# webMethods Integration Cloud 6.6.0 Readme

# August 2020

This file contains important information you must read before using webMethods Integration Cloud 6.6.0. You can find system requirements and user documentation on the Documentation website or the TECHcommunity website. At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

# 1.0    Critical Information

This section lists any critical information for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the Empower website.

None


# 2.0    Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the Empower website.

▪ UHM-973
  In the End-to-End Monitoring application, for a complex integration, where one SOAP API or REST API calls another SOAP API, only the starting point of the trace is captured. For the same complex integration, Integration Cloud shows both the traces as part of its monitoring feature.
  **Note**: The same limitation does not occur when REST APIs are called from a SOAP API or another REST API.

▪ UHM-434
  In the End-to-End Monitoring application, when you perform a search using multiple search characters, it may not show the correct results in some cases.

▪ UHM-1015
  When an Integration execution gets timed out, webMethods Integration Cloud does not store the record. However, this is tracked by End-to-End Monitoring. Due to this, when a user clicks on the *More details* link from the component details page, it opens a blank page.

▪ UHM-970
  In End-to-End Monitoring, API Gateway traces without a transactional event are not getting traced.


# 3.0    Usage Notes

This section provides any additional information you need to work with the current release of webMethods Integration Cloud.

▪ Information on major releases, hotfixes, and patch releases including the latest statistics on cloud system availability, system performance, and security are available on the Cloud Trust Center at https://trust.softwareag.com/integrationcloud/calendar/.

▪ See the *Supported Browsers* section in the *System Requirements for Software AG Products* document available on the Software AG Documentation website at https://documentation.softwareag.com for information on the supported browsers.

- webMethods Integration Cloud is best experienced using Google Chrome browser or Mozilla Firefox. Some features may not work if you are using Microsoft Internet Explorer 10.0 or earlier versions.

- After an Integration Cloud upgrade, the older version browser's cache and cookies are not cleared automatically. This may lead to incorrect display of page content. Ensure that you clear the browser's cache manually after every upgrade, and then log in to Integration Cloud.

- The Stored Procedure operation does not support the Input Field Type as java.sql.Array for the ARRAY JDBC Type. Use the Input Field Type as java.lang.Object for ARRAY JDBC Type.

# 4.0 Other Resolved Issues

This section lists the issues that were resolved in each release. A release is listed in this section only if changes occurred in that release.

## Release 4.1.0

- LIP-3087
  Pipeline mapping screen does not respond if there is a large number of nested complex fields.
  The pipeline mapping page becomes unresponsive when a large number of nested complex fields is selected in a custom operation.
  Workaround: While creating a custom operation, ensure that you select only the required fields.

- LIP-3932
  Audit log displays both Login and Logout entries after you have logged into Integration Cloud.
  When you log in, both Login and Logout entries appear in the Audit log. The Audit Log should display only the Login entry.
  There is currently no workaround for this issue.

# 5.0 Documentation Changes

This section describes *significant changes* to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

## Release 5.0.0

The new *Deploying to webMethods Integration Cloud* document describes how to deploy user-created packages and configurations that reside within on-premises runtimes or repositories to webMethods Integration Cloud.

## Release 1.0

The new context-sensitive *webMethods Integration Cloud Help* describes how to use Integration Cloud and its features.

# 6.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

### *Release 5.0.0*

| Old Term | New Term |
|---|---|
| Default ACL - Everybody | Default |

### *Release 4.5.0*

| Old Term | New Term |
|---|---|
| Advanced Security | Keys & Certificates |
| Exit Integration | Exit Integration signaling success |
| Exit Integration with failure | Exit Integration signaling failure |
| Stage Management | Manage Stages |

### *Release 4.0.0*

| Old Term | New Term |
|---|---|
| Expose as a REST service | Enable Integration to be invoked over HTTP |

# 7.0 Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.
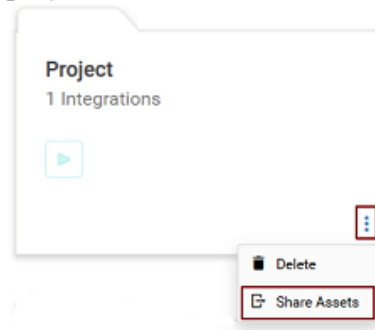
## *Release 6.6.0*

| Added Item | Description |
| --- | --- |

### Integration Cloud

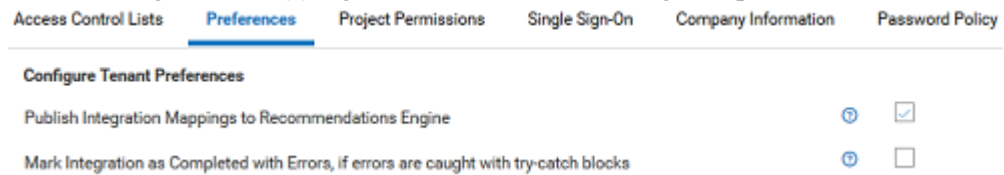| | |
| --- | --- |
| Support for sharing assets across projects | You can now share integrations and document types across projects by clicking the vertical ellipses icon available on a project and selecting the *Share Assets* option. Asset sharing allows you to use the same assets in other projects.<br><br><br><br>You can share assets with other projects only in the *Development* stage and if you are assigned to the *Administrator* Access Profile. |
| Capability to mark Integrations as Completed with Errors, if errors are caught with try-catch blocks | You can enable this option in the new *Settings > Preferences > Tenant Preferences* section. Select this option to view on-screen messages when an exception occurs while executing an operation or a service within an integration using a Try-Catch block. When this option is enabled, if an exception occurs within a Try block, then the end result of the integration execution is shown as completed with errors. Even if the error is handled in the Catch block, the integration is shown as completed with errors. When this option is not selected, if an exception occurs within a Try block, then the end result of the integration execution is shown as integration completed successfully. |

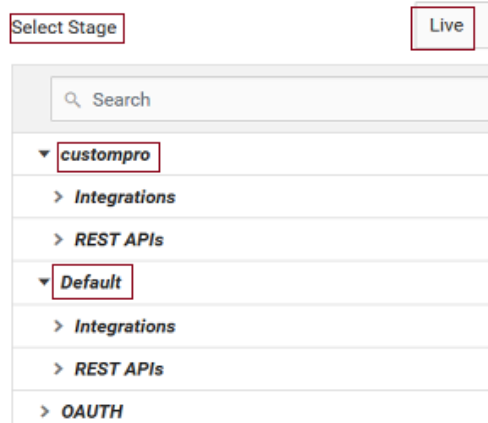| Added Item | Description |
| --- | --- |
| Support for smart mapping recommendations | Smart mapping provides you with intelligent mapping recommendations regarding which fields should be mapped in the pipeline. You can enable the smart mapping functionality by selecting the *Settings > Preferences > Publish Integration Mappings to Recommendations Engine* option.<br><br>Access Control Lists   **Preferences**   Project Permissions   Single Sign-On   Company Information   Password Policy<br><br>**Configure Tenant Preferences**<br><br>Publish Integration Mappings to Recommendations Engine     ⑦   ☑<br><br>Mark Integration as Completed with Errors, if errors are caught with try-catch blocks     ⑦   ☐<br><br>A Machine Learning (ML) algorithm is applied to provide the suggestions. This algorithm learns from the mappings you create and automatically provides suggestions to map similar fields.<br><br>If you do not select this option, you will not see the *Recommend Mappings* check box while mapping the fields in the pipeline. For all trial tenants, the mapping data is collected by default.<br><br>*Note*: For paid tenants, only an Admin user who has access profile ID 4 has the permission to enable this feature. For trial tenants and Free Forever Edition, this is always enabled and cannot be changed. |
| Support for creating a document type with optional fields | In earlier releases, when you loaded an XML or a JSON file to create a document type from scratch, by default, all the fields were marked as mandatory. In this release, after you click the *Load JSON* or *Load XML* options, you can use the *Required* option ⚪● Required to mark all the fields as optional or mandatory. By default, all the fields are marked as mandatory. If a field is mandatory, you must pass a value for that field when running an Integration. |

| Added Item | Description |
|---|---|
| New Services | The following *MIME* services are now available in Integration Cloud. You can use MIME services to create MIME messages and extract information from MIME messages.<br>• addBodyPart<br>• addMimeHeader<br>• createMimeData<br>• getBodyPartContent<br>• getBodyPartHeader<br>• getContentType<br>• getEnvelopeStream<br>• getMimeHeader<br>• getNumParts<br>• getPrimaryContentType<br>• getSubContentType<br>• mergeHeaderAndBody |
| OAuth 2.0 scope management | In earlier releases, while creating or updating a scope, exposed Integrations and REST Resources available only in the *Default* project were available for selection in the *Services* panel.<br>In this release, the Services panel displays the exposed integrations and REST Resources available in *all projects*, that is, in custom projects and in the Default project in the selected stage.<br> |
| Monitor page enhancements | You can now restart or resume an integration execution from the *Monitor > Dashboard* page. You can also restart or resume an integration execution from the *Monitor > Execution Results* page and from the *Last 5 Execution Results* page. |

| Added Item | Description |
| --- | --- |
| Parameters page changes | The *Active* option is now removed from the *Parameters* page while creating an operation for a REST Application to improve the usability. All parameters are now provided as part of the input signature. |
| Support for executing or debugging integrations generated from APIs | You can now run and debug integrations generated from SOAP APIs using WSDL and REST APIs using Swagger. |
| Dedicated infrastructure support for hybrid integration scenarios | Performance, scalability, and availability of on-premises connectivity for hybrid integration scenarios have now been enhanced by having dedicated Software AG Universal Messaging (UM) nodes for each tenant. A tenant can be associated with dedicated UMs based on the license. Contact Software AG Global Support for assistance in setting up the dedicated hybrid infrastructure.<br>If you are using hybrid connectivity and when you update the on-premises settings for the first time after the v6.6.0 upgrade, restart the on-premises webMethods Integration Server to resume hybrid connectivity. |
| Performance improvement | In this release, a performance improvement of 70 percent is observed on integration execution throughput. |

