria, Belgium, Finland, Germany, and Netherlands)	• *currencyCode* • *grossAmount* • *senderName*
India	• *documentDate* • *documentNumber* • *grossAmount* • *invoiceReferenceNumber* • *receiverTaxId* • *taxId*
Mexico	• *grossAmount* • *taxId*

Barcode Country/Region	Extracted Fields
Switzerland	• *currencyCode* • *documentNumber* • *grossAmount* • *senderAddress* • *senderBankAccount* • *senderName* • *receiverAddress* • *receiverName*
Uruguay	• *documentNumber* • *grossAmount*

19 Extracted Line Items (Base Edition and Premium Edition)

See all of the standard line item fields supported by the SAP Document AI basic UI and the APIs listed in API Rerence.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
amounts	*currencyCode* ⚠ Caution The *currency Code* line item has been deprecated and is no longer available for `purchaseOrder` documents. The preconfigured SAP schema `SAP_purchaseOrder_schema` still includes this line item. However, if you use it, SAP Document AI returns no extraction result for *currency Code*.	*Currency Code*	**DEPRECATED**. The *Currency Code* line item has been deprecated and is no longer available for purchase order documents.	`purchaseOrder`	String	

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
amounts	*deductionAmount*	*Deductions*	Deductions for a document because of damages or late delivery	`paymentAdvice`	Number	
amounts	*discountAmount*	*Discount Amount*	Discount received for a document	`paymentAdvice`	Number	
amounts	*netAmount*	*Amount*	Total amount of the line item (typically *Unit Price* * *Quantity*)	`invoice` `paymentAdvice` `purchaseOrder`	Number	

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
details	*customerMaterialNumber* ⚠ Caution The *senderMaterialNumber* line item has been deprecated and is no longer available for `purchaseOrder` documents. The preconfigured SAP schema `SAP_purchaseOrder_schema` still includes this line item. However, if you use it, SAP Document AI returns no extraction result for *senderMa*	*Customer Material Number*	Unique code that identifies a specific good or service in a customer catalog or system	`purchaseOrder`	String	Used for Product [page 219] enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
	terialNumber. Please use *customerMaterialNumber* instead.					
details	*description*	*Description*	Textual description of goods or services	`invoice` `purchaseOrder`	String	
details	*globalTradeItemNumber*	*Global Trade Item Number*	Unique and internationally recognized identifier for a trade item	`purchaseOrder`	String	
details	*materialNumber*	*Material Number*	Unique code that identifies a specific good or service in a supplier catalog or system	`invoice`	String	Used for Product [page 219] enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
details	*materialNumber* ⚠ Caution The *materialNumber* line item has been deprecated and is no longer available for `purchaseOrder` documents. The preconfigured SAP schema `SAP_purchaseOrder_schema` still includes this line item. However, if you use it, SAP Document AI returns no extraction result for *materialNumber*.	*Material Number*	**DEPRECATED**. The *Material Number* line item has been deprecated and is no longer available for purchase order documents. Please use *Supplier Material Number* instead.	`purchaseOrder`	String	Used for Product [page 219] enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
	Please use *supplierMaterialNumber* instead.					
details	*purchaseOrderNumber*	*Purchase Order Number*	Purchase order number referenced in a line item	`invoice`	String	
details	*quantity*	*Quantity*	Quantity of goods or services	`invoice` `purchaseOrder`	Number	

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
details	*senderMaterialNumber* ⚠ Caution The *senderMaterialNumber* line item has been deprecated and is no longer available for `purchaseOrder` documents. The preconfigured SAP schema `SAP_purchaseOrder_schema` still includes this line item. However, if you use it, SAP Document AI returns no extraction result for *senderMa*	*Sender Material Number*	**DEPRECATED**. The *Sender Material Number* line item has been deprecated and is no longer available for purchase order documents. Please use *Customer Material Number* instead.	`purchaseOrder`	String	Used for Product [page 219] enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
	terialNumber. Please use *customerMaterialNumber* instead.					

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
details	*supplierMaterialNumber* ⚠ Caution The *materialNumber* line item has been deprecated and is no longer available for `purchaseOrder` documents. The preconfigured SAP schema `SAP_purchaseOrder_schema` still includes this line item. However, if you use it, SAP Document AI returns no extraction result for *materialNumber*.	*Supplier Material Number*	Unique code that identifies a specific good or service in a supplier catalog or system	`purchaseOrder`	String	Used for Product [page 219] enrichment.

Category	Field Name and Default Extractor	Field Label	Description	Supported Standard Document Type	Type	Data Enrichment
	Please use *supplierMaterialNumber* instead.					
details	*unitOfMeasure*	*Unit of Measure*	The unit of measure UN/CEFACT code: for example, ANN for year, BG for bag, and BO for bottle	`invoice` `purchaseOrder`	String	
details	*unitPrice*	*Unit Price*	Price for a single instance of an object	`invoice` `purchaseOrder`	Number	
document	*documentDate*	*Document Date*	Date of the invoice document	`paymentAdvice`	Date	
document	*documentDate*	*Document Date*	Requested delivery date	`purchaseOrder`	Date	
document	*documentNumber*	*Document Number*	Document number that is used by the buyer	`paymentAdvice`	String	
item	*itemNumber*	*Item Number*	Item number that is used by the buyer	`purchaseOrder`	String	

20 Entities by Content Schema (Embedded Edition and Premium Edition)

Explore the SAP Document AI reference entities by content schema and document type.

> **Note**
>
> Reference entities are only available if you're using the service plans embedded edition or premium edition.

BILL_OF_EXCHANGE_STANDARD [page 414]

See all the reference entities that are part of the content schema `BILL_OF_EXCHANGE_STANDARD` that should be used for the document type: **bill of exchange**.

BUSINESS_CARD_STANDARD [page 417]

See all the reference entities that are part of the content schema `BUSINESS_CARD_STANDARD` that should be used for the document type: **business card**.

BUSINESS_PARTNER_CERTIFICATE_STANDARD [page 418]

See all the reference entities that are part of the content schema `0,asc` that should be used for the document type: **business partner certicate**.

DELIVERY_NOTE_STANDARD [page 420]

See all the reference entities that are part of the content schema `DELIVERY_NOTE_STANDARD` that should be used for the document type: **delivery note**.

