Sales

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Sales Monitoring and Analytics

Sales monitoring and analytics provides monitoring and analytical features across all core sales business processes, from quotations and contracts, to sales orders, including their fulfillment, up to invoices. It provides you with valuable insights and enables you to carry out further action, with seamless integration into transactional processes, sales documents, and collaboration tools, such as SAP CoPilot.

You can also manage sales plans for sales performance monitoring.

In the monitoring apps, you can, for example, gain an overview of your sales data in dashboard format, such as open sales orders, and navigate to edit your sales data. You can also check whether the delivery of a sales order is on track regarding its fulfillment, and resolve issues that impede sales orders from being fulfilled.

In the analytical apps, you can use Key Performance Indicators and flexible drill downs to gain insights into your current sales situation, ranging from conversion rates of quotations and contracts, to incoming sales orders and back orders, to delivery performance and sales volume.

You can use sales plans to enter target values and amounts for sales dimensions, such as sales employee and product category, and analyze them in comparison to the actual data.

Note that the term “product” refers to the “materials” that you find in other solution capabilities and in other lines of business.

Related Information

[FAQ for Sales Monitoring and Analytics]

Output Management for Sales Documents and Billing Documents

By default, all output-relevant apps use SAP S/4HANA Cloud output control (`CA-GTF-OC`) as their output management framework.

You can, for example, use the following output types for sales documents and billing documents with SAP S/4HANA output control:

- Cash sale
- Sales inquiry
- Sales quotation
- Sales contract
- Sales scheduling agreement
- Returns order
- Debit and credit memo request
- Customer invoice (standard)
- Customer invoice for professional services
- Debit and credit memo

- Invoice list
- SEPA mandate

Key Features

- You can display a list of output items issued for a sales or billing document.
- You can view the status of output items (for example, in preparation for sending, to be output or processed, pending processing, successfully processed, error while processing).
- You can assign the output type (for example, order confirmation, cash sales, sales inquiry, sales quotation, sales contract, order without charge, returns orders).
- You can choose the dispatch time (for example immediately or scheduled).
- You can choose the recipient and channel (for example by email or printing), the printer settings, the email settings of the sender and receiver, and the form (PDF) template used for your output items.

  Note

  There are multiple ways to determine email recipients. If no email recipient is maintained in the determination step **Email Recipient**, the default email recipient is set by the business application. The business application decides upon the source of this email address and always sets it as TO address. For more information, see Output Parameter Determination.

  Note

  The system uses the default email address that is maintained for the respective sales organization as the sender address. If you want to change this email address, you can do so in the system settings.

  You can find the **Maintain Sales Organizations** configuration activity in your configuration environment. Use the search function to open the configuration activity. For more information, see Configuration Environment of SAP S/4HANA Cloud.

  Search for the relevant sales organization, and change the email address.

- You can designate the receiver for debit memo requests and credit memo requests to be the employee responsible where the output shows employee contact information, or you can designate the receiver to be the sold-to party where the output shows customer contact information.
- You can designate a shipping point address or a delivery point address as the ship-to address for returns orders. For example, a shipping point can be the back door of a factory while the delivery point can be the front door of the factory. The shipping point address has the higher priority. Either the delivery point or the shipping point will print on the PDF.
- You can display the supplier address associated with a returns order item for a customer return that involves a subsequent supplier return.
- You can create your own form template consisting of a custom layout of the output PDF and the fields in the standard form data provider.
- You can show the configuration data (that is, advanced variant configuration) associated with a sales document item in the rendered PDF document. This feature is available for the order confirmation and sales quotation order types. All the valuated characteristics are included in the corresponding print document by default. If you would like to exclude certain characteristics and their values from being printed, you can implement the BAdI **Characteristic Filtering for Printing** (`BD_VCH_HL_PRINTING`). You can find this BAdI as custom logic for variant configuration for printing using the **Custom Logic** app. For more information about creating and publishing custom logic, see Creating Implementations.
- You can issue output for SEPA (Single Euro Payments Area) mandates.
- You can preview output items (for example, the PDF of an invoice for a customer).

Example

When you display a sales order in the **Display Sales Orders** app, you can preview the PDF and make additional settings under **More** > **Extras** > **Output**.

When you display a billing document in the **Display Billing Documents** app, you can preview the PDF and make additional settings under **Header Details** > **Output**.

- You can send output and resend output.
- You can view the status of the output items in the application log.
- You can enable and disable the issuing of changed document output types. Changed document output can be issued when changes to document text, at the header and/or item level, are detected. You can customize document attributes to be tracked for changes, and which messages are to be captured in the output PDF document issued as changed document output.
- You can show milestone billing plans associated with a sales document item in the rendered PDF document. This feature is available for the sales order confirmation order type.
- In overseas transactions, you can set the receiver country's name in the output form content of sales documents to be displayed in English instead of the sender country's language in the configuration activity **Name of the Recipient Country in English in Output Forms**.

For general information about setting up output management end-to-end, see scope item Output Management (1LQ) in theSAP Signavio Process Navigator.

Restriction

SAP strongly recommends that you do not output sales documents or billing documents with more than 1000 items to output channels `PRINT` or `EMAIL`, as this can cause technical issues when Adobe Document Services renders the PDF.

However, even a lower number of items may cause issues when compounded with the following factors:

- High complexity of the document itself (for example, due to an excessive amount of printable price elements or partner details on item level)
- High complexity of the output form template (for example, due to complex loops or other business logic scripting)
- For billing documents only: High complexity of an accompanying output BAdI implementation. While it's preferable to embed business logic via BAdI rather than in the form template, inefficient BAdI implementations should be avoided

All of these factors affect performance and could potentially lead to time-outs. In extreme cases, Adobe Document Services may be overwhelmed and unable to create the PDF.

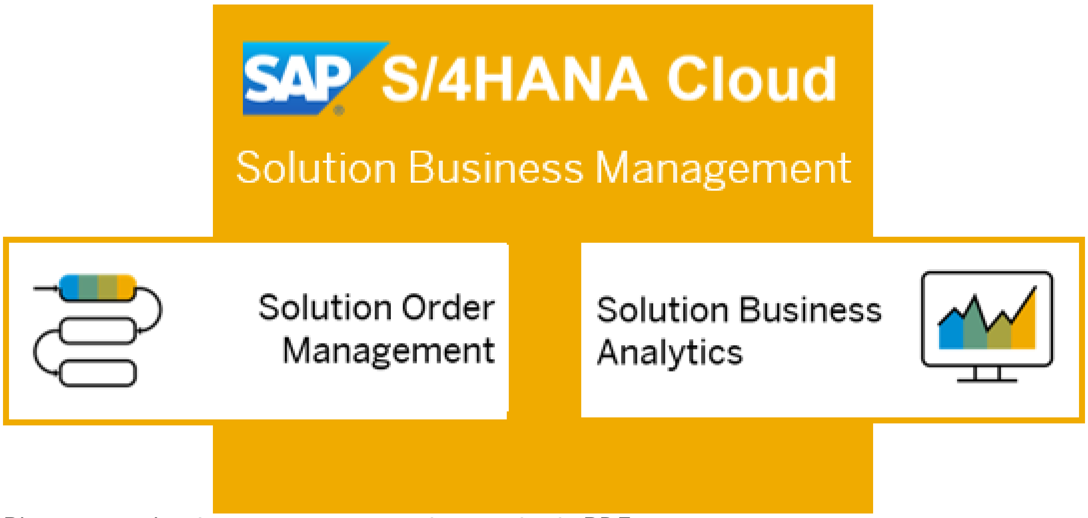
To avoid time-out issues, you can dispatch output using the **Schedule Billing Output** or the **Schedule Sales Document Output** app.

Related Information

SAP S/4HANA Output Control
SAP Note 2269304
Output Management for Outbound Delivery Documents
Custom Logic
Output Parameter Determination

Solution Business Management

To learn how the capabilities of SAP S/4HANA Cloud simplify your solution business management, you can navigate through the image map below.