| Added Item | Description |
| --- | --- |
| Support for using the field element inside an array list | While selecting a field for the conditions, that is, while using the If, or Loop, or Switch statements, you can now click on the *Select Field* expression and choose a field in the *Pipeline Data* dialog box to add its path to the condition. If you want to use the field element inside an array list, select the *Add Index* option to add the index and use the indexed field path. |
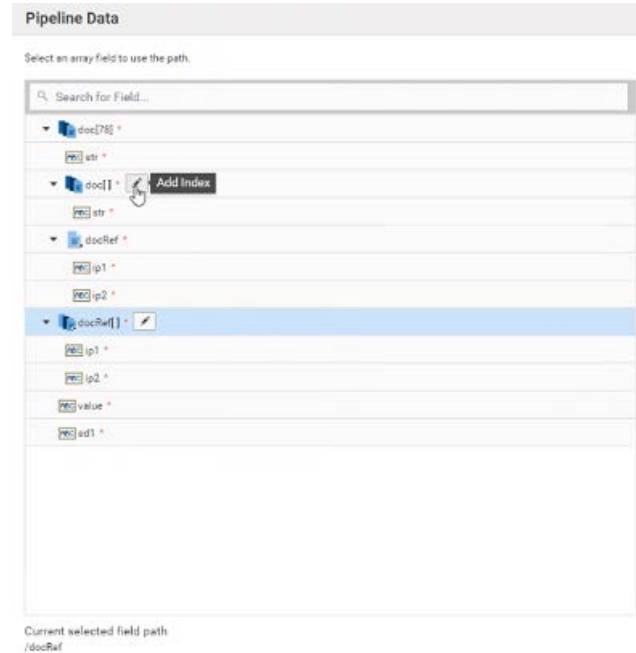


While selecting a field for the iterations, that is, while using the *for-each* statements, you can click now on the *Select Field* expression and choose an array in the *Pipeline Data* dialog box to add its path to the iteration. If you want to use the array element inside the array list, select the *Add Index* option to add the index and use the indexed field path.

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| Troubleshooting tips on Account configurations | The Help set now contains a new section, which provides troubleshooting tips to some of the most common questions on Account configurations. |

| Added Item | Description |
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## End-to-End Monitoring

| Added Item | Description |
| --- | --- |
| Dashboard updates | End-to-End Monitoring introduces a new dashboard. The warning status is removed. The *Overall* graph provides an overview of all the transactions that have succeeded or failed.<br>Also, the widget *Top 5 Rules Violated* is now represented as a Pi chart instead of a Bar graph. |
| More Details link | The *More Details* link now shows the product-specific details for the products involved in a cross-product transaction even if the tenant for that product was configured in a different domain or a custom domain. Previously, the *More Details* link would provide product-specific details only if all the products involved in the cross-product transaction were configured in the same domain. |

## *Release 6.1.0*

| Added Item | Description |
|---|---|

## Integration Cloud

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|---|---|
| Integration workspace enhancements | • On the *Integrations* page, you can now click the ⌨ icon to see the details of an Integration, click the ellipsis icon ⋮ to delete or copy an Integration, point to the 🗓 icon to view the scheduled status, scheduled type and when is the next scheduled execution date and time, and to the 🌐 icon to view the request URL. |
| | • The look and feel of the blocks have been enhanced and the size of the blocks reduced to increase the work space. |
| | • You can now copy a block from an integration and paste that block in another integration across projects. Currently, blocks cannot be pasted across different browsers or across domains. |
| | • The ☰ icon has been removed from the blocks. The *Copy*, *Delete*, *Comment*, *Disable*, and *Duplicate* options are now available by right-clicking on a block. |
| | • The *Modify Mapping* ( ) option now opens the pipeline data window for mapping. Further, mapping arrows have been removed from the source and target fields in the mapping window. |

| Added Item | Description |
|---|---|
| Monitor page enhancements | • On the *Dashboard* page, you can now filter the execution details of Integrations based on the invocation channel, for example, Scheduler, User Interface, HTTP Interface, REST APIs, SOAP APIs, and Listeners. The in-progress executions can also be filtered based on the invocation channels.<br><br>• You can now terminate multiple in-progress integration executions from the Dashboard by selecting the in-progress integration executions and clicking *Terminate*.<br><br>• On the *Execution Results* page, you can now select the Invocation channel for which you want to view the integration execution results. You can select All Invocations, All Projects, and All Integrations, if you want to view the execution details of Integrations based on all the invocation channels, for all integrations, and in all projects in the active stage, for the specified time period.<br><br>• The performance and responsiveness of the Monitor screen to high volume of data have been enhanced. |
| Flat File enhancements | Integration Cloud now supports flat files that do not have a record identifier. You can select the *Yes* or *No* options on the *Flat File Definition* page depending on whether the flat file contains or do not contain a record identifier. The following options will appear on the Flat File Definition page if you select *Yes*:<br><br>• *Start at position* - Identifies the character position in the record (counting from zero) where the record identifier is located.<br><br>• *Nth field* - Identifies the field in the record (counting from zero) that contains the identifier. |

| Added Item | Description |
|---|---|
| Support for changing the Authentication Type | While editing an Account in any stage, you can now select a different *Authentication Type* without impacting any integrations. So if an integration is using an Account with a specified Authentication Type, the integration will now run with the changed Account configuration. Further, while editing or creating an Integration, after you select the Operation, the Account field now lists all the Accounts that are supported for the execution of the selected Operation. While testing the Operation, you can select another Account created with a different Authentication Type, if the Account is supported for the execution of the selected Operation. |
| Support for clearing storage locks | If the environment goes down while an integration is running, the lock taken on the integration will not be automatically removed immediately. So, any scheduled executions for the same integration will be skipped. You can now remove the locks from the *Monitor > Clear Storage Locks* page. |
| SOAP API enhancements | Integration Cloud now allows you to export and import SOAP APIs. |

| Added Item | Description |
|---|---|
| Recipes page enhancements | • You can now search a recipe by the recipe name.<br>• If the main integration created out of a recipe does not have Applications but has sub-integrations, and if the sub-integrations have Applications, then the Applications are now pulled from the sub-integrations. The logos of the Applications in the sub-integrations will now appear on the Recipes page.<br>• The recipe configuration page now shows only the Applications and not the Operations for each Application. Further, now you do not have to configure each integration and sub-integration individually.<br>• If you have already used a recipe, Integration Cloud now prompts you if an integration with the same name already exists in your selected project, and whether you want to overwrite the references and changes made in the existing integration. |
| New Account Configuration fields | You can now set the following fields while configuring an Account:<br>• *Block Timeout* is the number of milliseconds that Integration Cloud will wait to obtain a connection with the SaaS provider before the connection times out and returns an error.<br>• *Expire Timeout* is the number of milliseconds that an inactive connection can remain in the pool before it is closed and removed from the pool, if connection pooling is enabled.<br>• *Idle Timeout* interval in milliseconds defines the interval for which a connection will be kept alive if it is not in use.<br>• *Keep Alive Interval* in milliseconds defines the interval for which a connection will be kept alive, if the back end does not respond with a Keep-Alive header. |

| Added Item | Description |
|---|---|
| REST Resource Operation enhancements | You can now modify a REST resource even if the resource has an operation with a deleted integration mapped to the operation. |
| Project permission changes | To create projects, you must now have the *Administrator* Access Profile as well as the *Developer* project permission assigned. |
| New Applications | • *Adobe Experience Platform*: You can now connect to Adobe Experience Platform using the REST API version 1. Adobe Experience Platform provides central services for Data Ingestion, Governance, Insights, and Actioning.<br>• *AgileApps*: You can now connect to AgileApps Cloud using the AgileApps REST API 10.8 to create and manage process-driven, situational, and case management applications.<br>• *webMethods Cloud Container*: You can now use this Application to invoke Java and Flow services for any Cloud Container solution. |
| Support for Keyboard shortcuts for workspace and debug operations | You can now click the *Show Keyboard Shortcuts* icon available above the integration workspace area and view the available shortcut keys.<br><br> |
| JSON Web Token support | For some Applications, for example, Salesforce CRM v44, Integration Cloud will now get an Access Token using the JSON Web Token (JWT) flow after you save the Account. You can generate OAuth 2.0 tokens using either the Authorization Code flow or the JSON Web Token (JWT) flow approaches. |

## *Release 6.0.0*

| Added Item | Description |
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## Integration Cloud