GAS_PLANT_STATEMENT_STANDARD [page 421]

See all the reference entities that are part of the content schema `GAS_PLANT_STATEMENT_STANDARD` that should be used for the document type: **gas plant statement**.

INHOUSE_SERVICE_STANDARD [page 425]

See all the reference entities that are part of the content schema `INHOUSE_SERVICE_STANDARD` that should be used for the document type: **in-house service**.

INVOICE_STANDARD [page 427]

See all the reference entities that are part of the content schema `INVOICE_STANDARD` that should be used for the document type: **invoice**.

NATIONAL_ID_STANDARD [page 430]

See all the reference entities that are part of the content schema `NATIONAL_ID_STANDARD` that should be used for the document type: **national ID**.

PAYMENT_ADVICE_STANDARD [page 431]

See all the reference entities that are part of the content schema `PAYMENT_ADVICE_STANDARD` that should be used for the document type: **payment advice**.

PROCUREMENT_QUALITY_CERTIFICATE_STANDARD [page 432]

See all the reference entities that are part of the content schema `PROCUREMENT_QUALITY_CERTIFICATE_STANDARD` that should be used for the document type: **procurement quality certificate**.

PURCHASE_ORDER_STANDARD [page 434]

See all the reference entities that are part of the content schema `PURCHASE_ORDER_STANDARD` that should be used for the document type: **purchase order**.

SHIPPING_DOCUMENT_STANDARD [page 436]
See all the reference entities that are part of the content schema `SHIPPING_DOCUMENT_STANDARD` that should be used for the document type: **shipping document**.

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Supported Document Types (Embedded Edition and Premium Edition) [page 119]
Enable Content Schema [page 339]

20.1 BILL_OF_EXCHANGE_STANDARD

See all the reference entities that are part of the content schema `BILL_OF_EXCHANGE_STANDARD` that should be used for the document type: **bill of exchange**.

Label	Name and Reference Entity	Entity Type	Data Type
Bill of Exchange Items	*billOfExchangeItems*	Category	String
Bill of Exchange Items Group	*billOfExchangeItemsGroup*	Group	String
Bill of Exchange Item Details	*billOfExchangeItemDetails*	Table	String
Beneficiary Parties	*beneficiaryParties*	Category	String
Payee Information	*payeeInformation*	Group	String
Payee Bank Account Name	*payeeBankAccountName*	Field	String
Payee Bank Name	*payeeBankName*	Field	String
Payee Bank Account Number	*payeeBankAccountNumber*	Field	String
Payee Name	*payeeName*	Field	String
Payee Bank Number	*payeeBankNumber*	Field	String
Acceptor Information	*acceptorInformation*	Group	String
Acceptor Bank Number	*acceptorBankNumber*	Field	String
Acceptor Bank Account Number	*acceptorBankAccountNumber*	Field	String
Acceptor Bank Name	*acceptorBankName*	Field	String

Label	Name and Reference Entity	Entity Type	Data Type
Acceptor Name	*acceptorName*	Field	String
Acceptor Bank Account Name	*acceptorBankAccountName*	Field	String
Bill of Exchange Data	*billOfExchangeData*	Category	String
Basic Data	*basicData*	Group	String
BOE Type	*boeType*	Field	String
Allow Negotiable	*allowNegotiable*	Field	String
BOE Number Range From	*boeNumberRangeFrom*	Field	String
BOE Number Range To	*boeNumberRangeTo*	Field	String
Document Number	*documentNumber*	Field	String
Allow Split	*allowSplit*	Field	String
Dates	*dates*	Group	String
Issue Date	*issueDate*	Field	Date
Acceptance Date	*acceptanceDate*	Field	Date
Due Date	*dueDate*	Field	Date
Amounts	*amounts*	Group	String
Amount	*amount*	Field	Number
Currency	*currency*	Field	String
Primary Parties	*primaryParties*	Category	String
Drawer Information	*drawerInformation*	Group	String
Drawer Bank Name	*drawerBankName*	Field	String
Drawer City	*drawerCity*	Field	String
Drawer Bank Account Name	*drawerBankAccountName*	Field	String
Drawer Name	*drawerName*	Field	String
Drawer Bank Account Number	*drawerBankAccountNumber*	Field	String
Drawer Bank Number	*drawerBankNumber*	Field	String
Drawer Address	*drawerAddress*	Field	String

Label	Name and Reference Entity	Entity Type	Data Type
Payer Information	*payerInformation*	Group	String
Payer Bank Address	*payerBankAddress*	Field	String
Payer Bank Number	*payerBankNumber*	Field	String
Payer Bank RIB Key	*payerBankRIBKey*	Field	String
Payer Bank Name	*payerBankName*	Field	String
Payer Address	*payerAddress*	Field	String
Payer Bank Account Number	*payerBankAccountNumber*	Field	String
Payer Name	*payerName*	Field	String

Parent topic: Entities by Content Schema (Embedded Edition and Premium Edition) [page 413]

Related Information

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SHIPPING_DOCUMENT_STANDARD [page 436]

20.2 BUSINESS_CARD_STANDARD

See all the reference entities that are part of the content schema `BUSINESS_CARD_STANDARD` that should be used for the document type: **business card**.

Label	Name and Reference Entity	Entity Type	Data Type
Employment Information	*employmentInformation*	Category	String
Role and Department	*roleAndDepartment*	Group	String
Role	*role*	Field	String
Department Name	*departmentName*	Field	String
Organization Details	*organizationDetails*	Group	String
Barcode	*barcode*	Field	String
Website	*website*	Field	String
Organisation Name	*organisationName*	Field	String
Personal Information	*personalInformation*	Category	String
Name	*name*	Group	String
First Name	*firstName*	Field	String
Middle Name	*middleName*	Field	String
Last Name	*lastName*	Field	String
Name Prefix	*namePrefix*	Field	String
Name Suffix	*nameSuffix*	Field	String
Contact Information	*contactInformation*	Category	String
Addresses	*addresses*	Group	String
Street Name	*streetName*	Field	String
City	*city*	Field	String
House Number	*houseNumber*	Field	String
Building Name	*buildingName*	Field	String
ZIP Code	*zipCode*	Field	String

Label	Name and Reference Entity	Entity Type	Data Type
PO Box	*poBox*	Field	String
State	*state*	Field	String
Contact Details	*contactDetails*	Group	String
Fixed Line	*fixedLine*	Field	String
Fax Number	*faxNumber*	Field	String
Mobile	*mobile*	Field	String
Email	*email*	Field	String

Parent topic: Entities by Content Schema (Embedded Edition and Premium Edition) [page 413]

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20.3 BUSINESS_PARTNER_CERTIFICATE_STANDARD

See all the reference entities that are part of the content schema `0,asc` that should be used for the document type: **business partner certicate**.