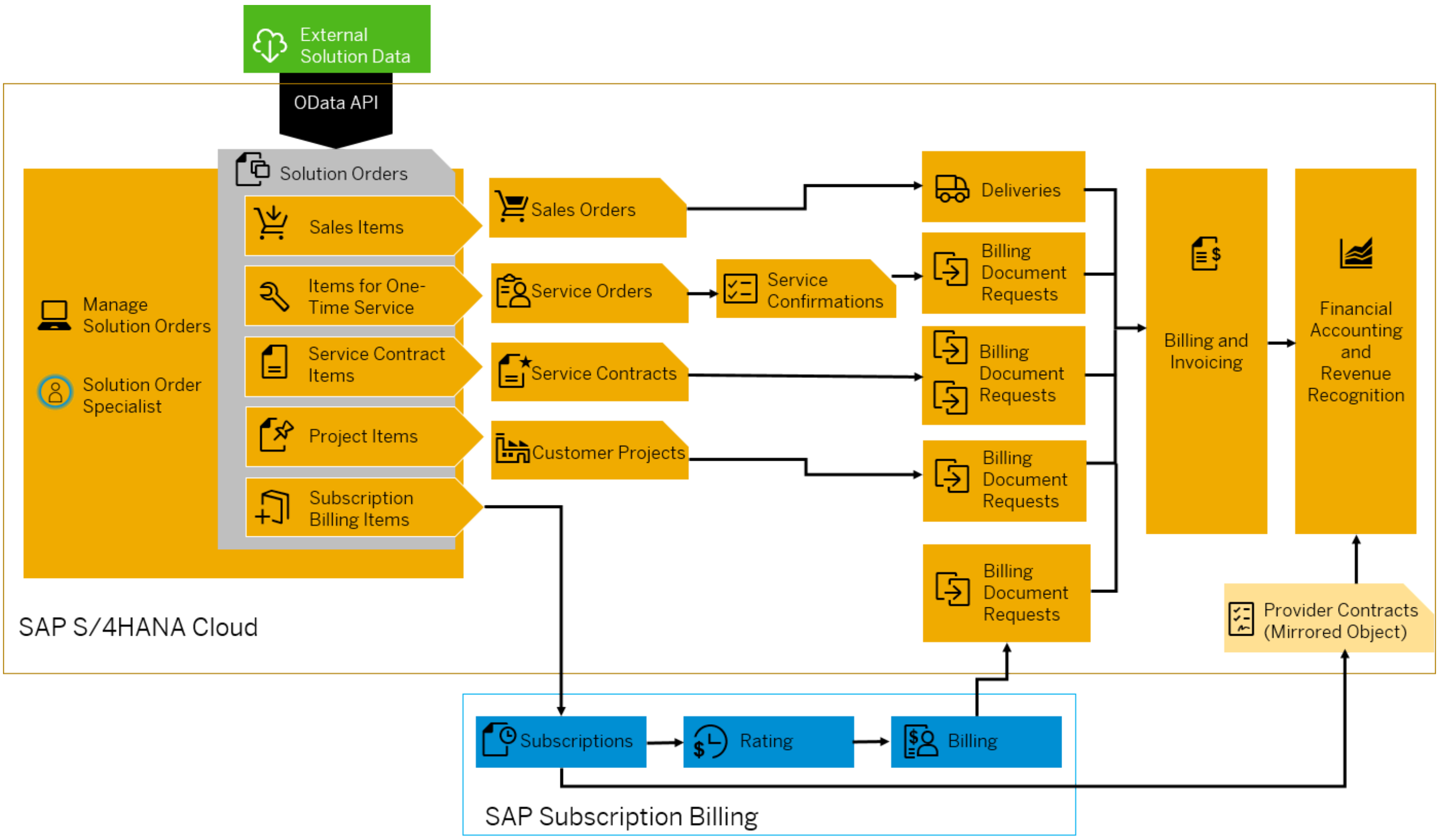
Please note that image maps are not interactive in PDF output.

Solution Order Management

Learn about the features and orchestration of a combined Sales and Service end-to-end process.

Solution order management represents an end-to-end process that spans from creating a solution order to delivering products of different categories, such as physical goods, one-time services, long-running services, and subscriptions. This includes the integration with invoicing and controlling.

This image is interactive. Hover over each area for a description. Click highlighted areas for more information.



Please note that image maps are not interactive in PDF output.

During the end-to-end process, the solution order orchestration supports the coordination of the forward and backward data exchange. In addition, you can use the **Solution Order Progress** to monitor the process and identify and solve issues.

Solution Order Management provides the following main features:

Solution Orders

The solution order is the main business transaction in Solution Order Management. You can create and process solution orders using the **Manage Solution Orders** app. Moreover, you can create solution orders by using corresponding application programming interfaces (APIs).

You can add the following types of items for different products to a solution order:

- Sales items for the sales of physical goods
- Service items, expense items, and service part items for one-time services
- Service contract items for services defined in long-term service agreements
- Subscription billing items for subscription business
- Project items for services to be delivered as customer projects

From the solution order items, follow-up business transactions are created, such as sales orders, service orders, service contracts, and subscriptions. The creation of the follow-up business transactions is controlled by the solution order orchestration.

Solution Order Orchestration

Solution order orchestration represents the automatic creation of follow-up business transactions from the solution order items, for example a service order from a service item.

Orchestration also includes the automatic forward and backward data exchange during the end-to-end process.

For example, service items in the solution order are automatically updated with the latest service confirmation status, billing status, and rejection status from the follow-up service order.

In addition to the orchestration, situation handling is supported, providing employees along the end-to-end process with information and pointing them to steps that need to be carried out manually.

For more information about the orchestration, see Solution Order Orchestration.

Solution Order Progress

From the **Manage Solution Orders** app, you can navigate to the **Solution Order Progress**, that provides a detailed overview of the end-to-end process in the form of a color-coded graphic showing the end-to-end process, and an item list containing the items from the solution order. You can navigate to the respective business transactions to solve any issues directly.

For more information about the **Solution Order Progress**, see Manage Solution Orders.

Solution Order Specialist

You can use the predefined solution order specialist (SOLN_ORDER_SPCLST) business role for access to the **Manage Solution Orders** app and to related apps.

Analytics

In several apps for sales analytics, you can search for a solution order and display it as a reference transaction in the process flow for **Track Sales Order Details**.

Data Management

The ILM-enabled archiving object `CRMS4_SOLO` is available. You can use this archiving object to archive solution orders.

Extensibility

You can enhance the **Manage Solution Orders** app using extensibility options.

Related Information

Solution Orders
SAP Subscription Billing
Integration of Solution Order Management with SAP Subscription Billing

Manage Solution Orders

With this app, you can create and process solution orders. The solution order is the main business transaction for triggering and orchestrating an end-to-end process that spans from creating a solution order to delivering products of different categories, such as physical goods, one-time services, and long-running services. This includes the integration with invoicing and controlling. Situation templates provide information that can lead to manual activities. You can use **Solution Order Progress** to monitor the process and identify and solve issues.

Key Features

You can use this app to perform the following steps:

- Search for solution orders
- Create, edit, and display solution orders, and solution order items
- Release items, trigger, and navigate to follow-up transactions
- Monitor the progress of end-to-end processes and navigate to business transactions.

In addition, the app supports the following technical features and options:

Solution Order Orchestration

For information about the solution order orchestration, see Solution Order Orchestration.

Solution Order Progress

From the **Manage Solution Orders** app, you can navigate to **Solution Order Progress**. It provides a detailed overview of the end-to-end process in the form of a color-coded graphic. From the graphic, you can navigate to the respective business objects to solve any issues directly.

The graphic displays the following business objects:

- Solution order
- Sales order
- Service order
- Service contract
- Subscription billing item
- Customer project
- Service confirmation
- Delivery
- Billing document request
- Invoice
- Journal entries

In addition to the graphic, the solution order progress contains a list of the items from the solution order. You can choose to display all solution order items in this list or only the ones that contain situations. From a solution order item, you can navigate to an overview of the corresponding items from the follow-up transactions. The item overview provides status information and enables you to identify and solve issues directly. **Visualize Item Relationship** represents the relationship between items maintained in a solution order in a graphical way.

Depending on the item type of the selected solution order item, the following items belonging to the follow-up transactions are displayed:

- If you select a sales item, the sales item from the solution order, the sales order item, the delivery item, and the invoice item are displayed.
- If you select a service item, the solution order service item, the service order item, the service confirmation item, the billing document request item, and the invoice item are displayed.
- If you select a service contract item, the solution order contract item, the service contract item, the billing document request item, and the invoice item are displayed.
- If you select a subscription billing item, the solution order subscription billing item, the subscription billing item, the billing document request item, and the invoice item are displayed.
- If you select a project item, the solution order project item, the customer project, the sales order item, the billing document request item, and the invoice item are displayed.

Situation Handling

Situation handling is supported to provide employees with information along the end-to-end process and to point them to steps in the process that need to be carried out manually.

Situation handling supports the following situation templates:

- Situation Templates
- Situation Templates with Item Relationships

For more information, see Situation Handling.

Attachments

You can attach files and URL links to solution orders. You have the following options:

- Upload, download, and display attachments
- Add files or URLs

For more information about the attachment service, see Attachment Service.

Output Management

Output management for solution orders enables you to print or e-mail solution order details. You can also generate xml output for the solution order. It also provides selected functions of the output management framework. You have the following options:

- Create output items when you create a solution order
- Display a list of output request items created for a solution order
- Use the xml, e-mail, and print functions
- Display the status of the output item

For more information about output management, see Output Management.

Multiple Customer Addresses and Address-Dependent Data

In the **Manage Solution Orders** app, when you create a solution order and select a sold-to party for which multiple addresses are maintained in the corresponding business partner master data, the app responds as follows:

- The system raises a message to inform you that the business partner has more than one address and allows you to use the address proposal to choose an alternative address.
- The address proposal is enabled for the following types of items if multiple addresses are maintained for the parties involved that you have selected:
    - Sales items
    - Service items, expense items, and service part items
    - Service contract items

i Note

- When multiple address handling is active in your system, you can select an address from the address proposal and the system forwards the address to the follow-on service transactions, sales documents and billing documents. For more information about multiple address handling, see Multiple Address Handling in SD Documents Using SAP Business Partner.
- When multiple address handling is not active in your system, you can select an address from the address proposal for corresponding partner functions but the system only forwards the selected address to the follow-on service transactions such as service orders, service confirmations, and service contracts, but **not** to the sales documents or billing documents. For sales documents and billing documents, the address is redetermined by the system automatically.