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| Preview Integrations | You can now view the pipeline and mapping details for a previous version of an orchestrated integration by clicking the *Show History* option. Pipeline preview is available in all stages of the Integration. To view the pipeline and mapping details for a previous version of an orchestrated integration in any stage other than the Development stage, change the stage, select the integration from the Integrations page, and then click *Preview*. You will not be able to make any modifications to the existing pipeline and mapping data. |

| Added Item | Description |
| --- | --- |
| Usage Reports | You can now view or download the run counts of integration usages for a specific stage and for the specified time frame. The report shows the count for the currently active stage. The data you see on the *Reports* page depends on when you view the data and when data collection ends. The reports data is collected daily, at the end of day, and it displays data collected till the day before yesterday. Daily around 9:10 PM, data collection starts. The time when data collection ends depends on the volume of data and for how long Integration Cloud takes to collect the data. |
| | Let us assume that the current date and time is 18th October, 9 PM. If you view the Reports page now at 9 PM, data collection is yet to start for today (it will start at 9:10 PM), and so the Reports page will show the integration execution counts that have occurred till 16th October 11:59 PM. If the data collection starts at 9:10 PM today and ends by 11 PM, then after 11 PM, the Reports page will show the integration execution counts till 17th October 11:59 PM. |
| Copy Integrations, REST APIs, and SOAP APIs across projects | You can now copy Integrations, SOAP APIs, and REST APIs between projects. Ensure that you create any account or reference data associated with the respective asset in the target project. |

| Added Item | Description |
|---|---|
| New Services | **Storage** <br>• *deleteStore* - Deletes a data store and all its contents. <br>**XML** <br>• *xmlNodeToDocument* - Converts an XML node to a document. <br>• *xmlStringToXMLNode* - Converts an XML document (represented as a String, byte[ ], or InputStream) to an XML node. <br>• *getXMLNodeType* - Returns information about an XML node. <br>• *queryXMLNode* - Queries an XML node. |
| New Applications | *Salesforce® CRM REST* <br>Integration Cloud connects to Salesforce® CRM REST using the REST API and allows you to manage security for inbound requests, log payloads, and specify run-time performance conditions for consumers for outbound requests. It also supports multiple authentication mechanisms. <br><br>*Google Cloud Pub/Sub* <br>Integration Cloud connects to Google Cloud Pub/Sub and allows you to create, get, delete, set policy, and get policy on topics and subscription resources. |
| Locale information | You can now set the locale information according to the user's preference from the *Users > Locale* tab. The value set by you here is the locale applicable for your user profile, irrespective of the value set in the *Default Locale* field in *Company Information*. |
| Support for duplicate keys | While running or debugging Integrations and testing Operations, if the input has any duplicate keys, or if the service returns an output with duplicate keys, you can now view those keys. |

| Added Item | Description |
| --- | --- |
| End to End Monitoring | End to End Monitoring is a cloud offering by Software AG to monitor a business transaction from its start to end, as it passes through the various cloud platforms which includes webMethods API Gateway, webMethods Integration Cloud, and webMethods.io B2B. End to End Monitoring allows you to identify any errors that occur during a business transaction. It identifies the application within the cloud platform where the error has occurred and provides details of the time at which the error has occurred. |

## Cloud Deployment

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| --- | --- |
| Support upgrade to v10.5 from v10.4 and v10.3 | You can now upgrade runtimes like webMethods Integration Server, Universal Messaging, and Terracotta that are part of a solution from an earlier solution 10.3 or 10.4 version to the latest 10.5 version. |
| Support GraphQL in Cloud Deployment | Cloud Deployment now allows you to deploy GraphQL assets which are developed using Software AG Designer and on-premises webMethods Integration Server. You can choose from predefined solution landscapes to deploy your GraphQL on-premises assets from Software AG Designer. |
| Support for tenant specific image | Hot fixes are now created for specific tenants. The *Hot Fix* list box in the *Solution* page lists all available fixes that include enhancements to the selected versions. |
| Support for creating solutions in non-development stage | Cloud Deployment now supports creating solutions in any stage, for example, in the development, test, live, and pre-live stages. |

| Added Item | Description |
| --- | --- |
| Support for defining stateless or stateful cluster for a solution in all stages | You can now define that a cluster is stateless or stateful for a solution in all stages. A stateless cluster of webMethods Integration Servers does not use a Terracotta Server Array. Select Stateful to add the Terracotta section. The Terracotta icons will be activated. |

## *Release 5.6.0*

| Added Item | Description |
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### *Integration Cloud*

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| Projects | A project is an independent entity and corresponds to a folder for organizing your assets. A project holds all the assets created as a part of that project by the logged-in user, along with the configurations associated with the assets. Any asset, for example, Integrations, REST APIs, SOAP APIs, Document Types, and Reference Data, is a part of a project.<br>If you are an existing tenant, your assets will be available in the *Default* project. You cannot delete this default project. If you are a new tenant, the Default project is not available and you need to create a new project.<br>**Note**: Only Administrators can create new projects. |
| Project Permissions | Project permissions are used to associate permissions with projects. The new *Project Permissions* page available under the *Settings > Project Permissions* tab allows you to associate permissions. Permissions for the *Default* project are assigned on the Administrative Permissions page in Access Profiles. |

| Added Item | Description |
|---|---|
| Assets categorized under Projects | Assets are now categorized under *Projects* on the *Deploy* page. If an asset is pulled and if the associated project is not present in the current stage, the project along with the asset will be available in the current stage. |
| Administrative permissions regrouped | Administrative permissions under Access Profiles have been regrouped under *Global Permissions*, *Functional Controls*, and *Project Permissions for Default Project*. If you are an existing tenant, your user's Access Profile controls global permissions as well as permissions for the Default project. If you are a new tenant, the Default project is not available and your user's Access Profile controls only global permissions. |
| Multi Authentication Support | You can now select different *authentication types* for the same Application while creating an Account. You can currently select different authentication types, for example, Credentials, OAuth V2.0 (Authorization Code Flow), or OAuth V2.0 (JWT Flow) only for Salesforce CRM v44. |
| Flat File enhancements | Integration Cloud now supports *Fixed length* and *Variable length* parsers when you use a *sample file* to define the definition and structure of a Flat File Application. |
| Locking Integrations | Integration Cloud now allows you to manage an Integration during the development life cycle by *auto locking*. When you edit an Integration, it is automatically locked for you. This restricts multiple users editing that Integration at the same time. To unlock an Integration, from the Integrations page, click the Integration link and on the Integration Overview page, click *Unlock*.<br>**Note**: Only the user who locked the Integration or an Administrator can unlock the Integration. |

| Added Item | Description |
|---|---|
| Create document type from an XML Schema Definition | You can now create and delete a document type built from an XML Schema Definition (XSD). |
| Integration Versioning | While editing an Integration, you can now view the version change history of the Integration and also restore an earlier or previous version of the Integration.<br>Click the *Show history* option available on the tool bar to view the version change history of the Integration.<br><br>Then click on an earlier version to view that Integration version and click the *Restore* option to restore the selected previous version of the Integration.<br><br>If you have reverted to an earlier version and there is a scheduled execution for the Integration, the reverted version of the Integration will be run as per the defined schedule. |

| Added Item | Description |
| --- | --- |
| User Interface enhancements | The following user interface enhancements and changes are made in this release:<br>▪ When you log in to Integration Cloud, you will now view the *Projects* page instead of the home page.<br>▪ The new *Notifications* icon on the Integration Cloud navigation bar allows you to view update notifications, when was the last login, and the list of enhancements and changes in the current release.<br><br>▪ The Orchestrated Integration workspace has been enhanced to improve the usability. Icons on the Orchestrated Integration workspace navigation bar have been replaced with intuitive icons and the new *Show inline comments* option allows you to view comments entered for the blocks.<br> |
| Database Application enhancements | *SSL account in the Database Application*<br>You can now create SSL account to the databases. To create an SSL account, choose the respective certificate from the *Truststore Alias* option available in the *Account* screen.<br>*Pre-loaded driver support*<br>You can now use driver groups like Microsoft JDBC Driver for Microsoft SQL Server and PostgreSQL JDBC Driver for PostgreSQL to create the connection. |
| Custom *From Email Address* for alert emails | Alert emails that come from Integration Cloud have the *From Email Address* as *noreply@webmethodscloud.** by default. You can now request for a custom *From email Address* for your tenant. |

| Added Item | Description |
|---|---|
| Custom Domain Name | You can now request for a custom domain name for your tenant. For example, if your company name is *XYZ*, you can have the domain name as https:// subdomain.*xyz*.com. |
| Support for form encoded parameter | You can now send simple key value parameters embedded in the *Request Body* for POST or PUT requests. This uses the default web form encoding, which is application/x-www-form-urlencoded. |
| Server Name Indication (SNI) Support | While configuring an *Account* for an Application, you can select the *Enable SNI* option if a SaaS provider offers SNI-based TLS connectivity, and if you want to connect to an SNI enabled SaaS provider to send the host name specified in the Server URL field, as part of the TLS SNI Extension server_name parameter.<br>To explicitly specify a host name to be included as a part of the SNI extension server_name parameter, in case the host name is other than the host name specified in the Server URL field, specify the host name value in the *SNI Server Name* field. |
| Modify alert frequency period | You can now set the alert frequency period from the *Alert Rules* page to send email messages. |

| Added Item | Description |
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| New Applications | The following new Applications are available in this release: |

- *Simple Mail Transfer Protocol (SMTP) Application*: Integration Cloud allows you to connect to an SMTP server using the Simple Mail Transfer Protocol (SMTP) Application. The *SendEmail* predefined operation sends an email to the specified recipient using SMTP.

- *Shopify*: Integration Cloud connects to Shopify using the Shopify REST API and allows you to organize your products, customize your storefront, accept credit card payments, track, and respond to orders.

- *CloudStreams Connector for Microsoft Azure Data Lake Store*: Integration Cloud connects to CloudStreams Connector for Microsoft Azure Data Lake Store using the REST API and allows you to manage File System resources through the Hadoop Distributed File System (HDFS) API. You create directories, folders, and files in your Azure Data Lake Store instance that can store and retrieve data.

- *Zuora REST*: Integration Cloud connects to Zuora REST using the Zuora REST API. Zuora allows you to manage Zuora objects in the Zuora Business Object Model, process revenue schedules, and perform other financial operations.