Label	Name and Reference Entity	Entity Type	Data Type
Certificate Data	*certificateData*	Category	String

Label	Name and Reference Entity	Entity Type	Data Type
License Details	*licenseDetails*	Group	String
License Number	*licenseNumber*	Field	String
Legal Type	*legalType*	Field	String
Issuing Authority	*issuingAuthority*	Field	String
Valid From	*validFrom*	Field	Date
Valid To	*validTo*	Field	Date
License Activities	*licenseActivities*	Field	String
Certificate Context	*certificateContext*	Group	String
Title	*title*	Field	String
Language Codes	*languageCodes*	Field	String
Business Partner Data	*businessPartnerData*	Category	String
Identification Data	*identificationData*	Group	String
Business Partner Identification	*businessPartnerIdentification*	Field	String
Certified Name	*certifiedName*	Field	String
Address Details	*addressDetails*	Group	String
Country	*country*	Field	String
PO Box	*poBox*	Field	String
Parcel ID	*parcelID*	Field	String
Pincode	*pincode*	Field	String
Country Code	*countryCode*	Field	String
City	*city*	Field	String
Contact Details	*contactDetails*	Group	String
Email	*email*	Field	String
Phone Number	*phoneNumber*	Field	String
Fax Number	*faxNumber*	Field	String
Roles and Relationships	*rolesAndRelationships*	Group	String

Label	Name and Reference Entity	Entity Type	Data Type
BP Roles	*bpRoles*	Field	String
Business Partner Type	*businessPartnerType*	Field	String
Business Partner Relationship	*businessPartnerRelationship*	Field	String

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20.4 DELIVERY_NOTE_STANDARD

See all the reference entities that are part of the content schema `DELIVERY_NOTE_STANDARD` that should be used for the document type: **delivery note**.

Label	Name and Reference Entity	Entity Type	Data Type
Delivery Note Data	*deliveryNoteData*	Category	String
Basic Data	*basicData*	Group	String
Purchase Order Number	*purchaseOrderNumber*	Field	String
Delivery Note Number	*deliveryNoteNumber*	Field	String
Delivery Date	*deliveryDate*	Field	Date

Label	Name and Reference Entity	Entity Type	Data Type
Document Date	*documentDate*	Field	Date
Customer Supplier ID	*customerSupplierId*	Field	String
Delivery Note Items	*deliveryNoteItems*	Category	String
Delivery Note Items Group	*deliveryNoteItemsGroup*	Group	String
Delivery Note Item Details	*deliveryNoteItemDetails*	Table	String

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20.5 GAS_PLANT_STATEMENT_STANDARD

See all the reference entities that are part of the content schema `GAS_PLANT_STATEMENT_STANDARD` that should be used for the document type: **gas plant statement**.

Label	Name and Reference Entity	Entity Type	Data Type
Gas Quality and Measurement Standards	*gasQuality*	Category	String
Gas Quality Metrics	*gasQualityMetrics*	Group	String
Dry BTU Factor	*dryBtuFactor*	Field	Number

Label	Name and Reference Entity	Entity Type	Data Type
Pressure Base	*pressureBase*	Field	Number
Wet BTU Factor	*wetBtuFactor*	Field	Number
Fees and Charges	*feesCharges*	Category	String
Fee Types	*feeTypes*	Group	String
Stabilization Fee	*stabilizationFee*	Field	Number
Condensate Price	*condensatePrice*	Field	Number
Gathering Fee	*gatheringFee*	Field	Number
Compression Fee	*compressionFee*	Field	Number
Tax Due	*taxDue*	Field	Number
Processing Fee	*processingFee*	Field	Number
Fuel Use Fee	*fuelUseFee*	Field	Number
Treating Fee	*treatingFee*	Field	Number
Frac Fee	*fracFee*	Field	Number
Electric Fee	*electricFee*	Field	Number
Service Fee	*serviceFee*	Field	Number
Alt Power or Fuel Fee	*altPowerOrFuelFee*	Field	Number
Fee Rate	*feeRate*	Group	String
Compression Fee Rate	*compressionFeeRate*	Field	Number
Stabilization Fee Rate	*stabilizationFeeRate*	Field	Number
Fuel Use Fee Rate	*fuelUseFeeRate*	Field	Number
Alt Power or Fuel Fee Rate	*altPowerOrFuelFeeRate*	Field	Number
Pipeline Reimbursement Rate	*pipelineReimbursementRate*	Field	Number
Gathering Fee Rate	*gatheringFeeRate*	Field	Number
Trans and Frac Rate	*transAndFracRate*	Field	Number
Electric Fee Rate	*electricFeeRate*	Field	Number
Minimum Charge Rate	*minimumChargeRate*	Field	Number

Label	Name and Reference Entity	Entity Type	Data Type
Service Fee Rate	*serviceFeeRate*	Field	Number
Tax Rate	*taxRate*	Field	Number
Frac Fee Rate	*fracFeeRate*	Field	Number
Processing Fee Rate	*processingFeeRate*	Field	Number
Treating Fee Rate	*treatingFeeRate*	Field	Number
Contract and Identification Info	*contractInfo*	Category	String
Lease and Contract Info	*leaseContractInfo*	Group	String
Operator Name	*operatorName*	Field	String
Production Date	*productionDate*	Field	Date
Operator ID	*operatorId*	Field	String
State	*state*	Field	String
Contract ID	*contractId*	Field	String
Meter Number	*meterNumber*	Field	String
Meter Name	*meterName*	Field	String
Volume Reporting	*volumeReporting*	Category	String
Volume Summary	*volumeSummary*	Group	String
Gross Wellhead Mcf	*grossWellheadMcf*	Field	Number
Gross Wellhead Mmbtu	*grossWellheadMmbtu*	Field	Number
Net Wellhead Mcf	*netWellheadMcf*	Field	Number
Net Wellhead Mmbtu	*netWellheadMmbtu*	Field	Number
Residue Gas Settlement	*residueSettlement*	Group	String
Allocated Residue Mcf	*allocatedResidueMcf*	Field	Number
Field Fuel	*deliveries*	Field	Number
Plant Fuel	*plantFuel*	Field	Number
Residue Price	*residuePrice*	Field	Number
Residue Value	*residueValue*	Field	Number