→ Tip

For the following types of solution order items, the system always uses the standard address defined for each partner function in the master data, and you cannot change this standard address:

- Subscription billing items
- Project items

- When multiple address handling is active in your system, if **address-dependent data** has been maintained (in the master data) for a customer address, and you select that address for one of the document's partner functions, the system automatically propagates this address-dependent data to the relevant fields of the document.

  For example, if a specific Incoterms value has been maintained for a customer address and you select this address as your document's sold-to party address, this value is automatically propagated to the Incoterms field of the sales item in the solution order. In some situations, this can cause a previously entered value to be overwritten.

  → **Tip**

  If both address-dependent and customer-dependent data has been maintained for a BP master record field, address-dependent data takes priority over customer-dependent data.

  For more information about maintaining address-dependent data, see Address-Dependent Data.

Supported Device Types

- Desktop
- Tablet

Related Information

Solution Orders
Situation Templates
Situation Templates with Item Relationships

Equipment Linkage

With equipment linkage, the equipment ID and its related serial number, of an equipment is automatically transferred to the contract during the post goods issue process of the sales item.

Certain physical goods which are serialized (have a serial number profile) have a unique equipment ID assigned to them during post goods issue.

In a solution order which has a sales product and a long-running contract for the sales product, the equipment ID of the product needs to be associated with the contract under object list.

When an item relationship of type (serviced by or contract for) is maintained between the sales item and the contract item of the solution order, during the post goods issue of the sales item, the equipment number and its related serial number, that is assigned to the sales item is copied automatically to the related contract item of the solution order and its follow-up contract.

Pre-Requisites

For the equipment ID to get copied automatically to the contract, the following pre-requisites need to be maintained:

- An item relationship "serviced by" or "contract for" is maintained between the sales item and the contract item.
- The post goods issue is created for a sales item which is the follow-up of a solution order.

Following are the possible scenarios of how the equipment ID gets copied to the service contract and the solution order contract item:

- The equipment ID is copied to follow-up service contract if the follow-up exists and to the service contract item of the solution order.
- The equipment ID is copied only to the object list of the service contract item of the solution order if the follow-up service contract is not yet created.
- The equipment ID is not copied to the service contract at all if the status of the follow-up contract is rejected.

App Extensibility: Manage Solution Orders

You can extend the **Manage Solution Orders** app according to your business needs.

Features

Key users can extend the app in the **Custom Fields** app using the following business contexts:

- **Service Header**
- **Service Item**

Business users can display fields that you have enabled in the **Custom Fields** app. The fields that you enable for this app are included in the personalization options for business users for the following UI elements:

UI Element	Business Context
Filter bar	Service Header
List of solution orders	Service Header

Note

As this app uses different UI technologies in edit and display mode, you must enable all custom fields separately in both modes. You can only enable custom fields in Q systems. The function isn't available in P systems. For the detailed procedure, see Extensibility for Specific Service Apps.

For more information about how to adapt an SAP Fiori UI at runtime, see Making UI Changes (Object Pages).

Related Information

Key User Extensibility
Custom Fields App and Custom Logic App
Extensibility for Service

App Extensibility: Solution Order Progress

As a key user, you can extend the solution order progress page of the **Manage Solution Orders** app according to your business needs.

You can add additional attributes to the solution order progress using the data source extension capabilities of SAP S/4HANA Cloud.

Custom Fields

With the **Custom Fields** tab in the **Custom Fields** app, you can create and maintain custom fields that you can use to enhance applications. You can add fields to the following UI elements using key user adaptation:

Node Title	Business Context	UIs and Reports
Billing Document Request Item	Sales: Billing Document Item	Billing Document Request Item Attributes for Solution Order Progress
Credit Memo Item	Sales: Billing Document Item	Credit Memo Item Attributes for Solution Order Progress
Credit Memo Item Cancellation	Sales: Billing Document Item	Credit Memo Item Cancellation Attributes for Solution Order Progress
Credit Memo Request Item	Sales: Sales Document Item	Credit Memo Request Item Attributes for Solution Order Progress
Customer Invoice Item	Sales: Billing Document Item	Customer Invoice Item Attributes for Solution Order Progress
Customer Return Item	Sales: Sales Document Item	Customer Return Item Attributes for Solution Order Progress
Debit Memo Item	Sales: Billing Document Item	Debit Memo Item Attributes for Solution Order Progress
Debit Memo Request Item	Sales: Sales Document Item	Debit Memo Request Item Attributes for Solution Order Progress
Invoice Cancellation Item	Sales: Billing Document Item	Invoice Cancellation Item Attributes for Solution Order Progress
Outbound Delivery Item	Shipping: Delivery Item	Outbound Delivery Item Attribute for Solution Order Progress
Purchase Order Item	Procurement: Purchasing Document Item	Purchase Order Item Attributes for Solution Order Progress
Purchase Requisition Item	Procurement: Purchase Requisition Item	Purchase Requisition Item Attributes for Solution Order Progress
Service Contract Item Predecessor	Service Item	Service Contract Item Predecessor Attributes for Solution Order Progress
Return Delivery Item	Shipping: Delivery Item	Return Delivery Item Attributes for Solution Order Progress
Solution Order Item	Service Item	Solution Order Item Attributes for Solution Order Progress
Sales Order Item	Sales: Sales Document Item	Sales Order Item Attributes for Solution Order Progress
Sales Order without charge	Sales: Sales Document Item	Sales Order without charge Attributes for Solution Order Progress
Service Confirmation Item	Service Item	Service Confirmation Item Attributes for Solution Order Progress
Service Contract Item	Service Item	Service Contract Item Attributes for Solution Order Progress
Service Entry Sheet Item	Procurement: Service Entry Sheet Item	Service Entry Sheet Item Attributes for Solution Order Progress

Node Title	Business Context	UIs and Reports
Service Order Item	Service Item	Service Order Item Attributes for Solution Order Progress
Supplier Invoice Item	Procurement: Supplier Invoice Item with Purchasing Document Ref. / Consignment	Supplier Invoice Item Attributes for Solution Order Progress
Billing Document Request	Sales: Billing Document	Billing Document Request Attributes for Solution Order Progress
Credit Memo Cancellation	Sales: Billing Document	Credit Memo Cancellation Attributes for Solution Order Progress
Credit Memo Request	Sales: Billing Document	Credit Memo Request Attributes for Solution Order Progress
Credit Memo	Sales: Billing Document	Credit Memo Attributes for Solution Order Progress
Customer Invoice	Sales: Billing Document	Customer Invoice Attributes for Solution Order Progress
Customer Returns	Sales: Billing Document	Customer Returns Attributes for Solution Order Progress
Debit Memo	Sales: Billing Document	Debit Memo Attributes for Solution Order Progress
Debit Memo Request	Sales: Billing Document	Debit Memo Request Attributes for Solution Order Progress
Invoice Cancellation Header	Sales: Billing Document	Invoice Cancellation Header Attributes for Solution Order Progress
Outbound Delivery	Shipping: Delivery	Outbound Delivery Attributes for Solution Order Progress
Purchase Order	Procurement: Purchasing Document	Purchase Order Attributes for Solution Order Progress
Purchase Requisition	Procurement: Purchase Requisition Item	Purchase Requisition Attributes for Solution Order Progress
Service Contract Predecessor	Service Header	Service Contract Predecessor Attributes for Solution Order Progress
Return Delivery	Shipping: Delivery	Return Delivery Attributes for Solution Order Progress
Solution Order	Service Header	Solution Order Attributes for Solution Order Progress
Sales Order	Sales: Sales Document	Sales Order Attributes for Solution Order Progress
Sales Order without charge	Sales: Sales Document	Sales Order without charge Attributes for Solution Order Progress
Service Confirmation	Service Header	Service Confirmation Attributes for Solution Order Progress
Service Contract	Service Header	Service Contract Attributes for Solution Order Progress

Node Title	Business Context	UIs and Reports
Service Entry Sheet	Procurement: Service Entry Sheet Header	Service Entry Sheet Attributes for Solution Order Progress
Service Order	Service Header	Service Order Attributes for Solution Order Progress
Supplier Invoice	Procurement: Supplier Invoice	Supplier Invoice Attributes for Solution Order Progress
Project Sales Order Item	Sales: Sales Document Item	Customer Project Sales Order Item Attributes for Solution Order Progress
Customer Project	Project Header	Customer Project Attributes for Solution Order Progress

For more information, see:

- Creating Custom Fields
- Adding Extension Fields to Apps with Different UI-Technologies

Data Source Extensions

With the **Data Source Extensions** tab in the **Custom Fields** app, you can extend pre-delivered data sources to retrieve data of additional fields from data sources delivered by SAP. After creating and publishing a data source extension, you can add the fields using key user adaptation:

Node Title	Business Context	UIs and Reports
Billing Document Request Item	Sales: Billing Document Item	Billing Document Request Item Attributes for Solution Order Progress
Credit Memo Item	Sales: Billing Document Item	Credit Memo Item Attributes for Solution Order Progress
Credit Memo Item Cancellation	Sales: Billing Document Item	Credit Memo item Cancellation Attributes for Solution Order Progress
Credit Memo Request Item	Sales: Sales Document Item	Credit Memo Request Item Attributes for Solution Order Progress
Customer Invoice Item	Sales: Billing Document Item	Customer Invoice Item Attributes for Solution Order Progress
Customer Return Item	Sales: Sales Document Item	Customer Returns Item Attributes for Solution Order Progress
Debit Memo Item	Sales: Billing Document Item	Debit Memo Item Attributes for Solution Order Progress
Debit Memo Request Item	Sales: Sales Document Item	Debit Memo Request Item Attributes for Solution Order Progress
Invoice Cancellation Item	Sales: Billing Document Item	Invoice Cancellation Item Attributes for Solution Order Progress
Outbound Delivery Item	Shipping: Delivery Item	Outbound Delivery Item Attributes for Solution Order Progress

Node Title	Business Context	UIs and Reports
Service Contract Item Predecessor	Service Item	Service Contract Item Predecessor Attributes for Solution Order Progress
Return Delivery Item	Shipping: Delivery Item	Return Delivery Item Attributes for Solution Order Progress
Solution Order Item	Service Item	Solution Order Item Attributes For Solution Order Progress
Sales Order Item	Sales: Sales Document Item	Sales Order Item Attributes for Solution Order Progress
Sales Order without charge	Sales: Sales Document Item	Sales Order without charge Attributes for Solution Order Progress
Service Confirmation Item	Service Item	Service Confirmation Item Attributes for Solution Order Progress
Service Contract Item	Service Item	Service Contract Item Attributes for Solution Order Progress
Service Order Item	Service Item	Service Order Item Attributes for Solution Order Progress
Billing Document Request	Sales: Billing Document	Billing Document Request Attributes for Solution Order Progress
Credit Memo Cancellation	Sales: Billing Document	Credit Memo Cancellation Attributes for Solution Order Progress
Credit Memo Request	Sales: Sales Document	Credit Memo Request Attributes for Solution Order Progress
Credit Memo	Sales: Billing Document	Credit Memo Attributes for Solution Order Progress
Customer Invoice	Sales: Billing Document	Customer Invoice Attributes for Solution Order Progress
Customer Returns	Sales: Sales Document	Customer Returns Attributes for Solution Order Progress
Debit Memo	Sales: Billing Document	Debit Memo Attributes for Solution Order Progress
Debit Memo Request	Sales: Sales Document	Debit Memo Request Attributes for Solution Order Progress
Invoice Cancellation Header	Sales: Billing Document	Invoice Cancellation Header Attributes for Solution Order Progress
Outbound Delivery	Shipping: Delivery	Outbound Delivery Attributes for Solution Order Progress
Service Contract Predecessor	Service Header	Service Contract Predecessor Attributes for Solution Order Progress
Return Delivery	Shipping: Delivery	Return Delivery Attributes for Solution Order Progress
Solution Order	Service Header	Solution Order Attributes for Solution Order Progress

Node Title	Business Context	UIs and Reports
Sales Order	Sales: Sales Document	Sales Order Attributes for Solution Order Progress
Sales Order without charge	Sales: Sales Document	Sales Order without charge Attributes for Solution Order Progress
Service Confirmation	Service Header	Service Confirmation Attributes for Solution Order Progress
Service Contract	Service Header	Service Contract Attributes for Solution Order Progress
Service Order	Service Header	Service Order Attributes for Solution Order Progress
Customer Project	Project Header	Customer Project Attributes for Solution Order Progress

For more information, see:

- Creating Data Source Extensions

Related Information

Key User Extensibility
Creating Extension Items and Transporting Them

Cloud BAdIs for Solution Order

The following table shows the cloud BAdIs available for solution orders.

Business Add-Ins (BAdIs)	Enhancement Spot	BAdI definition	Use
Service Transaction Check Before Change	`ES_S4CRM_10_EXTENSION`	`CRMS4_SERV_CHECK_BEFORE_SAVE`	You can use this BAdI to check the solution order data before saving.
Service Transaction Header Modifications	`ES_S4CRM_10_EXTENSION`	`CRMS4_SERV_CUST_H_MODIFY`	You can use this BAdI to set field properties for extension fields at the solution order header level, which are displayed on the custom fields tab of the apps.
Service Transaction Item Modifications	`ES_S4CRM_10_EXTENSION`	`CRMS4_SERV_CUST_I_MODIFY`	You can use this BAdI to set field properties for extension fields at the solution order item level which are displayed on the custom fields tab of the apps.

Business Add-Ins (BAdIs)	Enhancement Spot	BAdI definition	Use
Modify Subscription Billing Data During Solution Order Orchestration	CRMS4_SERV_CUST_I_MODIFY	CRMS4_SOLO_ORC_SB_SUBSC_MODIFY	You can use this BAdI to modify the subscription data based on your requirements. You can modify the following custom fields at subscription header and item level. • Custom references and bill split element (on subscription header and item level) • Technical resource and contract account (on subscription item level) • Subscription profile and billing profile (on subscription header level)
Custom Data Transfer for Billing Documents	ES_PF_BILLING_DT	SD_BIL_DATA_TRANSFER	You can use this BAdI to control creation of new billing documents based on the solution order ID.
Project Determination	/S4PPM/ES_PROJECT_2	/S4PPM/PROJECT_DETERMINATION_2	You can use this BAdI to determine values for the following project header properties: • External project ID (only during project creation) • Custom fields

Related Information

[Custom Fields App and Custom Logic App](#)
[Extensibility for Service](#)
[Extensibility: Solution Order Orchestration](#)
[Solution Order: Specifics for Customer Projects](#)

Situation Templates

Manage Solution Orders app supports the following situation templates:

- [Solution Order Delivery Date Changed](#)

- Planned Execution Date Changed
- Solution Order Item Not Delivered
- Service Item Not Completed
- Project Execution Dates Changed
- Service Order Not Scheduled
- Project Net Value Changed

Solution Order Delivery Date Changed

Technical Name: `SOLN_SOLO_SLSITM_DELIVDATE_CHGD`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist automatically when the delivery date of a sales item in a solution order is changed.

If you have used item relationships then you can use the template Sales Item Delivery Date Changed.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want to inform the solution order specialist automatically when the requested delivery date is changed for an orchestrated sales order item. Automatic notifications allow the user to directly navigate to the solution order item object page in question to review the item and take appropriate action.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

The following sections describe how this standard situation template is preconfigured and which predefined parameters you can configure in the **Manage Situation Types** app when you copy the standard template to create your own ready-to-use situation type.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Object: Business Solution Order Sales Item

Anchor Object: Business Solution Order Sales Item

Trigger Type: Event

Description: The situation is triggered when the requested delivery date is changed in the sales order item, which is created from the solution order. The system reschedules the delivery by changing the latest confirmation date. Changing this field triggers the situation and the user receives the notification.

Conditions

The condition in this template defines that a situation with the status **Open** is created when a notification is sent to the defined recipients if the system detects a solution order orchestrated sales item that meets the criteria specified above. As per the business requirement, at your end, you can also add filters to identify the solution order items.

The preconfigured conditions in this template are defined for processing in this order:

Filter	Description
Days Before Sales Item Delivery Date	Difference between current date and latest confirmation date.
Item Delivery Status	Default values: " " = Not Relevant A = Not Delivered B = Partially Delivered C = Delivered
Responsible Employee	Responsible employee assigned for the solution order.
Sales Organization	Sales organization for solution order.
Distribution Channel	Distribution channel for solution order.
Division	Division for solution order.

For more information, see [Conditions].

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see [Situation Display].

> **i Note**
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see [Translate Situation Types].

Notification Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the [My Situations] app.

For this template, the recipients of the notifications can be determined by the following predefined rule.

- Notify the employee responsible if the delivery date changed for a sales order item.

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Planned Execution Date Changed

Technical Name: `SOLN_SOLO_SRVCITM_PLNDDTE_CHGD`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist automatically when the planned execution date of a service order item of a solution order is changed.

If you have used item relationships then you can use the template Planned Execution Date Changed.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want to inform the solution order specialist automatically when the planned service date is changed for an orchestrated service order item and notification is sent to the responsible employee. Automatic notifications allow the user to directly navigate to the object page of the solution order item object to review the item and take appropriate action.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

The following sections describe how this standard situation template is preconfigured and which predefined parameters you can configure in the **Manage Situation Types** app when you copy the standard template to create your own ready-to-use situation type.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Object: Business Solution Order

Anchor Object: Business Solution Order

Anchor Type: Event

Description: The situation is triggered when the planned service date is changed in the service order item, which is created from solution order. The system checks the change in this field and triggers the situation, then the responsible user receives the notification.

Conditions

The condition in this template defines that a situation with the status **Open** is created and a notification is sent to the defined recipients if the system detects a service item that meets the criteria specified above. As per the business requirement, at your end you can also add filters to identify the solution order items.