- *Salesforce® CRM REST*: Integration Cloud connects to Salesforce® CRM REST using the REST API and allows you to manage security for inbound requests, log payloads and specifies run-time performance conditions for consumers for outbound requests. It also supports multiple authentication mechanisms.

| Added Item | Description |
| --- | --- |
| | ▪ *webMethods.io B2B*: This application allows you to:<br>○ Interact, accept requests, and build integrations for the webMethods.io B2B product instance.<br>○ Exchange business documents between trading partners that use EDI documents of various standards, versions, and transaction types.<br>▪ *Electronic Data Interchange (EDI)*: This application provides predefined operations to parse, validate, and transform EDI messages received from the webMethods.io B2B application and use these transformed messages to create orchestrations. |

## Cloud Deployment

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| Cloud Deployment Command Line Interface (CLI) | You can now manage a solution, monitor the status of all runtimes in a solution, promote assets from one stage to another, and so on using the Cloud Deployment CLI. The CLI supports *Interactive* and *Normal* modes. |
| Database as a Service | You can now add a MySQL database to your cloud deployment subscription. This enables you to configure, store, and monitor your database directly in the cloud instead of using external systems. The database endpoint can be shared by multiple solutions deployed by the tenant. |
| Self-managed update management | You can now update any product in a solution to the available higher version after you create the solution. The *Update Available* option appears if a higher version is available for any of the products in the solution. The latest version will appear in the *Version* drop-down list. |

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| Added Item | Description |
| --- | --- |
| Copying solutions | You can now copy solutions in any stage. Copying solutions allows you to have a back up of your solution before you make any changes. You can choose to make a copy of a solution by using either the *same configuration and services* in the solution landscape or by *modifying the configuration and services* in the solution landscape. |
| End to end monitoring using AppDynamics | If you are currently using *AppDynamics* to trace end to end business flows, the new *tracing* list box option available on the Solution creation page allows you to trace logs after creating or updating a solution for a webMethods Integration Server runtime. |
| Viewing API signature of executable services | After deploying assets, you can go to the Asset explorer page and click the *API Details* option to view the API details of the service such as the HTTP Method, URL, Input structure, and the parameters that are required to invoke the service from an external system, for example, a REST client. **Note**: The API Details option appears only for executable services. |
| Monitoring support for JDBC adapter and CloudStreams connectors | You can now view *Connectivity KPIs* for both JDBC adapter and CloudStreams connectors in the runtimes of solutions. For connectors, listeners and connections data are displayed. |
| webMethods Integration Server service execution statistics | webMethods Integration Server service execution for solutions is now displayed by default for all services. There is no need to enable audit logging. |

## *Release 5.5.0*

| Added Item | Description |
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### *Integration Cloud*

| Added Item | Description |
|---|---|
| Streaming support and replaying Salesforce events | Some Integration Cloud Applications, for example, *Salesforce CRM version 44*, now support connectivity with streaming APIs and processing of streaming API events. You can create a Salesforce CRM listener, select a subscription channel, and specify the Integration to be invoked on the incoming events. Additionally, you can configure the headers and parameters as well as enable and disable the listener. Once enabled, the listener receives the streaming API events and processes the received events. The Salesforce CRM listener can subscribe and listen to Salesforce events. Salesforce stores standard volume events for 24 hours, so for versions of Salesforce later than v37.0, you can retrieve the events if they are within the retention window. You can replay the lost events by selecting the following replay options: <ul><li>New - Receive only new events that are broadcast after subscription.</li><li>All - Receive new events including past events (last 24 hours) that are within the retention window.</li></ul> |
| Support for consuming and producing Flat Files | You can now create a Flat File Application by defining a flat file structure either manually or from a sample file. You can then convert an inbound flat file to a document by invoking the predefined *convertFlatFileToDocument* operation in an Integration, or convert a document to an outbound flat file by invoking the predefined *convertDocumentToFlatFile* operation. |

| Added Item | Description |
| --- | --- |
| Support for creating SOAP APIs | Integration Cloud allows you to write integration logic to integrate different types of applications. This logic can now be exposed to the external world using SOAP APIs.<br><br>You can create SOAP APIs by using an existing set of Integrations (from scratch), or by using a WSDL file.<br><br>A SOAP API exposes one or more Integrations as operations, so each operation in a SOAP API corresponds to an Integration.<br><br>Using a SOAP client, you can invoke the SOAP Operation externally using Basic Authentication or 2-way SSL. When the SOAP Operation is invoked, the associated Integration gets executed. |
| Connect to a database using the Database Application | You can now connect to a database using the new *Database* Application and perform database operations with cloud databases. |

## Cloud Deployment

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| Upgrade products to a higher fix version in a solution | You can now upgrade any product in a solution to the available higher fix version after you create the solution.<br><br>The *Upgrade* option appears if a higher fix version is available for any of the products in the solution. The latest fix version will appear in the Fix version drop-down list. |
| Enable packages during solution creation | While creating a solution, after you select a *Fix* version, webMethods Integration Server packages such as *WmCloudStreams* and *WmJDBCAdapter* will appear in the *Packages* group box based on the selected *Fix* version. You can select the packages that you want to enable. |

| Added Item | Description |
| --- | --- |
| Enable cloud deployment capability for all tenants | Cloud Deployment capability is now enabled by default for all tenants. As soon as you register, 3 CPU cores and 6 GB memory are allocated for all tenants. *Provisioning* happens if you access Cloud Deployment for the first time using the application launcher. Solutions created using a trial account are deactivated daily. After you log in, you need to reactivate the solutions. All assets will be available after a short delay. |
| Deploy webMethods CloudStreams assets | You can now deploy CloudStreams provider packages, CloudStreams connector services, CloudStreams connection, and CloudStreams connector listeners to a solution in Cloud Deployment and view those assets. This is applicable only if you have selected *WmCloudStreams* as the package option while creating the solution. |
| Promote assets from a solution to another solution | Within a tenant, you can now promote assets from a solution to another solution, from a previous stage to the current stage, for the same runtime type. You can promote assets if the source runtime version is lesser than or same as the target runtime version. |
| Load pipeline data for testing services | When you run a service in Software AG Designer, you can save the pipeline data as an XML document to your local file system. After you deploy the service in Cloud Deployment, you can now click the *Load Data* option in the Service editor in Cloud Deployment to load or update the pipeline data and test the service. |

| Added Item | Description |
| --- | --- |
| Download user deployed packages and configurations | You can now download user deployed packages and configurations from the *Assets* page. The assets will be zipped and downloaded to your local storage space. From the *Asset Repository* page, you can either download individual packages or download the whole repository for each product. The assets including ACDL files will be zipped and downloaded to your local storage. |
| Enhanced user interface for Monitoring | • The Alerts page now displays the *Resolved On* date for all the resolved alerts.<br>• On the *Runtimes* page, you can now click on the *Adapter KPI* link to display the Adapters details in a pop-up window.<br>• On the landing page, a help icon is now added in the *Service Executions* card.<br>• From the *Alerts* card on the landing page, you can now click *Configure* and go to the *Alerts Configuration* page. |

## *Release 5.1.0*

| Added Item | Description |
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| | ### *Integration Cloud* |
| User Interface changes due to performance enhancements | The following user interface changes are made to enhance the performance and reduce the wait time for user actions:<br>• Applications are now listed under different categories such as Predefined Applications, REST Applications, On-Premises Applications, and SOAP Applications.<br>• The Integrations list page (Develop > Integrations) now shows a basic view of all the Integrations. To view the references (*Uses* column), select the *Show Advanced View* check box available on the Integrations list page. |
| Support for viewing Integration Cloud Capabilities | The new *Capability* page allows you to view the status of some of the system capabilities, based on your license offering. To access this page, from the Integration Cloud navigation bar, click ⑦ and select *Licensing > Capability*. |
| Support for multipart request body | For some Applications and Operations, for example, for the *CloudStreams Connector for Salesforce(R) Bulk v2 Data Loader* Application and *Create Job and Upload Job Data* Operation, Integration Cloud supports multipart request body. |
| Mapping enhancement | While doing pipeline mapping, you can now view only the mapped fields by selecting the *Show Only Mapped Fields* check box. |

| Added Item | Description |
| --- | --- |
| Support for invoking deployed services from Integration Cloud | Integration Cloud Integrations can now invoke Cloud Deployment webMethods Integration Server services for the same tenant. A new pre-defined Application, *Cloud Deployment*, is added in Integration Cloud. Using this Application, you can select the solution webMethods Integration Server services that you want to call from Integration Cloud. |

| Added Item | Description |
|---|---|
| OAuth 2.0 enhancements | The following OAuth 2.0 enhancements have been implemented in this release:<br><br>• From the *Client Registration* page, you can now associate scopes with a client as well as create a new scope and associate it with a client by clicking the *Associate Scopes* option.<br><br>• Support is added for Client Credentials Grant and Resource Owner Password Credential Grant types as part of OAuth spec for OAuth token generation flow.<br><br>• After you select the *Enable Integration to be invoked over HTTP* option on the Integration Details page, *OAuth Scopes containing the exposed Integration URL* appears. Clicking the *OAuth Scopes* option displays the OAuth Scopes which contain the exposed URL of the Integration. You can add the exposed URL of the Integration to an existing scope or add a new Scope which will contain the exposed URL of the Integration.<br><br>• From the REST API Resources page for a REST API which is created from scratch, you can now click the *OAuth Scopes* option to view the OAuth Scopes which contain the REST Resource path with Method. You can add the REST Resource path with Method to an existing scope or add a new scope which will contain the REST Resource path with Method.<br><br>• While creating or updating a scope, you can now select the exposed Integrations and REST Resources that you want to add as Service URLs from the *Services* dialog box.<br><br>• Enhanced the OAuth Approval page generated in the OAuth token generation flow.<br><br>• SSO support for authentication during OAuth token generation flow.<br><br>• Support for auditing OAuth Client, Scope, and Token CRUD operations. |

| Added Item | Description |
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### *Cloud Deployment*

| Added Item | Description |
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| Support for viewing Cloud Deployment Capabilities | The new *Capability* page allows you to view the status of some of the Cloud Deployment capabilities, based on your license offering. To access this page, from the Cloud Deployment navigation bar, click 🔵 and select *Licensing > Capability*. |
| Support for deleting assets | You can now delete assets from all stages from the *Deploy* page for a solution. |
| Support for viewing more assets | You can now view more on-premises assets for Cloud Deployment. |
| Support for stateless cluster of webMethods Integration Servers | In addition to supporting stateful webMethods Integration Server clusters, you can now define that a cluster is *stateless* from the *Landscape* page for a solution. The deployment of a solution will therefore not need a Terracotta Server Array. |
| Landscape component status | You can now see the status of a solution landscape component whether it is ready or not ready on the landscape page. |
| Deployment Status Tracking | You can now type a message to describe the rollback. The rollback message appears on the *History* page. The History page shows the *Trace ID*, that is, the tracking ID, which is automatically generated on every successful or unsuccessful promotion, rollback, or deletion, the Deployment, Rollback, or Deletion Action, Date when the asset was promoted, rolled back, or deleted, the User who promoted, rolled back, or deleted the asset, and the commit Message for the selected instance. You can click on a Trace ID to see the *Track History* for the specific action. |