Label	Name and Reference Entity	Entity Type	Data Type
Compression Fuel	*compressionFuel*	Field	Number
Line Loss	*lineLoss*	Field	Number
Allocated Residue Mmbtu	*allocatedResidueMmbtu*	Field	Number
Shrinkage	*shrinkage*	Field	Number
Contract Percent	*contractPercent*	Field	Number
Residue Mmbtu	*residueMmbtu*	Field	Number
Residue Mcf	*residueMcf*	Field	Number
Product Allocation and Pricing	*productAllocation*	Category	String
Allocated Gallons	*allocatedGallons*	Group	String
C3 Gallons	*c3Gallons*	Field	Number
C5 Plus Gallons	*c5PlusGallons*	Field	Number
NC4 Gallons	*nc4Gallons*	Field	Number
Contract Percent NGL	*contractPercentNgl*	Field	Number
C2 Gallons	*c2Gallons*	Field	Number
Condensate	*condensate*	Field	Number
C4 Gallons	*c4Gallons*	Field	Number
Allocated Price	*allocatedPrice*	Group	String
C4 Price	*c4Price*	Field	Number
NC4 Price	*nc4Price*	Field	Number
C2 Price	*c2Price*	Field	Number
C5 Plus Price	*c5PlusPrice*	Field	Number
C3 Price	*c3Price*	Field	Number

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20.6 INHOUSE_SERVICE_STANDARD

See all the reference entities that are part of the content schema `INHOUSE_SERVICE_STANDARD` that should be used for the document type: **in-house service**.

Label	Name and Reference Entity	Entity Type	Data Type
Inhouse Service Items	*inhouseServiceItems*	Category	String
Inhouse Service Items Group	*inhouseServiceItemsGroup*	Group	String
Inhouse Service Item Details	*inhouseServiceItemDetails*	Table	String
Inhouse Service Data	*inhouseServiceData*	Category	String
Basic Data	*basicData*	Group	String
Document Number	*documentNumber*	Field	String
Buyer	*buyer*	Category	String
Buyer Information	*buyerInformation*	Group	String
Sender Bank Account	*senderBankAccount*	Field	String
Sender Fax	*senderFax*	Field	String
Sender Email	*senderEmail*	Field	String
Sender ID	*senderId*	Field	String

Label	Name and Reference Entity	Entity Type	Data Type
Sender Tax ID Number	*senderTaxIdNumber*	Field	String
Sender Phone	*senderPhone*	Field	String
Sender Tax ID	*senderTaxId*	Field	String
Sender Name	*senderName*	Field	String
Buyer Contact	*buyerContact*	Group	String
Sender Contact Email	*senderContactEmail*	Field	String
Sender Contact Phone	*senderContactPhone*	Field	String
Sender Contact Name	*senderContactName*	Field	String
Buyer Address	*buyerAddress*	Group	String
Sender District	*senderDistrict*	Field	String
Sender Postal Code	*senderPostalCode*	Field	String
Sender Country Code	*senderCountryCode*	Field	String
Sender Street	*senderStreet*	Field	String
Sender House Number	*senderHouseNumber*	Field	String
Sender City	*senderCity*	Field	String
Sender Extra Address Part	*senderExtraAddressPart*	Field	String
Shipping	*shipping*	Category	String
Shipping Contact	*shippingContact*	Group	String
Ship To Email	*shipToEmail*	Field	String
Ship To Fax	*shipToFax*	Field	String
Ship To Phone	*shipToPhone*	Field	String
Shipping Address	*shippingAddress*	Group	String
Ship To Name	*shipToName*	Field	String
Ship To Country Code	*shipToCountryCode*	Field	String
Ship To Postal Code	*shipToPostalCode*	Field	String
Ship To City	*shipToCity*	Field	String

Label	Name and Reference Entity	Entity Type	Data Type
Ship To House Number	*shipToHouseNumber*	Field	String
Ship To Street	*shipToStreet*	Field	String
Ship To District	*shipToDistrict*	Field	String
Ship To Extra Address Part	*shipToExtraAddressPart*	Field	String

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20.7 INVOICE_STANDARD

See all the reference entities that are part of the content schema `INVOICE_STANDARD` that should be used for the document type: **invoice**.

Label	Name and Reference Entity	Entity Type	Data Type
Invoice Data	*invoiceData*	Category	String
Taxes	*taxes*	Group	String
Tax Name	*taxName*	Field	String
Tax Amount	*taxAmount*	Field	Number

Label	Name and Reference Entity	Entity Type	Data Type
Tax Rate	*taxRate*	Field	Number
Amounts	*amounts*	Group	String
Gross Amount	*grossAmount*	Field	Number
Net Amount	*netAmount*	Field	Number
Currency Code	*currencyCode*	Field	String
Shipping Amount	*shippingAmount*	Field	Number
Basic Data	*basicData*	Group	String
Document Date	*documentDate*	Field	Date
Purchase Order Number	*purchaseOrderNumber*	Field	String
Barcode	*barcode*	Field	String
Document Number	*documentNumber*	Field	String
Delivery	*delivery*	Group	String
Delivery Note Number	*deliveryNoteNumber*	Field	String
Delivery Date	*deliveryDate*	Field	Date
Payment	*payment*	Group	String
Due Date	*dueDate*	Field	Date
Payment Terms	*paymentTerms*	Field	String
Discount	*discount*	Field	Number
Invoice Items	*invoiceItems*	Category	String
Invoice Items Group	*invoiceItemsGroup*	Group	String
Invoice Item Details	*invoiceItemDetails*	Table	String
Buyer	*buyer*	Category	String
Buyer Information	*buyerInformation*	Group	String
Receiver Contact	*receiverContact*	Field	String
Receiver Tax ID	*receiverTaxId*	Field	String
Receiver Name	*receiverName*	Field	String