The preconfigured conditions in this template are defined for processing in this order:

Filter	Description
Distribution Channel	Distribution channel for solution order.
Division	Division for solution order.
Days Before Planned Service End Date	Difference between current date and planned service end date.
Days Before Requested Service Start Date	Difference between current date and requested service start date.
Distribution Channel	Distribution channel for solution order.
Responsible Employee	Responsible employee assigned for solution order item.
Sales Organization	Sales organization for solution order.
Service Item Lifecycle Status	Default values: A = Open B = In-Process C = Completed D = Released
Service Technician	Service technician assigned for service.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

i Note

When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Notification Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the responsible employee for changes to planned date in service orders

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Solution Order Item Not Delivered

Technical Name: `SOLN_SOLO_SLSITM_NOT_DLVRD`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist automatically when the delivery date of a sales item in a solution order is close and the sales item hasn't been fully delivered.

If you have used item relationships then you can use the template Sales Item Delivery Date Reached.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want to inform the solution order specialist automatically when the orchestrated sales order item has not been delivered and the delivery date has been reached. Automatic notifications allow the user to directly navigate to the object page of the solution order item to review the item and take appropriate action.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

The following sections describe how this standard situation template is preconfigured and which predefined parameters you can configure in the **Manage Situation Types** app when you copy the standard template to create your own ready-to-use situation type.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Object: Business Solution Order Sales Item

Anchor Object: Business Solution Order Sales Item

Trigger Type: Batch

Description: In the batch job run, the system checks for all solution order items that have the item delivery status **Not Completed** and have a delivery date that has already been reached or, as per your requirement, you can set the number of days between delivery date and current date. The **Predefined Days Before Sales Item Delivery Date** is set to zero (0), but you are free to change it according to your requirements.

Conditions

The condition in this template defines that a situation with the status **Open** is created and a notification is sent to the defined recipients if the system detects a solution order orchestrated sales item that meets the criteria specified above.

The preconfigured conditions in this template are defined for processing in this order:

Filter	Description
Days Before Sales Item Delivery Date	Difference between item delivery dates
Item Delivery Status	Default values: • " " = Not Relevant • A = Not Delivered • B = Partially Delivered • C = Delivered
Responsible Employee	Responsible employee assigned for solution order item
Sales Organization	Sales organization for solution order
Distribution Channel	Distribution channel for solution order

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **i Note**
>
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Notification Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible if the delivery date is changed for a sales order item.

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Service Item Not Completed

Technical Name: `SOLN_SOLO_SRVCITM_NOT_CMPLTD`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist automatically when the planned execution date of a service order item in a solution order has been reached and the service order isn't completed.

If you have used item relationships then you can use the template Planned Execution Date Reached.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want to inform the solution order specialist automatically about the solution order when orchestrated service order item is not completed even after the planned execution date has reached. Automatic notifications allow the user to directly navigate to solution order item object page to review and take appropriate action.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

The following sections describe how this standard situation template is preconfigured and which predefined parameters you can configure in the **Manage Situation Types** app when you copy the standard template to create your own ready-to-use situation type.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Object: Business Solution Order

Anchor Object: Business Solution Order

Trigger Type: Batch

Description: In the batch job run, the system checks for all solution order items, which have orchestrated service item status Not Completed and Planned Execution date is already reached or as per your requirement, you can set the number of days between Planned Execution Date and Current Date. Predefined Days Before Service Item planned service date is set to zero (0) but you are free to change according to your requirement.

The condition in this template defines that a situation with the Open status is created and a notification is sent to the defined recipients if the system detects a solution order orchestrated service item that meets the above specified criteria.

The preconfigured conditions in this template are defined for processing in this order:

Filter	Description
Days Before Planned Service End Date	Difference of current date and planned service end date.
Days Before Requested Service Start Date	Difference of current date and requested service start date.
Service Item Lifecycle Status	Default values: A = Open B = In-Process C = Completed D = Released
Service Technician	Service technician assigned for service.

Filter	Description
Responsible Employee	Responsible employee assigned for solution order item.
Sales Organization	Sales organization for solution order.
Distribution Channel	Distribution channel for solution order.
Division	Division for solution order.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **Note**
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Notification Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible for solution order.

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Project Execution Dates Changed

Technical Name: `SOLN_SOLO_PROJITM_DATE_CHGD`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist automatically when the start date or the end date of a project item in a solution order is changed.

If you have used item relationships then you can use the template Project Execution Dates Changed.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want to inform the solution order specialist automatically when the requested start date or the end date is changed for an orchestrated project item. Automatic notifications allow the user to directly navigate to the object page of the solution order project item to review the item and take appropriate action.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

The following sections describe how this standard situation template is preconfigured and which predefined parameters you can configure in the **Manage Situation Types** app when you copy the standard template to create your own ready-to-use situation type.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Object: Business Solution Order Project Item

Anchor Object: Business Solution Order Project Item

Trigger Type: Event

Description: The situation is triggered when the start or the end date is changed in the project item, which is created from the solution order. Changing these field triggers the situation and the user receives the notification.

Conditions

The condition in this template defines that a situation with the status **Open** is created when a notification is sent to the defined recipients if the system detects a project item that meets the criteria specified above. As per the business requirement, at your end, you can also add filters to identify the project items.

The preconfigured conditions in this template are defined for processing in this order:

Filter	Description
Project Stage	The current stage of the project.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **i Note**
>
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Notification Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule.

- Notify the employee responsible if the start or the end date is changed for a project item.

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Service Order Not Scheduled

Technical Name: `SOLN_SOLO_SRVCITM_NOT_SCHEDLD`

Consuming App: Manage Solution Orders

Template used for situation handling that informs a solution order specialist automatically when the requested service date of a service order item in a solution order is close or if there is no scheduling for the service in the service order.

This template is used irrespective of whether item relationships are used or not.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want the solution order specialist to be informed automatically when an orchestrated service order item's requested service start date has been reached or has been reached by a defined days and the service technician is not assigned. The situation is then raised and notification is sent. Automatic notifications allow the user to directly navigate to the object page of the solution order item to review the item and take appropriate action.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

The following sections describe how this standard situation template is preconfigured and which predefined parameters you can configure in the Manage Situation Types app when you copy the standard template to create your own ready-to-use situation type.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Object: Business Solution Order

Anchor Object: Business Solution Order

Trigger Type: Batch

Description: In the batch job run, the system checks for all solution order items that have an orchestrated service item where the service technician has not been assigned and the requested service start date has already been reached or as per your requirement, you can set the number of days between the requested service start date and the current date. The Predefined Days Before Service Item Requested Service Date is set to zero (0), but you are free to change it according to your requirements.

Conditions

The condition in this template defines that a situation with the status **Open** is created and a notification is sent to the defined recipients if the system detects an orchestrated service item in a solution order that meets the criteria specified above.

The preconfigured conditions in this template are defined for processing in this order:

Filter	Description

Filter	Description
Days Before Planned Service End Date	Difference between current date and requested service date
Days Before Requested Service Start Date	Difference between current date and requested service start date
Service Item Life Cycle Status	Default values: • A = Open • B = In-Process • C = Completed • D = Released
Service Technician	Service technician assigned for service.
Responsible Employee	Responsible employee assigned for solution order item.
Sales Organization	Sales organization for solution order.
Distribution Channel	Distribution channel for solution order.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **i Note**
>
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Notification Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible for solution order

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

[Situation Handling]
[Key Concepts in Situation Handling]
[Situation Templates in Sales]

Project Net Value Changed

Technical Name: `SOLN_SOLO_PROJITM_NETVALUE_CHGD`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist automatically when the net value of a project item in a solution order is changed.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want to inform the solution order specialist automatically when the net value is changed for an orchestrated project item. Automatic notifications allow the user to directly navigate to the object page of the solution order project item to review the item and take appropriate action.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Object: Business Solution Order Project Item

Anchor Object: Business Solution Order Project Item

Trigger Type: Event

Description: The situation is triggered when the net value of an orchestrated project item is changed.

Conditions

The condition in this template defines that a situation with the status **Open** is created when a notification is sent to the defined recipients if the system detects a project item that meets the criteria specified above. As per the business requirement, at your end, you can also add filters to identify the project items.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **Note**
>
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule.

- Notify the employee responsible if the net value is changed for a project item.

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Solution Order Item Credit Blocked

Situation Template ID: `SOLN_SOLO_FUP_CREDIT_BLOCKED`

Consuming App: Manage Solution Orders

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want to inform the solution order specialist when the follow-up transactions created from solution orders are blocked due to a failed credit check. The situation handling notification is enabled for the sales order item, service order item, and service contract item. The notification is deleted automatically when the negative credit check result is resolved and the follow-up transactions created from solution orders are no longer blocked.

Note

The situation handling notification is not enabled for project items and subscription billing items.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Object	Business Solution Order Item
CDS View for Trigger Object	`C_BUSSOLNORDITMFUPCRDTBLKSITN`
Anchor Object	Business Solution Order Item
CDS View for Anchor Object	`I_BUSSOLNORDITMSITUATIONANCHOR`
Trigger Type	Batch

The situation is triggered when the follow-up transaction is blocked due to a failed credit check.