| Added Item | Description |
|---|---|
| Support for usage based license monitoring of CPU and Memory capacity | You can now view the cumulative usage of CPU and Memory for all the active solutions in all the stages from the *Usage* page. To access this page, from the Cloud Deployment navigation bar, click ⓘ and select *Licensing > Usage*.<br><br>Further, on the Cloud Deployment landing page, you can see the current usage (CPU and Memory) for the tenant. |
| Continuous Integration/Continuous Deployment (CI/CD) | You can now build user-created assets and configurations using webMethods Asset Build Environment (ABE), retrieve those assets and configurations from a VCS by using ABE or an automated tool like Jenkins, and then deploy those assets and configurations to the Integration Cloud Development Stage using ABE. For information on CI/CD and how to promote assets across stages, see the *Deploying to webMethods Integration Cloud* document. |
| Support for webMethods Adapter KPI monitoring | You can now monitor the following details of all the installed Adapters:<br>• Total number of enabled and disabled connection pools<br>• Total number of enabled and disabled listeners<br>• Total number of enabled and disabled notifications |
| Duplicate low severity alerts | In earlier releases, along with critical alerts, redundant alerts of lower severity like warning and info alerts were also displayed. From this release, if there are critical alerts, lower severity alerts will not be displayed. |

## *Release 5.0.0*

| Added Item | Description |
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### *Integration Cloud*

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| Debug Orchestrated Integrations | You can now debug an orchestrated Integration and can inspect the data flow during the debugging session. You can inspect and edit the pipeline data before and after executing the individual blocks. Further, you can step over each block one at a time, or can specify breakpoints where you want to halt the execution. |
| Support for OAuth 2.0 | You can now protect Integration services and REST APIs using the OAuth 2.0 protocol. |
| Support for enabling dynamic account configuration details at runtime | For REST Application operations, you can now provide account configurations at runtime during integration execution. When you create or edit an operation of a REST application, you can select the fields you want to pass at runtime in the *Dynamic Account Configuration Fields* dialog box. |
| Support for configuring two-way SSL for inbound connections | Integration Cloud now supports two-way SSL for inbound connections. You can store client certificates and associate a certificate with a user account. |
| Support for refreshing OAuth 2.0 Access Tokens | To refresh the access tokens for accounts which use the OAuth 2.0 protocol, you can now specify a call-back Integration which will execute when the access token expires. Select *Custom ESB Service* in the *Refresh URL Request* field and provide the Integration name in the *Refresh Custom ESB Service* field. |

| Added Item | Description |
| --- | --- |
| New Applications | • *Applicability Statement 2 (AS2)* - Applicability Statement 2 (AS2) allows you to transport EDI and other business data securely and reliably using the HTTP transport protocol. The application supports the AS2 protocol versions 1.1 and 1.2. You can configure the AS2 Application with the *Auto Detect* option.<br>• *Microsoft Dynamics CRM 365* - Microsoft Dynamics CRM 365 allows you to manage CRM data and access metadata that defines the specific CRM instance to which you are connecting using the OData API Version 4.0. This Application performs standard CRUD operations on business objects by connecting to the OData service endpoint. |
| Support for configuring Headers and Parameters for REST-based Applications | You can now add and configure the Headers and Parameters for REST-based Applications. |
| Support for viewing associated ACLs for an Access Profile | You can now view ACLs associated with an Access Profile from the Access Profile details page. |
| Support for editing the default Access Control List | You can now edit the default Access Control List. Further, the name of the default ACL has been changed from "Everybody" to "Default". |
| Service changes | • New services<br>*sleep:* This service has been added under the *Flow* category.<br>• Updated Services<br>*xmlStringToDocument* - New input parameters have been added to this service. |
| Enhancements for Interactions and Business Objects for Operations | You can now edit interactions in a single request and also edit multiple business objects in a single request. Further, you can drag and drop the interactions or business objects to change the order in which they will execute. |

| Added Item | Description |
|---|---|

## *Cloud Deployment*

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|---|---|
| Support for Cloud Deployment | Cloud Deployment allows you to deploy on-premises assets and configurations, which are developed using Software AG Designer and on-premises Integration Server, to Integration Cloud. You can choose from predefined solution landscapes to deploy your on-premises assets from Software AG Designer.<br>The assets and configurations can be promoted from one stage to another stage. During promotion, the asset field values can be changed.<br>You can monitor the health and availability of the solutions and run-time instances, alerts, and alert statuses for all the deployed solutions. |
| New Administrative Permissions for Solutions | Permissions for creating, updating, and deleting solutions have been added under Access Profile > Administrative Permissions > *Functional Controls*. The permissions allow you to add, modify, and delete solutions available on Integration Cloud. |
| Solution Permissions | A new *Solution Permissions* page in Access Profiles is now available which allows you to map Integration Server user groups to an Access Profile. With this mapping, the Integration Cloud user who has that Access Profile can perform tasks on the solution Integration Server(s) by being present in that particular user group. |
| Customized message while promoting assets | You can now type a message while promoting assets. The promotion message appears on the new *History* page. |
| Infrastructure provisioning status for Cloud Deployment | You can now see the status when a solution landscape is provisioning or has been successfully provisioned. The user interface pages will be disabled when a solution is being provisioned. |

### *Release 4.6.0*

| Added Item | Description |
|---|---|
| Reference Data enhancements | You can now view, edit, delete, and download Reference Data *in all stages*. The new *Status* column in the Reference Data table displays *Configured* if the Reference Data is available in the current stage and displays *Not Configured* if the Reference Data is not available in the current stage but available in any other stage. |
| Controlling Integration Executions using Access Control Lists (ACLs) | You can now use Access Control Lists (ACLs) to control the execution permission of an Integration. An ACL can be assigned to an Integration and a user can be associated with the ACL through the Access Profile. Therefore using ACLs, you can control the users who can execute an Integration. |
| Users associated with an Access Profile | You can now view the list of users associated with an Access Profile by clicking the Access Profile link on the Access Profiles page. |
| Support for associating multiple Access Profiles with an Access Control List | You can now associate multiple Access Profiles with an ACL while creating or modifying an ACL from the Access Control List > *Associate with Access Profiles* page. |
| Ability to Copy, Export, Import, and Refresh REST APIs | Integration Cloud now allows you to copy, export, import, and also refresh a REST API. |

| Added Item | Description |
| --- | --- |
| Support for nested and multiple Business Objects and Interactions | You can now create or update *multiple business objects*, for example, Contact, Opportunities, and Account in a single request for the Salesforce v42 Application. The following operations have been added for the Salesforce v42 Application: *createMultiple* - This operation allows you to add one or more records of different business object types. For example, Account and Contact business objects can be created in a single invocation. *updateMultiple* - This operation allows you to update one or more records of different business object types. For example, Account and Contact business objects can be updated in a single invocation. |

You can also add *interactions (*sub-operations), for example, Create, Update, Upsert, and Delete, and then *associate those interactions with business objects in a single request* for the OData 4.0 Application. The following operations are available for the OData 4.0 Application:
*Batch* - Batch requests allow grouping multiple interactions into a single HTTP request payload. Batch allows you to create, update, read, and/or delete entities of same or different entity types in a single request.
*ChangeSet* - A change set is an atomic unit of work consisting of an unordered group of one or more data modification requests. ChangeSet allows you to create, update and/or delete entities of same or different entity types in a single request.

Note that business objects and Interactions appear only for certain Applications and Operations.

Further, for some operations, for example, for the *Retrieve Contained Or Derived Entity* operation in the OData 4.0 Application, Integration Cloud displays nested business objects. You can expand the nested business objects to display the child-level objects.

| Added Item | Description |
| --- | --- |
| New Applications | The following Applications are added in this release:<br>• *Amazon Kinesis* - Amazon Kinesis is a managed service that scales elastically for real-time processing of streaming big data. The most common Amazon Kinesis use case scenario is rapid and continuous data intake and aggregation.<br>• *Twilio* - Using the REST interface, Twilio allows you to programmatically make and receive phone calls and send and receive text messages. |
| Help navigation and user interface changes | Page titles and help icons have now been removed from the specific user interface pages. To access context-sensitive help information, click on the icon from the navigation bar. |
| Recipes page enhancements | *Pagination*<br>The Recipes page is now paginated to identify the sequential order of the pages. You can also select the number of recipes to be viewed per page.<br>8  9  ▶  ▶|  12 ▼  Recipes per Page<br>*Search*<br>You can now search Recipes by Application names. |
| Registration page changes | The field name of the email address provided during registration has been changed to *Work Email Address*. |

| Added Item | Description |
| --- | --- |
| New Services | New services have been added under the following categories:<br><br>*Date*<br>• currentNanoTime<br>• elapsedNanoTime<br>• formatDate<br>• getCurrentDate<br><br>*Document*<br>• searchDocuments<br><br>*List*<br>• addItemToVector<br>• vectorToArray<br><br>*Math*<br>• addObjects<br>• divideObjects<br>• min<br>• multiplyObjects<br>• subtractObjects<br>• toNumber<br><br>*String*<br>• HTMLDecode<br>• HTMLEncode<br><br>*Utils*<br>• generateUUID |

| Changed Item | Description |
| --- | --- |
| Submit option is deprecated while executing Integrations from an external system | You can use the *run* option in the Request URL while executing an Integration from an external system, that is, if the Integration is enabled to be invoked over HTTP. |

## *Release 4.5.0*

| Added Item | Description |
|---|---|
| Create REST APIs | Integration Cloud allows you to write integration logic to integrate different types of applications. This logic can be exposed to the external world using REST APIs. |
| | These REST APIs can be created by using an existing set of Integrations (from scratch) or by using a file containing the Open API specification (formerly known as the Swagger specification) as a template. |
| | A REST API consists of many Resource Operations and each Resource Operation has a Path, one or more HTTP Methods, and an associated Integration. |
| | A REST Resource Operation can be tried out from the Swagger screen of a REST API. When the Resource Operation is invoked using the HTTP Method, the associated Integration gets executed. |
| Application enhancements | Following are the Application enhancements: |
| | • Some Applications, including custom REST Applications now allow two-way SSL authentication by providing keystore and truststore aliases in the Account Configuration section. |
| | • The Account configuration field *Use Chunking* has been added in many Applications. |
| | • For custom REST Applications, *binary* has been added as the content type for the Request/Response body. Binary data can be sent as an input to a REST operation. |
| Refresh SOAP Applications | You can now update a SOAP Application by specifying a new WSDL URL or by uploading a new WSDL file. |

| Added Item | Description |
|---|---|
| New Blocks and Expressions in Orchestrated Integrations | Following are the new and modified blocks and expressions: |

**New Blocks**

- *switch* block in *Control Flow* category. The *switch* block can be mutated for multiple *cases* and one *default*.