Label	Name and Reference Entity	Entity Type	Data Type
Buyer Address	*buyerAddress*	Group	String
Receiver Postal Code	*receiverPostalCode*	Field	String
Receiver State	*receiverState*	Field	String
Receiver Country Code	*receiverCountryCode*	Field	String
Receiver Address	*receiverAddress*	Field	String
Receiver House Number	*receiverHouseNumber*	Field	String
Receiver Extra Address Part	*receiverExtraAddressPart*	Field	String
Receiver District	*receiverDistrict*	Field	String
Receiver Street	*receiverStreet*	Field	String
Receiver City	*receiverCity*	Field	String
Supplier	*supplier*	Category	String
Supplier Address	*supplierAddress*	Group	String
Sender Postal Code	*senderPostalCode*	Field	String
Sender Street	*senderStreet*	Field	String
Sender House Number	*senderHouseNumber*	Field	String
Sender District	*senderDistrict*	Field	String
Sender State	*senderState*	Field	String
Sender City	*senderCity*	Field	String
Sender Extra Address Part	*senderExtraAddressPart*	Field	String
Sender Address	*senderAddress*	Field	String
Sender Country Code	*senderCountryCode*	Field	String
Supplier Information	*supplierInformation*	Group	String
Tax ID	*taxId*	Field	String
Sender Name	*senderName*	Field	String
Sender Bank Account	*senderBankAccount*	Field	String

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20.8 NATIONAL_ID_STANDARD

See all the reference entities that are part of the content schema `NATIONAL_ID_STANDARD` that should be used for the document type: **national ID**.

Label	Name and Reference Entity	Entity Type	Data Type
National ID Data	*nationalIdData*	Category	String
Basic Data	*basicData*	Group	String
Employee Name	*employeeName*	Field	String
Document Name	*documentName*	Field	String
Country Name	*countryName*	Field	String
Validity Date	*validityDate*	Field	Date
National ID Number	*nationalIdNumber*	Field	String

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20.9 PAYMENT_ADVICE_STANDARD

See all the reference entities that are part of the content schema `PAYMENT_ADVICE_STANDARD` that should be used for the document type: **payment advice**.

Label	Name and Reference Entity	Entity Type	Data Type
Payment Advice Item	*paymentAdviceItem*	Category	String
Payment Advice Items	*paymentAdviceItems*	Group	String
Payment Advice Item Details	*paymentAdviceItemDetails*	Table	String
Payment Advice Data	*paymentAdviceData*	Category	String
Business Partner	*businessPartner*	Group	String
Sender Address	*senderAddress*	Field	String
Tax Id	*taxId*	Field	String
Sender Name	*senderName*	Field	String
Amounts	*amounts*	Group	String
Currency Code	*currencyCode*	Field	String
Gross Amount	*grossAmount*	Field	Number
Basic Data	*basicData*	Group	String

Label	Name and Reference Entity	Entity Type	Data Type
Document Number	*documentNumber*	Field	String
Document Date	*documentDate*	Field	Date

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20.10 PROCUREMENT_QUALITY_CERTIFICATE_STANDARD

See all the reference entities that are part of the content schema `PROCUREMENT_QUALITY_CERTIFICATE_STANDARD` that should be used for the document type: **procurement quality certificate**.

Label	Name and Reference Entity	Entity Type	Data Type
Data From Document	*dataFromDocument*	Category	String
Order and Delivery	*orderAndDelivery*	Group	String
Purchase Order Number	*purchaseOrderNumber*	Field	String
Delivery Note Number	*deliveryNoteNumber*	Field	String
Material	*material*	Group	String

Label	Name and Reference Entity	Entity Type	Data Type
Supplier Material Number	*supplierMaterialNumber*	Field	String
Supplier Material Description	*supplierMaterialDescription*	Field	String
Supplier Batch Number	*supplierBatchNumber*	Field	String
Material Number	*materialNumber*	Field	String
Supplier	*supplier*	Group	String
Supplier Name	*supplierName*	Field	String
Supplier Address	*supplierAddress*	Field	String
Quality Certificate Data	*qualityCertificateData*	Group	String
Plant	*plant*	Field	String
Quality Certificate	*qualityCertificate*	Field	String

Parent topic: Entities by Content Schema (Embedded Edition and Premium Edition) [page 413]

Related Information

BILL_OF_EXCHANGE_STANDARD [page 414]
BUSINESS_CARD_STANDARD [page 417]
BUSINESS_PARTNER_CERTIFICATE_STANDARD [page 418]
DELIVERY_NOTE_STANDARD [page 420]
GAS_PLANT_STATEMENT_STANDARD [page 421]
INHOUSE_SERVICE_STANDARD [page 425]
INVOICE_STANDARD [page 427]
NATIONAL_ID_STANDARD [page 430]
PAYMENT_ADVICE_STANDARD [page 431]
PURCHASE_ORDER_STANDARD [page 434]
SHIPPING_DOCUMENT_STANDARD [page 436]

20.11 PURCHASE_ORDER_STANDARD

See all the reference entities that are part of the content schema PURCHASE_ORDER_STANDARD that should be used for the document type: **purchase order**.