Note

These settings aren't visible in the template in the **Manage Situation Types** app and cannot be changed when you create a situation type based on this template. All of the following settings are visible in the template and you can adapt them when you copy the template to create a situation type.

Conditions

The condition in this template defines that a situation is created when the follow-up transaction created from solution orders is blocked due to a failed credit check.

The preconfigured conditions in this template are defined for processing in this order:

Condition	Description
1	A situation with the status **Open** is created and a notification is sent to the defined recipients when the system detects that the follow-up transaction created from solution orders is blocked due to a failed credit check.
2	An open situation is automatically set to **Resolved** when the follow-up transaction created from solution orders is no longer blocked. The notification is deleted automatically when the negative credit check result is resolved.

For more information, see Conditions.

Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible for the solution order item

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

> **i Note**
>
> Customers are responsible for the data, including the adherence to legal restrictions in their judicial area. Neither SAP nor its associated companies assume any responsibility for the adherence to authorizations or data protection rules for data captured and processed by its customers. This means that customers alone must ensure adherence to these rules and regulations.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Situation Templates with Item Relationships

Manage Solution Orders app supports the following situation templates with item relationships:

- Sales Item Delivery Date Changed
- Planned Execution Date Changed
- Sales Item Delivery Date Reached
- Planned Execution Date Reached
- Project Execution Dates Changed

Sales Item Delivery Date Changed

Technical Name: `SOLO_DELIVDTE_CHGD_ITMREL`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist when the delivery date of a sales item in a solution order is changed due to reprioritization.

This template should be used when item relationships are used.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want the solution order specialist to be informed when the delivery date of a sales item in a solution order is changed due to reprioritization. The situation is raised only if an item relationship is maintained and there are one or more items related to the sales item whose delivery date was changed. The situation is raised for items in the following cases:

- For a service item dependent on the sales item whose delivery date was changed if the new delivery date is after the planned start date of the service item
- For a contract item dependent on the sales item whose delivery date was changed if the new delivery date is after the contract start date of the contract item.
- For a subscription billing item dependent on the sales item whose delivery date was changed if the new delivery date is after the subscription start date of the subscription billing item.
- For a sales item dependent on the sales item whose confirmed delivery date was changed if the new confirmed delivery date is after the confirmed delivery date of the sales item.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Type: Event

Trigger Object: Sales item

Anchor Object: Any dependent item. It can be a service item, a contract item, a subscription billing item, or another sales item.

Conditions

The condition in this template defines that a situation is created when the delivery date of a sales item in the solution order is changed due to reprioritization and there is at least one other item that is dependent on the sales item whose delivery date is changed.

The preconfigured conditions in this template are defined for processing in this order:

Condition	Condition Description
1	Condition 1 defines that the situation is raised if the item delivery status is "Not Delivered".

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **Note**
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible for the solution order.

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Planned Execution Date Changed

Technical Name: `SOLO_PLNDDTE_CHGD_ITMREL`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist when the planned execution date of a service item is changed, and this change affects another item dependent on this service item.

This template should be used when item relationships are used.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want the solution order specialist to be informed when the planned execution date of a service item is changed, and this change affects another item dependent on this service item. The situation is raised for items in the following cases:

- When the latest confirmed delivery date of one or more dependent sales items is after the new planned start date of the trigger service item.
- When the latest of the planned start dates of one or more dependent service items is after the new planned start date of the trigger service item.
- When the latest of the contract start dates of one or more dependent contract items is after the new planned start date of the trigger service item.
- When the latest of the subscription start dates of one or more dependent subscription billing items is after the new planned start date of the trigger service item.
- For another dependent service item when its planned start date is after the new planned start date of the trigger service item.
- For a dependent sales item when its confirmed delivery date is after the new planned start date of the trigger service item.
- For a dependent contract item when its contract start date is after the new planned start date of the trigger service item.
- For a dependent subscription billing item when its subscription start date is after the new planned start date of the trigger service item.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Type: Event

Trigger Object: Service item

Anchor Object: Itself or any dependent item, such as a service item, a contract item, a sales item, or a subscription billing item.

Conditions

The condition in this template defines that a situation is created when the planned execution date of the service item in the solution order is changed and there are one or more dependent items affected.

The preconfigured conditions in this template are defined for processing in this order:

Condition	Condition Description
1	Condition 1 defines that the situation is raised when the planned execution date is changed and the life cycle status of the service item is not completed.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **i Note**
>
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible for solution order

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Sales Item Delivery Date Reached

Technical Name: `SOLO_DELIVDTE_RCHD_ITMREL`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist when the delivery date of a sales item in the solution order has been reached.

This template should be used when item relationships are used.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want the solution order specialist to be informed when the delivery date of a sales item in the solution order has been reached. If desired, the situation can be configured to be raised a few days before the delivery date. By default, this situation is raised on the day after the confirmed delivery date. The situation is raised for all items dependent on the sales item.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Type: Batch

Trigger Object: Sales item

Anchor Object: Any dependent item. It can be a service item, a contract item, a subscription billing item, or another sales item.

Conditions

The condition in this template defines that a situation is created when the delivery date of the sales item in the solution order has been reached.

The preconfigured conditions in this template are defined for processing in this order:

Condition	Condition Description
1	This defines that the situation is raised when it is less than one day or one day before the item delivery date and the item has not been delivered.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **Note**
>
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible for the solution order

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Planned Execution Date Reached

Technical Name: `SOLO_PLNDDTE_RCHD_ITMREL`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist when the service is not completed even after the planned start date of a service item has been reached.

This template should be used when item relationships are used.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want the solution order specialist to be informed when the service is not completed even after the planned start date of a service item has been reached. If desired the situation can be configured to be raised a few days before the planned start date, by default this situation is raised on the day after the planned start date. The situation is raised on all items dependent on the service item.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Type: Batch

Trigger Object: Service item

Anchor Object: Any dependent item, such as a sales item, a contract item, another service item, or a subscription billing item.

Conditions

The condition in this template defines that a situation is created when the planned execution date of a service item has been reached but the service is not completed yet.

The preconfigured conditions in this template are defined for processing in this order:

Condition	Condition Description
1	Condition 1 defines that the situation is raised when the planned execution date has been reached and the life cycle status of the service item is not completed.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

Note

When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible for solution order

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Project Execution Dates Changed

Technical Name: `SOLO_PROJDTE_CHGD_ITEMREL`

Consuming App: Manage Solution Orders

Template used for Situation Handling that informs a solution order specialist automatically when the start or the end date of a project is changed and this change affects another item dependent on this project item.

This template should be used when item relationships are used.

For background information about the Situation Handling framework, see the Product Assistance for Situation Handling.

Business Value

As a configuration expert for business processes (SAP business role SAP_BR_BPC_EXPERT), you can use this template for the following situation:

You want the solution order specialist to be informed when the start or end date of a project item is changed, and this change affects another item dependent on this project item.

The situation is raised either on the project item itself or on other dependent items based on the below conditions:

1) When the trigger project item is dependent on other solution order items

- On the project item itself when the latest confirmed delivery date of one or more dependent sales items is after the new project start date of the trigger project item.
- On the project item itself when the latest of the planned start dates of one or more dependent service items is after the new project start date of the trigger project item.

- On the project item itself when the latest of the contract start dates of one or more dependent contract items is after the new project start date of the trigger project item.
- On the project item itself when the latest of the subscription start dates of one or more dependent subscription billing items is after the new project start date of the trigger project item.
- On project item itself when the latest of the contract start dates of one or more dependent project items is after the new project start date of the trigger project item.

2) When other solution order items are dependent on the trigger project item

- On a dependent service item when its planned start date is before the new project end date of the trigger project item.
- On a dependent sales item when its confirmed delivery date is before the new project end date of the trigger project item.
- On a dependent contract item when its contract start date is before the new project end date of the trigger project item.
- On a dependent subscription billing item when its subscription start date is before the new project end date of the trigger project item.
- On another dependent project item when its project start date is before the new project end date of the trigger project item.

Default Settings

The template comes with predefined settings. For the settings that aren't visible or self-explanatory, you can find information in the following sections. For generic information about how to configure situations based on this template, refer to the documentation of the Manage Situation Types app with which you can display and use the template.

For more information, see Manage Situation Types.

Situation Trigger Object and Anchor Object

These technical settings define for which object a situation is displayed (anchor object) and the object based on which a situation is triggered (trigger object):

Trigger Type: Event

Trigger Object: Project item

Anchor Object: Trigger project item or any dependent item, such as a service item, a contract item, a sales item, subscription billing item, or another project item.

Conditions

The condition in this template defines that a situation is created when the start or the end date of the project item in the solution order is changed and there are one or more dependent items affected.

There are no preconfigured conditions defined for this situation template. However, you can use the filter criteria 'Project Stage" to define your own filters.

For more information, see Conditions.

Situation Display

When situations occur, users are informed about them by various texts, such as in-app situation messages or notifications on SAP Fiori launchpad. In this section, you can see all preconfigured texts.