- *Throw error "..."* block in *Control Flow* category.

- *Field exists* expression in *Expressions* category.

**Modified Blocks**

- *if* block has been enhanced and can now be mutated.

- *if else* block has been deprecated and is not available from this release but Integrations currently using the *if else* block will continue to work successfully.

- *Exit Integration* has been renamed to *Exit Integration signaling success* and *Exit Integration with failure* has been renamed to *Exit Integration signaling failure*.

| Ability to delete assets used by an Integration | You can now delete custom Applications, Accounts, Operations, Integrations, Reference Data, and Document Types assets available in the *Development* stage, even if those assets are referenced by other assets. Note that if assets used by an Integration are deleted, you will not be able to pull the Integration into subsequent stages or export the Integration. After deleting an asset, the deleted asset reference is highlighted ( ⚠ ) in the user interface. |
|---|---|
| Ability to delete Users | You can now delete users provided you have the *User Management* permission. Note that you cannot delete your own user profile. If a user is deleted, then the user cannot be recovered and all assets created or modified by the user will appear in the *Created By* and *Modified By* columns as *Unknown User{first two characters of the first name and last name}*. |

| Added Item | Description |
| --- | --- |
| New Services | The following new services have been added under the *IO* category:<br>• *streamToString* - Creates a string from data that is read from an InputStream.<br>• *stringToStream* - Converts a string to a binary stream.<br><br>The following new services have been added under the *Flow* category:<br>• *clearPipeline* - Removes all fields from the pipeline.<br>• *getHTTPRequest* - Gets information about the HTTP request, received by Integration Cloud.<br>• *setHTTPResponse* - Sets the HTTP response information to be returned by Integration Cloud. |
| Terminate in-progress Integration executions | You can now click the *Terminate* option available in the Execution Results details page to terminate *in-progress* Integration executions provided you have the Execute Integration permission. The *Terminate* audit log entry is created. |
| New Application | A new Application, *Anaplan*, has been added in this release. Anaplan allows you to interact with data in your models and securely upload files, download files, import and export data, and run actions programmatically. |
| Viewing assets and services in various stages | Integration Cloud now displays the current active stage on the navigation bar:<br>.<br>The stage in view can be changed in the *Stages > Change Stage To View* page. You can view assets and services in each stage and *view only those assets that are available in the selected stage*. |
| API Management permission | The *Manage Promotions* permission has been added under *Functional Controls* and allows you to add, modify, and delete API Gateway stages, or move API Gateway assets from the source stage to one or more target stages, or to rollback an asset promotion that is already available in the target stage at any time. |

| Added Item | Description |
| --- | --- |
| Redesigned user interface | The user interface has been redesigned and has a new look and feel in this release. The functions that can be accomplished have been reorganized for improved usability.<br>• *Settings* menu can be accessed by clicking on the ⚙ icon.<br>• *User Profile*, *My Profile* and *Logout* menu items can be accessed by clicking on the 👤 icon.<br>• *Help Topics*, *TECHcommunity* website, and the *About* page can be accessed by clicking on the ❓ icon.<br>• *Applications* and *Keys & Certificates* have been moved under the *Connect* menu.<br>• *Stages* tab has been newly added in this release and contains *Change Stage To View, Deploy, and Manage*. The *Deploy* option is also available on the *Integrations* page.<br>• *Recipes* tab has been moved under *Develop*.<br>• The *Pull* functionality has been moved from the *Integration Details* page to the *Deploy Assets* (*Stages > Deploy*) page. This page allows you to move assets from one stage to another stage.<br>• Stage selection drop-down list box has been removed from the *Dashboard* and *Execution Results* pages. |

### *Release 4.1.0*

| Added Item | Description |
| --- | --- |
| Export and Import Integrations | Integration Cloud now allows you to export Integrations from one tenant and import those Integrations to another tenant. You can import only those Integrations that are exported from Integration Cloud. You must have the "Export" permission to export Integrations. |
| Home page enhancements | The Home page has been redesigned and has a new look and feel in this release. The functions that can be accomplished from the Home page have been reorganized for improved usability. |

| Added Item | Description |
|---|---|
| Customizing Integration Cloud | You can now customize the Integration Cloud user interface by changing the logo, colors, font face, copyright information, and the "About" page contents. The behavior or functionality of Integration Cloud cannot be changed. |
| Email opt-in during new tenant registration | The Email opt-in field is now added that will enable you to receive marketing materials from Software AG. You can unsubscribe from the updates at any time. |
| SSO login capability | If you have already configured SSO, the "SSO Login" option now appears in the login page. Clicking this option redirects you to the Identity Provider (IdP) login page. After you provide the IdP login credentials, you will be logged into Integration Cloud. |
| Redesigned test results and Orchestration layout | The test results panel has been redesigned to provide a larger work space in this release. Also, the "Cancel" button in the Orchestrated Integration page has been changed to "Exit" and the Help icon has been moved to the lower left-corner of the page. |
| Logged fields for business data | Integration Cloud now allows you to select any number of fields to log business data from the Operation and Integration signatures. |
| New Applications | The following Applications are added in this release:<br>• DocuSign<br>• Amazon DynamoDB |
| New Services | The new *Storage* block is added in this release and the following services are added under the *Storage* block: *add, get, keys, lock, put, remove,* and *unlock.* The *objectToString* service is added under the *String* block and it is also available as a transformer service. |
| New Recipes | 39 new Recipes integrating Coupa, NetSuite, ServiceNow, Salesforce, Amazon S3, FTP server, Jira, Sugar CRM, Concur, and Zendesk have been added in this release. |

| Added Item | Description |
| --- | --- |
| Prevent concurrent executions | Integration Cloud now allows you to skip the next scheduled Integration execution if the previous scheduled execution is still running by selecting the "Prevent concurrent executions" option in the Schedule Execution window. |

### Release 4.0.0

| Added Item | Description |
| --- | --- |
| Alert rules | You can now create alert rules and send email messages to selected users for one or more Integrations based on Integration execution results (Failed, Completed with Errors, or Completed Successfully) for different stages (Development, Test, Pre-live, and Live). Email messages are sent only if there are executions that match the alert rules. |
| Restart/Resume Integration executions | Integration Cloud now allows you to restart or resume Integration executions. You can enable Integration executions to be restartable or resumable by selecting the *Enable executions to be restartable* option in the Integration Details page. From the Execution Results page, based on the execution status, you can either resume or restart the Integration execution. |
| Orchestration UI changes | The Orchestration User Interface has a new look and feel in this release. The block shapes, colors, and icons have changed but there is no change in the Orchestration functionality. |
| New Applications | The following Applications are added in this release: <br> • Atlassian Jira v2 <br> • IBM Watson Tone Analyzer v3.0 <br> • Google Analytics Reporting v4.0 <br> • Google Analytics v3.0 <br> • Coupa v19 <br> • Google Prediction <br> • NetSuite 2016_2 <br> • Siemens MindSphere v2.0 |

| Added Item | Description |
| --- | --- |
| Add custom fields to operations | For some operations of certain Applications, for example, Coupa, you can now add your own fields. Such fields are called custom fields. |
| getSessionInfo service enhanced | The getSessionInfo service is enhanced in this release to include the *executionResultReference* parameter in the response under $session. The *executionResultReference* parameter returns the current Integration execution result reference identifier. For example, you can pass the identifier to an on-premises operation and trace the Integration execution. |
| New Recipes | 16 new Recipes integrating Cumulocity, ServiceNow, IBM Watson Tone Analyzer, Zendesk, Salesforce CRM, Marketo, Google Sheets, Slack, MS Dynamics CRM, and Magento have been added in this release. |
| Orchestrate containerized Integration Server services | You can now invoke services exposed by Integration Servers running in Docker containers from Integrations. |
| API Management permissions | Integration Cloud now allows you to create and manage API Management Access Profiles provided you have the required API Gateway Cloud and/or API Portal Cloud licenses. The following predefined Access Profiles are provided:<br>• API Gateway Administrators<br>• API Gateway Providers<br>• API Portal Administrators<br>• API Portal Providers |

| Deprecated Item | Replacement, if any |
| --- | --- |
| Coupa v17 | Coupa v19 |
| NetSuite 2014_2 | NetSuite 2016_2 |