Label	Name and Reference Entity	Entity Type	Data Type
Buyer	*buyer*	Category	String
Buyer Address	*buyerAddress*	Group	String
Sender Street	*senderStreet*	Field	String
Sender State	*senderState*	Field	String
Sender City	*senderCity*	Field	String
Sender Address	*senderAddress*	Field	String
Sender Extra Address Part	*senderExtraAddressPart*	Field	String
Sender House Number	*senderHouseNumber*	Field	String
Sender Postal Code	*senderPostalCode*	Field	String
Sender Country Code	*senderCountryCode*	Field	String
Sender District	*senderDistrict*	Field	String
Buyer Information	*buyerInformation*	Group	String
Sender Email	*senderEmail*	Field	String
Sender ID	*senderId*	Field	String
Sender Bank Account	*senderBankAccount*	Field	String
Sender Name	*senderName*	Field	String
Sender Phone	*senderPhone*	Field	String
Sender Fax	*senderFax*	Field	String
Shipping	*shipping*	Category	String
Shipping Contact	*shippingContact*	Group	String
Ship To Phone	*shipToPhone*	Field	String
Ship To Fax	*shipToFax*	Field	String

Label	Name and Reference Entity	Entity Type	Data Type
Ship To Email	*shipToEmail*	Field	String
Shipping Address	*shippingAddress*	Group	String
Ship To Postal Code	*shipToPostalCode*	Field	String
Ship To Extra Address Part	*shipToExtraAddressPart*	Field	String
Ship To Name	*shipToName*	Field	String
Ship To Address	*shipToAddress*	Field	String
Ship To Street	*shipToStreet*	Field	String
Ship To State	*shipToState*	Field	String
Ship To City	*shipToCity*	Field	String
Ship To House Number	*shipToHouseNumber*	Field	String
Ship To Country Code	*shipToCountryCode*	Field	String
Ship To District	*shipToDistrict*	Field	String

Parent topic: Entities by Content Schema (Embedded Edition and Premium Edition) [page 413]

Related Information

BILL_OF_EXCHANGE_STANDARD [page 414]
BUSINESS_CARD_STANDARD [page 417]
BUSINESS_PARTNER_CERTIFICATE_STANDARD [page 418]
DELIVERY_NOTE_STANDARD [page 420]
GAS_PLANT_STATEMENT_STANDARD [page 421]
INHOUSE_SERVICE_STANDARD [page 425]
INVOICE_STANDARD [page 427]
NATIONAL_ID_STANDARD [page 430]
PAYMENT_ADVICE_STANDARD [page 431]
PROCUREMENT_QUALITY_CERTIFICATE_STANDARD [page 432]
SHIPPING_DOCUMENT_STANDARD [page 436]

20.12 SHIPPING_DOCUMENT_STANDARD

See all the reference entities that are part of the content schema `SHIPPING_DOCUMENT_STANDARD` that should be used for the document type: **shipping document**.

Label	Name and Reference Entity	Entity Type	Data Type
Shipping Document Data	*shippingDocumentData*	Category	String
General Data	*generalData*	Group	String
Consignment Number	*consignmentNumber*	Field	String
Customer Supplier ID	*customerSupplierId*	Field	String
Document Date	*documentDate*	Field	String
Delivery Information	*deliveryInformation*	Group	String
Deliveries	*deliveries*	Table	String

Parent topic: Entities by Content Schema (Embedded Edition and Premium Edition) [page 413]

Related Information

BILL_OF_EXCHANGE_STANDARD [page 414]
BUSINESS_CARD_STANDARD [page 417]
BUSINESS_PARTNER_CERTIFICATE_STANDARD [page 418]
DELIVERY_NOTE_STANDARD [page 420]
GAS_PLANT_STATEMENT_STANDARD [page 421]
INHOUSE_SERVICE_STANDARD [page 425]
INVOICE_STANDARD [page 427]
NATIONAL_ID_STANDARD [page 430]
PAYMENT_ADVICE_STANDARD [page 431]
PROCUREMENT_QUALITY_CERTIFICATE_STANDARD [page 432]
PURCHASE_ORDER_STANDARD [page 434]

21 Security

Get an overview on the security information that applies to SAP Document AI. Learn about the main security aspects of the service and its components.

Related Information

Data Protection and Privacy [page 437]
Auditing and Logging Information [page 440]
Front-End Security [page 443]

21.1 Data Protection and Privacy

Introduction

Data protection is associated with numerous legal requirements and privacy concerns. In addition to compliance with general data privacy regulation, it is necessary to consider compliance with industry-specific legislation in different countries/regions. SAP provides specific features and functions to support compliance with regard to relevant legal requirements, including data protection. SAP does not give any advice on whether these features and functions are the best method to support company, industry, regional, or country/region-specific requirements. Furthermore, this information does not give any advice or recommendation in regards to additional features that would be required in particular IT environments; decisions related to data protection must be made on a case-by-case basis, under consideration of the given system landscape and the applicable legal requirements.

> **Note**
>
> SAP software supports data protection by providing security features and specific data protection-relevant functions such as functions for the simplified blocking and deletion of personal data. SAP does not provide legal advice in any form. The definitions and other terms used in this document are not taken from any given legal source.

SAP Document AI may process personal data, such as employee names and email addresses, depending on the information available in documents and enrichment data.

All data processed by the service is stored in the SAP BTP, Cloud Foundry environment. SAP Document AI generally processes the following data types:

Data required by SAP Document AI

Data	Purpose
Inference Documents	Refers to documents that are submitted by users to receive machine learning predictions.
Data Feedback Collection Documents	Refers to documents that are submitted by users to receive machine learning predictions, and to be used to retrain the solution's machine learning models through the data feedback collection feature.
Documents Associated with Templates	Refers to documents that are submitted by users and associated with templates to extract information from other similar business documents.
Enrichment Data	Refers to enrichment data records, for example, supplier name and supplier address. The service matches your existing structured data (typically master data records) with the information extracted from documents.

→ Remember

The SAP Document AI solution is not intended for the processing of any special categories of personal data as defined in Article 9 GDPR or other types of sensitive personal information under applicable data protection laws. **Do not** use SAP Document AI for the processing of such personal data revealing, for example, racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data and biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation, government ID, or financial information.

Read Access Logging

The data used by SAP Document AI is controlled and managed by the consuming application or customer that uses the service. However, the service does not have any means to verify whether the data uploaded to the service contains any sensitive personal data. Therefore, SAP Document AI does not support logging of read access to sensitive personal data. For more information, see Auditing and Logging Information [page 440].

Information Report

The data from inference documents and data feedback collection documents used by SAP Document AI is controlled and managed by the consuming application which calls the SAP Document AI APIs. SAP Document AI does not create or modify inference or retraining data provided by the consuming application. Therefore it is not possible for SAP Document AI to provide a retrieval function to identify data of specific individuals.

It is recommended that the consuming application which uses SAP Document AI provides personal data reports to its users and transfers to SAP Document AI for processing. After every change of the data in the customer system, customers should call the Create Enrichment Data [page 214] endpoint.