For more information, see Situation Display.

> **Note**
> When you copy the template and adapt it to your needs, you can define the notification settings and change all text elements in this section. After making the changes in the original language, please remember to translate these changes into the other languages that you want to use. The template comes with translations that can be changed directly when you copy the template.

For more information, see Translate Situation Types.

Recipients

In this section, you see the predefined settings for determining who is responsible for a situation instance. Based on these, you can define who receives a notification when a situation instance is triggered (if enabled) or who sees the instance in the My Situations app.

For this template, the recipients of the notifications can be determined by the following predefined rule:

- Notify the employee responsible for solution order

For more information, see Recipients.

Situation Monitoring

Monitor Instances: Monitoring (the tracking of changes to situation instances) isn't enabled by default for situation templates. When you copy the template to create a situation type, you need to enable this option if you want to capture data for this situation type and enable the creation of business situation events. You can view the data in the Monitor Situations app.

Related Information

Situation Handling
Key Concepts in Situation Handling
Situation Templates in Sales

Solution Orders

Get an overview of solution orders and how you can use them in typical business scenarios.

Use

You can use solution orders to sell to your customers any combination of different products, such as physical goods, one-time services, long-running service contracts, subscription-based services, and project-based services. To manage solution orders, you can use the **Manage Solution Orders** app.

Features

You can use the following features in solution orders:

Items and Item Views

You can add the following types of items for different products to a solution order:

- Sales items for sales of physical goods. For more information, see Sales Items in Solution Orders.
- Service items, expense items, service part items for one-time services agreed with your customer. For more information, see Service Items, Expense Items, and Service Part Items in Solution Orders.
- Service contract items for services defined in long-term service agreements. For more information, see Service Contract Items in Solution Orders.
- Subscription billing items for subscription business. For more information, see Subscription Billing Items in Solution Orders.
- Project items for services to be delivered as customer projects. For more information, see Project Items in Solution Orders.

Specific item types are predefined. Data about these items are forwarded to the follow-up service transactions or sales documents after release. The following diagram shows an overview of the items.

Solution Order

Solution Order	SOLO
Sales Item/Free of Charge	SOSA/SOT1
Sales Item (3rd Party with Shipping Notification)/Free of Charge	SOS1/SOT2
Sales Item (3rd Party Without Shipping Notification)/Free of Charge	SOS2/SOT3
Sales Item (Bought-in)/Free of Charge	SOS3/SOT4
Sales Item for Service/Free of Charge	SOS4/SOT5
Non-Stock Sales Item /Free of Charge	SOS5/SOT6
Configurable Sales Item/Free of Charge	SOS6/SOT7
Sales BOM	SOX1/SOX2/SOX3/ SOX4/SOX5/SOSA/ SOT1/SOS5/SOT6
Service Item/Fixed Price	SOSR/SOFS
External Service Item/Fixed Price	SOEW/SOFW
Expense Item/Fixed Price	SOEP/SOFE
Service Part Item/Fixed Price	SOSP/SOFP
Non-Stock Service Part Item/Fixed Price	SONP/SOFN
Service Contract Item	SOSC
Service Contract Item (Price Adaptation)	SOPA
Service Contract Item (Ad-hoc Billing)	SOAB
Project Item	SOPR
Subscription Billing Item	SOSB

Sales Order	SOR
Standard Item/Free of Charge	TAN/CBXN
3rd Party with Shipping Notification/Free of Charge	CB1/CB3
3rd Party Without Shipping Notification/Free of Charge	CB2/CB4
Bought-in Item/Free of Charge	CBAB/CBXB
Service Item/Free of Charge	TAD/TADN
Non-Stock Item/Free of Charge	TAX/TAXN
Configuration at Material Level/Free of Charge	CBTC/CBTN
Sales BOM	TAE/TAQ/TAQF/TAP/TAPF/ TAN/CBXN/TAX/TAXN

Service Order	SVO1
Service Item/Fixed Price	SVP1/SVP2
External Service Item/Fixed Price	SEW1/SEW2
Expense Item/Fixed Price	SVE1/SVE2
Stock Service Part/Fixed Price	SVR1/SVR2
Non-Stock Service Part/Fixed Price	SVS1/SVS2

Service Contract	SC1
Service Contract Item	SCN1
Service Contract Item (Price Adaptation)	SCN2
Service Contract Item (Ad-hoc Billing)	SCN3

Customer Project	/

Subscription	/
Subscription Item	/

All items are displayed in the item list by default. You can also choose to show only one type of items in the respective item view. Functions that are specific to certain types of items are available only in the view that you have chosen. For example, the simulation of sales order creation is only visible in the sales item view. Similarly, attributes of the items displayed in the item table are filtered according to the respective views.

Releasing Items

You can release a solution order for the material delivery or service execution by releasing all items in the solution order. Alternatively, you can release individual items according to your business requirements. Depending on the items that you have released, the system automatically creates corresponding follow-up transactions.

After you release an item or change a released item in a solution order, the system takes some time to verify the data and create or change the follow-up transaction. If, after a while, no follow-up transaction is created or the update fails, you can redistribute the data from the solution order header. For more information about distribution status, see Solution Order Orchestration.

Rejecting Items

You can manually reject all solution order items (except released project items) in the header and select a rejection reason. Consequently, all items are set to the completed status, and the rejection reason is populated to all items. Alternatively, you can reject individual items (except project items) by setting a rejection reason at the item level according to your business requirements. You can also reset the last rejection. After the reset, all the items are set back to their original statuses. Note that open items are set back to the in process status.

Defining Item Relationships

You can define relationships between different items to indicate how they are connected. You have the following options for defining an item relationship:

- *Depends on*, which declares that the item in question depends on another item.
- *Has dependency*, which, conversely, declares that another item is dependent on the item in question.

Generally speaking, there are two directions per relationship since most relationships have two corresponding sides, or perspectives. You define an item relationship that item 1 depends on item 2. This also means that item 2 has dependency item 1. “Depends on” and “has dependency” represent two perspectives of the same item relationship.

→ Recommendation

Do not use personalization to change the order of the item relationship columns on your user interface. The reason for this is that the item relationship is rigidly defined as described above. The default order of columns represents the correct order of the related items. If the column order is changed from this default order, you can always use the personalization options to reset the column layout to its default state.

You can view graphics of the items that have item relationships and the corresponding item statuses in the **Solution Order Progress**.

External References

You use an external reference, such as a purchase order number, in your solution order header. When you sell services and service contracts, you can add such a number for reference purposes. When you sell tangible goods, it's mapped to the customer reference in the follow-up sales order.

Additional External References

You can view the additional external references, which act as identifiers of your solution orders in external systems. For example, you can use a solution order ID in the external quoting system as the external reference for a solution order that you synchronize with your SAP S/4HANA Cloud system through API services.

Transaction History

You can view all the preceding or follow-up transactions that are relevant to your solution order in the transaction history. You can also navigate from here to the relevant app to view the details of a preceding or follow-up transaction.

Pricing

The system determines price details when you add an item to a solution order. You can use the condition types in the price details as follows:

- One-time: such as PPR0 (Price), DCM1 (Customer/Material) and DPG1 (Cust. Grp / Material) used for sales items; PSC0 (MtrlPr.in Serv.Cntr), SOV1 (Overtime), and DSC1 (MatlDisc.inSrvc.Cntr) used for service items, service part items, and expense items; and PMV1 (Manual Item Amount) used for fixed price items
- Recurring: such as PSI1 (Price f.Srv.Cntr.Itm), PMBL (Man.Price f. BRqLine) and DSP1 (Service Profile) used for service contract items
- Variant price: such as PVA0 (Variant Price) and PVA1 (Variant Price (%)) used for configurable sales items and configurable service items

During the processing of solution orders, price details determined by the pricing procedures are automatically copied from solution orders to the follow-up transactions or documents. For more information, see Pricing.

Note

One predefined pricing procedure, for instance A17024 for the United States, is available for solution orders. Key users can use it in the configuration environment to set pricing procedure determination or use it as a reference to define your own pricing procedure, and then set the determination. For more information, see Price Management.

To get correct prices and net values, we recommend that you choose the applicable condition types for your items. You can check details in the following table.