### *Release 3.6.0*

| Added Item | Description |
| --- | --- |
| Create REST Applications | Integration Cloud now allows you to define REST Resources and Actions and create REST Applications. |

| Added Item | Description |
| --- | --- |
| New Recipes | New recipes are added in this release. The recipes page now displays the number of times each recipe has been used to create Integrations. The page also displays the Applications referenced in the recipe. |
| New Applications | The following Applications are added in this release:<br>• Apache Solr<br>• Concur<br>• Coupa<br>• Cumulocity<br>• SugarCRM<br>• Zendesk |
| Double-click to set field values | You can now double-click a field while mapping and set a value for that field. |
| View Docker Image Tag label details | You can now view the Docker Image Tag label details on the *Image Tag* details page. |
| View the number of available Docker containers | You can now view the number of available Docker containers in the repositories screen based on your license permissions. |
| Password Policy changes | The following fields are added in the *Password Policy* page:<br>• Password Never Expires for<br>• Inactive Session Timeout |
| SOAP Account configuration changes | Protocol, Host, and Port fields in the SOAP Account configuration page are replaced with the *URL* field. |
| Save Integration execution test results | You can now either open or view an Integration execution test result entry or save it locally in JSON format. You can also delete the selected test result entry from the *Test Results* page. |

| Added Item | Description |
| --- | --- |
| Licensing model changes | Licensing model has now changed and the details are as follows:<br>• Licensing is now based on the number of Applications and not on the number of Accounts created.<br>• If an Application has an Account, then the Application is considered as being used.<br>• The total number of Applications allowed is 2 for Basic, 5 for Advanced, and 8 for Enterprise editions.<br>• You can now use all released versions of an Application, that is, you can use both version 29 and 31 of Salesforce CRM. The Application count will still be considered as 1.<br>• The Application count will be considered as 1 for any number of custom SOAP or REST Applications created in Integration Cloud.<br>• The "Applications" page message now displays the total number of allowed Applications and the total number of Applications used. On-premises applications are not counted as part of the total number of applications allowed. |
| Redesigned Registration page | The *Registration* page has a new look and feel in this release. Further, the following fields are added:<br>• Your Role<br>• Company Size<br>• Is your interest based on |

### *Release 3.5.0*

| Added Item | Description |
| --- | --- |
| Recipes | You can now use pre-built Orchestrated or Point-to-Point Integration templates to create an Integration. Recipes are based on the most common integration needs and can significantly reduce the effort required to build an Integration. You can also preview the recipe description and its assets before using the recipe. |

| Added Item | Description |
| --- | --- |
| Alphanumeric characters on the New Registration, Reset Password, and Login screens | Integration Cloud now displays distorted alphanumeric characters on the "Password Reset" and "New Registration" screens. Further, if you are not able to successfully login after a few attempts, you are required to enter the distorted alphanumeric characters that appear on the login screen. |
| Password in a follow-up email | After you submit the new registration form and as soon as the registration process is complete, an email is sent to the email address you provided during registration. A follow-up email is now sent that contains the temporary password. The follow-up email is also sent for "Password Reset". |
| New Applications | The following Applications are added:<br>▪ Google Cloud Storage<br>▪ SAP S/4HANA Marketing Cloud |
| Enhanced Integration Scheduling | You can now define a recurrence pattern to schedule integration flows at 1 minute intervals. |
| New types Integer, Short, Long, Float, Double, and Boolean are introduced for defining the data contained by a field. | While defining fields of a Document Type, you can now specify Integer, Short, Long, Float, Double, and Boolean as types. |
| Enhanced Operations screen | "Show Signature" and "Test" options are now available on the Operations screen.<br>The "Show Signature" option allows you to view the Input and Output signature of all predefined and custom Operations.<br>The "Test" option allows you to test all predefined and custom Operations. Both Trigger and Action Operations can be tested. If an operation does not have an input signature, the input fields are not displayed. |
| Enhanced Business Data logging | Integration Cloud now allows you to capture business data for all (successful and error) transactions. The "Always" option is added in the "Select Business Data to log" dialog box, which allows you to *always* log select business data from the Operation and Integration signature. |

| Added Item | Description |
| --- | --- |
| Enhanced Dashboard | Integration Cloud Dashboard displays the number of in-progress Integration executions. You can now click on the number to view the in-progress Integration execution details. |
| Reference Data in Point-to-Point Integrations | Reference Data is now available in Point-to-Point Integrations while transforming data. |

| Changed Item | Description |
| --- | --- |
| getSession | Name of the "getSession" service is changed to "getSessionInfo". The service is available under the Services > Flow block. |

### *Release 3.1.0*

| Added Item | Description |
| --- | --- |
| Redesigned Container management UI | Container Repository and Services screens are reorganized for improved usability. Container now includes elastic volume for Docker application data persistent. |
| Run Universal Messaging (UM) as a container | Universal Messaging (UM) can now be run as a container in Integration Cloud. For creating the UM Docker images supported by Integration Cloud, you must run the Integration Cloud UM script to modify the base image before it is uploaded into Integration Cloud. |
| New Service | "getSession" service is now added under the Services > Flow block. |
| Redesigned Execution Results screen | You can now view execution results for all Integrations in all stages for a specified time period. Execution status filters are provided to filter the results. Numbers inside the status filter circles indicate the sum of the execution counts for that status. Detailed screens are provided to view the number of documents processed by an Integration along with information about the Operations for a selected Integration. You can also view the business data logs when errors occur along with custom messages from the Execution Results screen. |

| Added Item | Description |
|---|---|
| Redesigned Dashboard screen | The Dashboard now displays the total number of documents processed (counted using the countProcessedDocuments service) by an Integration or for all Integrations. It also shows Integration executions that have completed with errors. |
| Alerts on Welcome screen | You can now view alerts on the Integration Cloud Welcome screen. High severity messages appear in red color. Medium severity messages, for example, deprecated information, appear in yellow color. Low severity messages, for example, scheduled and upgrade messages, appear in blue color. |
| New Services | groupDocuments, documentToBytes, bytesToDocument, and sortDocuments services are added under the Document block. countProcessedDocuments service is added under the Flow block. |
| New Applications | The following Applications are added:<br>▪ Avalara AvaTax<br>▪ Google BigQuery<br>▪ Magento eCommerce Platform<br>▪ OData v2.0<br>▪ ServiceNow Enterprise Service Management (Geneva)<br>▪ Slack |
| Copy fields and Paste fields | You can now copy a field from a pipeline view or a Document Type view and depending on the context, paste either the field or the field path. |
| New Control Flow blocks | "Exit Integration", "Exit Integration with failure", and "Break out of loop" blocks are now added under the Control Flow category. |

| Deprecated Item | Replacement, if any |
|---|---|
| ServiceNow Enterprise Service Management version Calgary. | ServiceNow Enterprise Service Management version Geneva. |

## *Release 3.0.0*

| Added Item | Description |
| --- | --- |
| Container management service | You can now package existing webMethods Integration Server services as a Docker image or a repository and upload them in the Integration Cloud registry using the Docker CLI. From the Integration Cloud User Interface, you can create Docker containers from those repositories and start, stop, or delete the container services. |
| Support for upgrading Accounts and Operations | You can now upgrade Accounts and Operations from a lower version to a higher version. If an upgrade is available, the upgrade notification text appears on the Applications screen beside the Application. In this release, only Salesforce CRM Application can be upgraded from v29 to v31. |
| Support for complex fields | Integration Cloud now allows you to select nested data fields while creating a custom operation. |
| Enhanced look and feel for the User Interface | Integration Cloud User Interface has a new look and feel in this release. The screen layout and width has changed but there is no change in the User Interface functionality. |
| Field level help texts | For some fields in Integration Cloud, you can now point the mouse cursor to the help icon (❓) next to a field,  and view the field level help text. |

| Deprecated Item | Replacement, if any |
| --- | --- |
| Salesforce CRM version 29 is deprecated. | Salesforce CRM version 31. |

## *Release 2.6.0*

| Added Item | Description |
| --- | --- |
| Performance data on Welcome screen | You can now view performance data regarding Integration executions on the Integration Cloud Welcome screen. |
| Dashboard for monitoring | Dashboard provides a centralized and intuitive way to view and monitor Integration executions and performance details. You can quickly identify, diagnose, and address problems in Integrations. Dashboard is available on the "Monitor" menu. |

| Added Item | Description |
| --- | --- |
| Integration Cloud User Interface | "Audit Log" and "Execution Results" are now available on the "Monitor" menu. |
| Business Data Logging | Integration Cloud now allows you to log select business data from the Operation and Integration signature. Values of logged fields can be viewed in the "Business Data" section in Execution Results. You can also create aliases for the logged fields. |
| New Service | The "logCustomMessage" service is added under the Flow block. |
| Download Execution Results | You can now download execution results from the Execution Results screen. |
| SAML 2.0 based Single Sign-On (SSO) | Integration Cloud now supports Single Sign-On (SSO) that allows users to authenticate themselves against an Identity Provider (IdP). Both Service Provider and Identity Provider initiated SSO capabilities are supported. |
| Federation ID for SSO | You can now enter the *Federation ID* in the *User profile > Basic* tab if your Identity Provider passes the Federation ID for Single Sign-On. |
| Secure File Transfer Protocol (SFTP) | You can now connect to a SFTP server using the new SFTP Application and download files from or upload files to an SFTP-enabled server using the secure file transport channel. |
| Amazon Simple Notification Service (SNS) | An additional Application for Integration Cloud. Integration Cloud connects to Amazon Simple Notification Service (Amazon SNS) using the REST interface and allows you to publish messages and deliver them to subscribers and other applications. |
| SAP Cloud for Customer (C4C) OData v2.0 | An additional Application for Integration Cloud. Integration Cloud connects to SAP Cloud for Customer (C4C) including SAP Cloud for Sales, SAP Cloud for Service, and SAP Cloud for Social Engagement solutions using the REST interface, and allows you to do standard CRUD operations on business objects by connecting to the OData Service endpoint. The SAP Cloud for Customer (C4C) OData v2.0 Application is a Beta candidate. |

| Added Item | Description |
| --- | --- |
| Marketo | An additional Application for Integration Cloud. Integration Cloud connects to Marketo using the Marketo REST API and allows you to create, retrieve, and remove entities and data stored within Marketo. |