Deletion of Personal Data

See in the table below, retention period and deletion details for all data types required by SAP Document AI.

Deletion of personal data is logged using audit logging services. For more information, see Audit Logging in the Cloud Foundry Environment.

Data	Deletion
Inference Documents	The default retention period for inference data documents is 7 days. You can also use the `documentRetentionTimeDays` key to Create Configuration [page 159] and customize the retention period, for inference documents uploaded to the service, from 1 to 30 days. You can delete inference data using the Delete Document [page 212] endpoint at any time, even before the retention period expires.
Data Feedback Collection Documents	There is no default retention period for retraining data documents. You can delete all retraining data using the Create Configuration [page 159] and Delete Configuration [page 169] endpoints at any time. You can also individually delete documents previously submitted for retraining using the Delete Document [page 212] endpoint at any time. If the `performPIICheck` subconfiguration is set to *true*, the service automatically scans all submitted documents and tries to exclude all documents where Personally Identifiable Information (PII) data is detected from being used for retraining and improving the service. It is the customer's responsibility to ensure that no personal data is submitted when using the data feedback collection feature.
Documents Associated with Templates	The documents uploaded to the document feature and associated with templates are not deleted automatically. To minimize the processing of personal data, do not use sample documents that contain personal data.
Enrichment Data	Enrichment data containing personal data is deleted automatically when customers delete the service instances. You also control the enrichment data retention period using the Delete Enrichment Data (Synchronous) - Decommissioned [page 228] and Delete Enrichment Data (Asynchronous) [page 229] endpoints to delete enrichment data records at any point in time.

> ⚠ Caution
>
> To ensure all data ever submitted to the service is deleted, delete the service instances. Deletion of data is irreversible.

Change Log

The application does not perform any update of enrichment data automatically. Any update of enrichment data per customer request would be logged using audit logging services. For more information, see Audit Logging in the Cloud Foundry Environment.

Consent

According to Personal Data Processing Agreement for SAP Cloud Services, SAP acts as data processor. Thus, customers are responsible for obtaining relevant consent to process personal data, including when applicable approval by controllers to use SAP as a processor.

21.2 Auditing and Logging Information

Here you can find a selecction of security events that are logged by SAP Document AI.

Security events written in audit logs

Event grouping	What events are logged	How to identify related log events	Additional information
Authentication related events	Authentication success	Successful login attempt for tenant {tenant_id} on {instance_id} on {time}	See below the definitions of the notations used in the log events. • {client_name}: ID of a client created with the Create Client [page 150] endpoint. • {dataset_id}: ID of the dataset (enrichment data). • {document_id}: ID of a document uploaded to the service. • {instance_id}: ID of the service instance used to access the service. • {tenant_id}: ID of the tenant used to access the service. • {time}: time stamp of when a log was created.
	Authentication failure	Failed login attempt for tenant {tenant_id} on {instance_id} on {time}	
Client related events	Client(s) created	"Tenant" and ID consisting of: targetTenant {tenant_id} (Multiple) Attribute(s) with name "client {client_name}" and state change from None to "CREATED"	
	Client(s) deleted	"Tenant" and ID consisting of: targetTenant {tenant_id} (Multiple) Attribute(s) with name "client {client_name}" and state change from "CREATED" to "DELETED"	

Event grouping	What events are logged	How to identify related log events	Additional information
Configuration related events	Configuration updated	Configuration change by {user_id} of {tenant_id} on {document_id} Configuration with name "documentRetentionTimeDays" was changed from "7" to "11"	You can use time stamps to sort the logs by time. • {user_id}: ID of the user that accessed the service and performed document related tasks.
	Configuration enabled	Configuration change by {user_id} of {tenant_id} on {document_id} Configuration with name "enableInstantLearning" was changed from "False" to "True"	
	Configuration disabled	Configuration change by {user_id} of {tenant_id} on {document_id} Configuration with name "dataFeedbackCollection" was changed from "True" to "False"	
	Configuration deleted	Configuration change by {user_id} of {tenant_id} on {document_id} Configuration with name "documentRetentionTimeDays" was changed from "11" to "Null"	
Dataset related events	Modification of dataset (enrichment data)	Modification of dataset:{dataset_id} successful Modification of dataset:{dataset_id} failed	
	Deletion of dataset (enrichment data)	Deletion of dataset:{dataset_id} successful Deletion of dataset:{dataset_id} failed	

Event grouping	What events are logged	How to identify related log events	Additional information
Document related events	Deletion of documents (customer documents, for example, invoices uploaded to the service)	Deletion of document:{document_id} successful Deletion of document:{document_id} failed	
	Document access attempt	Document access attempt by {user_id} of {tenant_id} on {document_id}	
	Document updated	Successful / failed modification attempt by {user_id} of {tenant_id} on {document_id} Attribute with name "extractions" was changed	
	Document confirmed	Successful / failed modification attempt by {user_id} of {tenant_id} on {document_id} Attribute with name "status" was changed to "CONFIRMED"	
	Document deleted	Successful / failed modification attempt by {user_id} of {tenant_id} on {document_id} Attribute with name "status" was changed to "DELETED"	
Tenant related events	Tenant provision	"Tenant provisioned" and ID consisting of: targetTenant {tenant_id} Attribute with name "state" was changed from "DOES_NOT_EXIST" to "PROVISIONED"	

Event grouping	What events are logged	How to identify related log events	Additional information
	Tenant de-provision	"Tenant de-provisioned" and ID consisting of: targetTenant {tenant_id} Attribute with name "state" was changed from "PROVISIONED" to "DEPROVISIONED"	
	Tenant saas-subscription	"Tenant SAAS Subscription" and ID as targetTenant {tenant_id} Attribute with name "state" was changed from "DOES_NOT_EXIST" to "SAAS_SUBSCRIBED"	
	Tenant saas-unsubscription	"Tenant SAAS UnSubscription" and ID as targetTenant {tenant_id} Attribute with name "state" was changed from "SAAS_SUBSCRIBED" to "SAAS_UNSUBSCRIBED"	

Related Information

Audit Logging in the Cloud Foundry Environment

21.3 Front-End Security

The SAP Document AI basic UI (User Interface) is a web application that supports the following features:

- SAPUI5 Frame option to avoid clickjacking attacks
- Cross-site request forgery (CSRF) protection
- Cross-site scripting (XSS) output encoding during SAP UI5 rendering
- Secure transport layer security (TLS) encryption using HTTPS
- Access to business data only after authentication and with sufficient authorizations using SAP Business Technology Platform (SAP BTP) identity management and SAP BTP role-based access management (RBAM)

- Cross-site-scripting counter measures
- Session inactivity timeout (15 minutes)
- Rate limiting for document upload
- Data access audit log for viewing extracted document
- Data change audit log for changing/confirming extraction results
- Data change audit log for deleting a document

22 Accessibility Features in SAP Document AI

To optimize your experience of SAP Document AI, SAP Business Technology Platform (SAP BTP) provides features and settings that help you use the software efficiently.

> **Note**
>
> SAP Document AI runs on the SAP BTP cockpit. For this reason, the accessibility features for SAP BTP cockpit apply. For more information, see the accessibility documentation for SAP BTP cockpit on SAP Help Portal at Accessibility Features in SAP BTP Cockpit.

The SAP Document AI basic UI is based on SAPUI5. It provides accessibility support in its tools and customer documentation. For more information on keyboard handling for SAPUI5 UI elements and screen-reader support for SAPUI5 controls, see Accessibility for End Users.

23 Monitoring and Troubleshooting

Find out how to get support, and explore solutions to potential issues.

Related Information

Getting Support [page 446]
Troubleshooting [page 447]
Download Troubleshooting Data [page 297]
Export/Import Documents [page 305]

23.1 Getting Support

If you encounter an issue with this service, we recommend that you follow the procedure below.

Check Platform Status

Check the availability of the platform at SAP Trust Center.

For more information about selected platform incidents, see Root Cause Analyses.

Check Guided Answers

In the SAP Support Portal, check the Guided Answers section for SAP Business Technology Platform. You can find solutions for general platform issues as well as for specific services there.

Contact SAP Support

You can report an incident or error through the SAP Support Portal. For more information, see Getting Support.

Please use the following component for your incident:

Component Name	Component Description
CA-ML-BDP	Services related to Business Document Processing

When submitting the incident, we recommend including the following information:

- Region information (Canary, EU10, US10, for example)

- Subaccount technical name
- The URL of the page where the incident or error occurs
- The steps or clicks used to replicate the error
- Screenshots, videos, or the code entered
- Any business documents (for example, invoices) with which there have been extraction issues

> → Remember
>
> If you submit documents to support, SAP reserves the right to use these documents for analytics and retraining. Submitting retraining data and documents to SAP does not guarantee that SAP will actually use the data for improving the service, nor does SAP guarantee that potential errors will be fixed in future improved versions of the service.

Related Information

Built-In Support [page 294]

23.2 Troubleshooting

In this section, see possible reasons for the following SAP Document AI potential issues:

- Problem: You Receive Status Code 4** [page 447]
- Problem: You Receive Status Code 400 [page 448]
- Problem: You Receive Status Code 401 [page 448]
- Problem: You Receive Status Code 413 [page 449]
- Problem: You Receive Status Code 415 [page 449]
- Problem: You Receive Status Code 422 [page 450]
- Problem: You Receive Status Code 429 [page 450]
- Problem: You Receive Status Code 500 [page 451]

23.2.1 Problem: You Receive Status Code 4**

If you are getting a 4** status code for your request (such as `400`, `401`, or `422`), make sure that you are submitting the request correctly. In most cases, the problem can be fixed in the request. Perhaps the

authentication information is missing or the request is using the wrong HTTP method (GET, POST, DELETE). Or maybe the payload is invalid.

23.2.2 Problem: You Receive Status Code 400

Output Code

```
Status: 400 Bad Request
{
"errors": [
{
"code": "string",
"message": "string"
}
]
}
```

Possible reasons:

A `400` error means that the request is malformed. This can be because of one of the following reasons:

- The request does not have the correct `Content-Type` header (usually `application/json`)
- The request payload is not a valid JSON
- The request payload does not contain some of the required fields and files
- The authorization token was not included in the headers. The error message will be `"Authorization token was not found in headers"`. The header should look like `Authorization: Bearer eyJhbGc....`

23.2.3 Problem: You Receive Status Code 401

Output Code

```
Status: 401 Unauthorized
{
  "error": {
    "statusCode": 401,
    "message": "..."
```

```
  },
}
```

Possible reasons:

A `401` error means that you did not supply correct authentication information. This can be because of one of the following reasons:

- You provided an invalid tenant password
- You provided an invalid authentication token or the authentication token has expired

23.2.4 Problem: You Receive Status Code 413

Output Code

```
Status: 413 Request Entity Too Large
{
  "error": {
    "statusCode": 413,
    "message": "..."
  }
}
```

Possible reasons:

A `413` status indicates that the request you are making is too large. Either you are sending a file that is too large or trying to process too many objects in a single request.

23.2.5 Problem: You Receive Status Code 415

Output Code

```
Status: 415 Unsupported File Type
{
  "error": {
    "statusCode": 415,
    "message": "..."
  }
```

```
}
```

Possible reasons:

You get a 415 status code when you use the wrong content type or file format. See Supported Document Types [page 118] and Supported File Types [page 121].

23.2.6 Problem: You Receive Status Code 422

Output Code

```
Status: 422 Unprocessable Entity
{
  "error": {
    "statusCode": 422,
    "message": "..."
  }
}
```

Possible reasons:

You get a 422 status code when your request payload references a clientId, senderId, or documentId that does not exist. For example, you will get this error if you try to create a document for a client that does not exist.

You may also get this error if the document you upload cannot be parsed.

23.2.7 Problem: You Receive Status Code 429

Output Code

```
Status: 429 Rate Limit Exceeded
{
  "error": {
    "statusCode": 429,
    "message": "..."
  }
}
```

Possible reasons:

You get a `429` status code when you have reached the rate limit for this user. You have made too many requests.

23.2.8 Problem: You Receive Status Code 500

You get a 500 status code for your request due to a server error and not an issue with the request. A `500` error is usually an error in the SAP Document AI application code. To report `500` errors, create an incident on the component CA-ML-BDP, as described in Getting Support [page 446].

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