### Release 2.5.0

| Added Item | Description |
| --- | --- |
| Added new services under String block | The following new services are added: isNumber, isAlphanumeric, isNullOrBlank, isDate, substitutePipelineVariables, compareStrings. |
| Added a new FTP predefined operation | renameFile operation is added for FTP Application. |
| Alfabet | An additional Application for Integration Cloud. Integration Cloud connects to Alfabet using the Interface for RESTful Web Services Version 1 and supports working with the various object types as defined in Alfabet. You can use it to query, retrieve, create, update, and delete objects of any type, and also manage relations between the objects. |
| Ability to connect to Salesforce using Partner SOAP API version 31 and Salesforce Bulk API version 31 | Integration Cloud can now connect to Salesforce using the Partner SOAP API version 31 and the Salesforce Bulk API version 31. |
| Added a new Salesforce CRM predefined operation | uploadDataToWave operation is added for Salesforce CRM. |
| Download Integration Cloud Readme | You can now download the Integration Cloud Release Readme from the *About webMethods Integration Cloud* page (*<Logged in User>* > About > About webMethods Integration Cloud). |

| Changed Item | Description |
| --- | --- |
| Integration Cloud User Interface | Integration Cloud has a new look and feel in this release. The location of the menu has changed but there is no change in the User Interface functionality. |

## *Release 2.1.0*

| Added Item | Description |
|---|---|
| Added new services under Date, Document, List, and Flow blocks | The following new services are added: compareDates, incrementDate, insertDocument, deleteDocuments, documentListToDocument, documentToDocumentList, appendToDocumentList, appendToStringList, sizeOfList, stringListToDocumentList, getLastError. |
| Test Integration executions in real time | You can now test the Integration execution in real time and view the execution results in the "Test Results" pane. |
| Support for document references | You can now create pipeline variables as document references, create document types comprising of document references, and also define the signature of Integrations comprising of document references. |
| Connection status for FTP and SOAP Accounts | You can now select "Test Connection" if you want to view the status of the connection for an FTP or custom SOAP Application. In earlier releases, Integration Cloud automatically verified the connection status. |
| Integration inputs during scheduling | You can now use "Schedule" or "Run Now" options available in the Integration details page and provide inputs to the Integration based on the defined input signature. |
| Enhanced Reference Data signature | You can now filter the Reference data by providing an appropriate "matchCriteria". The output of Reference Data used in an Integration is a list of documents that match the specified "matchCriteria". Reference Data signature is derived from the column names of the uploaded text file. The root element in the output of Reference Data created from Integration Cloud version 2.1.0 has the same name as the one given to the Reference Data. |

| Added Item | Description |
| --- | --- |
| Map an indexed item of a String List, Document List, Document Reference List, or Object List | You can now add an indexed item to a String List, Document List, Document Reference List, or Object List and also map the indexed item. You can delete the selected indexed item provided the indexed item or none of its child fields are mapped. |

## *Release 2.0.1*

| Added Item | Description |
| --- | --- |
| Microsoft Dynamics CRM | An additional Application for Integration Cloud. Integration Cloud connects to Microsoft Dynamics CRM 2013 using the Microsoft Dynamics CRM SOAP API. You can manage CRM data and access metadata that defines the specific CRM instance to which you are connecting. |

## *Release 2.0*

| Added Item | Description |
| --- | --- |
| Create and edit Document types | You can now create a Document type and use it to define the input or output parameters for an Integration. |
| Specify input/output signatures | You can now declare input and output parameters for an Integration using the Input and Output tabs. |
| Invoke an Integration from another Integration | A new "Integrations" block is added, which displays the list of Integrations created in Integration Cloud. You can now invoke an Integration from another Integration. When copying integrations from one stage to another, all the referred Integrations and their dependents are also copied. You can also edit the referred Integration, which will open the Integration in a new tab. |
| Improved Orchestrated Integration User Interface | Blocks are reordered for improved usability. |
| Perform pipeline variable substitution | You can now perform pipeline variable substitution if you want to replace the value of a pipeline field at run time. |

| Added Item | Description |
| --- | --- |
| View execution results within Integration Cloud | You can now view the last five execution results in the Integration details page. |
| File Transfer Protocol (FTP/FTPS) Application | You can now connect to a FTP server using the new FTP/FTPS Application and download files from or upload files to the FTP-enabled server. |
| Added new services | New services are added under Flat File, JSON, and XML in this release. |
| WSDL file selection for a custom SOAP Application | You can now select a WSDL file from your local file system while creating a custom SOAP Application. |
| Ability to upload custom Application logos | You can now select a different icon for your custom SOAP Application. |
| Support for Partner or agent | You can now define Partner users. Even if "Allow User Interface Access" permission available under Access Profile > Administrative Permissions > Account Controls is not enabled, a Partner User can still perform on-premise tasks. |
| View and download Audit Logs and update the retention period | You can now view and download audit logs related to additions, deletions, updates, export, schedule, login, logout, password changes, record access attempts, access violations, deployments, and so on for a user. |

### Release 1.6.0

| Added Item | Description |
| --- | --- |
| Advanced Security | Integration Cloud now allows you to upload Keystores, Truststores, and Partner Certificates. These can be applied while creating an Account for a Custom Application. |
| Custom SOAP Applications | Integration Cloud now allows you to create Custom SOAP Applications. Custom SOAP Applications enable you to access third party web services hosted in the cloud or on-premise environment. The Custom SOAP Application uses a WSDL that is accessible through publicly or locally accessible URLs. |

| Added Item | Description |
| --- | --- |
| Web Service Security | Integration Cloud now allows you to create Custom SOAP Applications with third party Web Services that have WS-Security policies annotated in them. The WS-Security policies are automatically acknowledged in Integration Cloud if those policies are enforced on the Web Services. |
| New Services | findDocuments, fuzzyMatch, bytesToStream, and streamToBytes services are added to Integration Cloud in this release. |
| Reference Data | Integration Cloud now allows you to upload Reference Data from a text file containing tabular data separated by a character. Reference data is a collection of key-value pairs, which can be used to determine the value of a data field based on the value of another data field. You can access the uploaded Reference Data in Orchestrated Integrations as a list of documents, by using the Reference Data block and providing an appropriate name. |
| Add fields to the pipeline | Integration Cloud now allows you to add a field to the pipeline while creating an Orchestrated Integration. |

## Release 1.5.1

| Added Item | Description |
| --- | --- |
| *Remove* field<br>*Restore* field | You can drop or remove an existing pipeline input field. Once you drop a field from the pipeline, it is no longer available to subsequent services. The field which is removed can be restored. |

## Release 1.5

| Added Item | Description |
| --- | --- |
| Orchestrated Integration | Integration Cloud now supports advanced integration scenarios involving multiple application endpoints, complex routing, and orchestrations requiring multiple steps. Using a graphical drag and drop tool, you can create complex, orchestrated integrations and run them in the Integration Cloud environment. |

## *Release 1.2*

| Added Item | Description |
|---|---|
| Better logging and auditing capabilities | For better debugging of the integration execution failures, more information is now provided in the "Execution Results" page. |
| Application Account enable and disable functionality | You can now configure the Account details correctly in a stage. If you have configured the Account details incorrectly in any stage, the stage will appear in red color in the "Connectivity Status" column. If an Account is configured correctly in a particular stage, then that stage will appear in green color, and if an Account is not configured in a particular stage, then that stage will appear in white color. |
| Ability to expose an Integration as a REST service | You can now trigger the execution of an Integration from an external system. This feature provides you with one more option to trigger Integration executions from a software application, for example, a REST Client, apart from manual and scheduled integrations from the user interface. |
| Amazon Simple Storage Service (S3) | An additional Application for Integration Cloud. Integration Cloud connects to Amazon Simple Storage Service (S3) using the REST interface and provides read, write, and delete access to the Amazon S3 buckets and objects within the Amazon instance. |
| Amazon Simple Queue Service (SQS) | An additional Application for Integration Cloud. Integration Cloud connects to Amazon Simple Queue Service (SQS) using the REST interface and provides access to the SQS objects within the Amazon instance. |
| StrikeIron Contact Verification | The StrikeIron Contact Verification Application has been added in this release. |
| Predefined operations added in Salesforce CRM | *getDeletedBusinessObjectIDs* - Fetches the ID field of business objects deleted within the provided timeframe. |
|  | *getUpdatedBusinessObjectIDs* - Fetches the ID field of business objects updated within the provided timeframe. |

| | |
|---|---|
| Salesforce Bulk Data Loader | An additional Application for Integration Cloud. Integration Cloud connects to Salesforce using the Salesforce Bulk API version 29 and supports Job and Batch resources. You can use it to create, update, query jobs and batches, and operate on large number of records asynchronously by submitting batches which are processed in the background by Salesforce. |
| SuccessFactors HCM | An additional Application for Integration Cloud. Integration Cloud connects to SuccessFactors using the SuccessFactors web service SFAPI, and performs SuccessFactors operations (Create, Read, Update, Delete, Fetch, Insert, Query, queryMore, and Upsert) over HTTP, using synchronous SOAP protocols. This Application has been tested with the following business objects: GOAL$1, GOAL$2, GOAL$3, GoalMilestone$2, GoalMilestone$3, GoalTask$2, GoalTask$3, MatrixManager, and CustomManager. |
| ServiceNow Enterprise Service Management | An additional Application for Integration Cloud. webMethods Integration Cloud connects to different areas (Incident, Problem, and Change management) of ServiceNow using the Calgary version of the ServiceNow API. You can create incidents, get details of created incidents, and update and delete them. Similar operations are available for problem and change management cloud applications. |

## *Release 1.1*

| Removed Item | Replacement, if any |
|---|---|
| StrikeIron Contact Verification | The *StrikeIron Contact Verification* Application has been temporarily removed. If you have created StrikeIron Accounts, Custom Operations, and Integrations, these will not function. The Application may be reintroduced in a future release. |

### *Release 1.0*

| Added Item | Description |
| --- | --- |
| Initial Release | Initial Release |

# 8.0    Copyright Information

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