Condition Types

Condition Type	Description	Sales Item	Items for One-Time Service	Fixed Price Items for One-Time Service	Service Contract Item	Subscription Billing Item	Project Item
PPR0	Price	X	X	X			
PSC0	MtrlPr.in Serv.Cntr		X	X			
PVA0	Variant Price	X*	X*	X*			
PVA1	Variant Price (%)	X*	X*	X*			
PMP0	Manual Price	X	X	X			
PMP1	One-Time Price					X	
PMP2	Recurring Price					X	
PMP3	Usage-Based Price					X	
PSI1	Price f.Srv.Cntr.Itm				X		
PMBL	Man.Price f. BRqLine				X		
SOV1	Overtime		X	X			
SOV2	Overtime (%)		X	X			
DAI2	Accounting Ind. (%)		X	X			
DSC1	MatlDisc.inSrvc.Cntr		X	X			
DSC2	GrpDiscMatlPrSrvCntr		X	X			
DSC3	Dis.f.Srv.Contr.		X	X			

Condition Type	Description	Sales Item	Items for One-Time Service	Fixed Price Items for One-Time Service	Service Contract Item	Subscription Billing Item	Project Item
DCM1	Customer/Material	X	X	X			
DC01	Division / Customer	X	X	X			
DM01	Material	X	X	X			
DPG1	Cust. Grp / Material	X	X	X			
DPG2	Customer Price Group	X	X	X			
DPG3	Material Price Group	X	X	X			
DPG4	Customer/Mat.Pr.Grp	X	X	X			
DPG5	Cust. Grp/Mat.Pr.Grp	X	X	X			
DRV1	Fixed Amount 1	X	X	X		X	
DSI1	Man. Srv.Cntr. Surch				X		
DSI2	Man. Srv. Surch. (%)				X		
DSP1	Service Profile				X		
DSP2	Response Profile				X		
DRV2	Monthly Abs. Disc.				X		
VASE	Variant Price				X		
PMV1	Manual Item Amount			X			X
D100	100% discount	X	X	X	X		
DRE1	Refund Deduction	X					
YBHD	Freight	X					
PI02	Inter-company %	X					
PI01	Inter-company Price	X					
DCD2	Cash Discount Net	X	X	X	X		
DRD1	Rounding Off	X	X	X	X		
DCD1	Cash Discount Gross	X	X	X	X		
PCIP	Internal Price	X	X**	X**			
PC02	Calculated Costs	X					
X*: Only for configurable items X**: Only for service part items							

Billing

Solution orders themselves are not relevant for billing. However, you can set a billing block reason for solution orders and therefore block the billing of follow-up transactions and documents, such as service contracts and sales orders, dependent on the availability of blocking reasons in the follow-up transactions and documents. Follow-up transactions and documents of solution orders follow their respective billing processes. Dependent on the billing processing of follow-up transactions, the billing status at solution order item level is updated accordingly.

For more information about the billing of service transactions, see Billing. For information about the billing of sales and distribution documents, see Sales Billing. For information about how to enable the creation of one combined invoice per solution order, see Solution Order: Specifics for Billing Documents and Subscription Management with Sales Billing. Note that you can't converge billing data from customer projects into these combined invoices. Customer projects must be invoiced separately. Fore more information, see Manage Project Billing.

For customers who have been charged too much, you can create a credit memo request with reference to the combined customer invoice created for their solution order. For more information, see Solution Order: Specifics for Billing Documents.

i Note

To create the credit memo request, you must have the internal sales representative role (`SAP_BR_INTERNAL_SALES_REP`) assigned to your user. Use sales document type (`SOCR`).

Overview of Life Cycle Statuses

The following table provides an overview of the life cycle statuses that solution order items have. The description also applies to the header statuses. You can't change the header status because the system automatically updates it according to the item statuses.

Life Cycle Status	Description
Open	This is the default status that an item takes after it's created. It indicates that you're free to change the item.
In process	You set an item to this status when you start processing it. Any item in the solution order is set to the in process status, the header is automatically set to in process as well. Note that you can't set a released or completed item back to the in process status.
Released	This status indicates that the item has been finalized and no further changes are required. When this status is set, the item is ready for the follow-up process and the system automatically triggers a process transferring data and generating follow-up transactions. If any error occurs in the back-end system, the status is rolled back to in process.
Completed	Use this status when you want to end the process of an item, or when a released item fulfills specific conditions so that the system ends its process. The status in the solution order header is automatically set to completed when all the items in the solution order are completed.

There may be cases in which your business requires changes to solution orders even though they are released or completed. The fields in the following table are editable for released and completed items. New changes are forwarded to the follow-up transactions, though this is dependent on the availability of features in the follow-up transactions.

Type	Editable Fields
Sales items	Delivery block reason, billing block reason, requested delivery date, reason for rejection, plant (only for released items)

Type	Editable Fields
Service items, service part items, expense items	Billing block reason, reason for rejection, requested start and end dates **i Note** There is no field for the billing block reason in service orders.
Service contract items	Billing block reason, reason for rejection
Subscription billing items	Reason for rejection
Project items	No fields are editable.

Related Information

[Sales Items in Solution Orders](#)
[Service Items, Expense Items, and Service Part Items in Solution Orders](#)
[Service Contract Items in Solution Orders](#)
[Subscription Billing Items in Solution Orders](#)
[Project Items in Solution Orders](#)

Sales Items in Solution Orders

Get an overview of sales items and how you can use them in solution orders.

Use

You can use sales items in solution orders to sell tangible goods and services to your customer. You can use the following types of sales items:

- Sales item (S0SA)
- Sales item for third party with shipping notification (S0S1)
- Sales item for third party without shipping notification (S0S2)
- Bought-in sales item (S0S3)
- Sales item for service (S0S4)
- Non-stock sales item (S0S5)
- Configurable sales items (S0S6)
- To include free of charge goods in your solution orders, use the following types of sales items:
  - Free of charge sales items (S0T1)
  - Free of charge sales item for third party with shipping notification (S0T2)
  - Free of charge sales item for third party without shipping notification (S0T3)
  - Free of charge bought-in sales item (S0T4)
  - Free of charge sales item for service (S0T5)
  - Free of charge non-stock sales item (S0T6)

- Free of charge configurable sales item (SOT7)

- Items for sales bills of material (BOMs), see Sales Bills of Material in Solution Orders

Prerequisites

1. Ensure that the products used as the items are assigned to the following item category groups in your product master:

Item	Item Category Group
Sales items, sales items for third party with shipping notification, sales items for third party without shipping notification, bought-in sales items Free of charge sales items, free of charge sales item for third party with shipping notification, free of charge sales item for third party without shipping notification, free of charge bought-in sales item	NORM, CBOR, CBNA, or CBUK
Sales items for service Free of charge sales item for service	SERV
Non-stock sales items Free of charge non-stock sales item	NLAG
Configurable sales items Free of charge configurable sales item	0002
Items for sales BOMs	See Sales Bills of Material in Solution Orders

2. For configurable sales items and free of charge configurable sales items, you must activate the scope item 6HY (Solution Order Management with Advanced Variant Configuration).

Features

Simulating Sales Order Creation

You can simulate sales order creation when you edit a solution order in the sales item view. By simulating, the system performs the following tasks:

- Check whether a sales order can be created successfully
- Check whether there is inventory available
- Validate the plant that you have specified and select a default plant if no plant is specified

Using the result of the simulation, the system updates the real-time availability status, such as the confirmed quantity, and the last confirmed delivery date. Note that the simulation results are cleared except plants after you save the solution order. The following table explains each possible status of the availability check.

Availability Status	Description
(Space)	Availability check is not triggered
Unconfirmed	Products not available

Availability Status	Description
Partially confirmed	Only partial quantity available or later delivery date than requested
Confirmed	Requested quantity available on requested delivery date

Setting and Displaying Shipping Information

You can select the product price group in the sales item details. Based on your selection, the system determines the price conditions of the sales item.

You can specify a plant in the shipping information of a sales item. If no plant is specified, the system selects a default plant (if available) after a simulation or after the creation of the follow-up sales order.

Depending on the type of a plant (for intracompany or for intercompany sales), the system determines respective price (internal price or intercompany price).

You can block the goods delivery by providing a delivery block reason any time the sales item is not rejected. The delivery block reason is forwarded to the follow-up sales order.

You can combine the delivery of multiple sales items by selecting the same group ID. You can also decide to deliver the sales item partially. You can control the delivery process by prioritizing the delivery of the sales item.

You can always check the delivery status of a sales item after it's released. The system updates the delivery status when the goods are completely or partially delivered from the follow-up sales order. After all goods in this sales item are delivered, the system automatically sets the item to the completed status.

Displaying Schedule Lines

You can always use the schedule lines to check the dates and quantities for a sales item such as the date requested, quantity requested, date confirmed, and quantity confirmed. You can't change any information for the schedule lines.

Configurable Product

You can add and configure a configurable product as a configurable sales item or a free of charge sales item in the **Manage Solution Orders** app.

Configure Configurable Product

When you add a configurable product as a sales item, you are required to configure the product you have added. You can select the characteristics and characteristic values that are defined in the product master data. By default, the status of the configurable product is incomplete. After you finish configuring the product, the configuration status is changed to released.

View Price Details

After you have configured a specified configurable product, you can see the price impact of your selected characteristics and characteristic values based on the defined variant conditions in the price details on service contract item and header.

→ **Tip**

For sales orders that are created from sales items in solution orders, you can create returns orders, credit memo requests, and debit memo requests according to your business requirements. For more information, see Creating Returns Orders with Reference.

Related Information

Sales Bills of Material in Solution Orders

If your company uses bills of material (BOMs) to sell products that consist of several components, you can include these sales BOMs (also known as sales kits) in your solution orders.

A BOM is a predefined list of all the components that make up a product. A BOM for a bicycle, for example, consists of all the bicycle parts: the frame, the saddle, the wheels, and so on.

BOMs speed up the process of entering these products in solution orders: Instead of entering each component one by one, you simply add the BOM. BOMs also help to make the process less error-prone, as you can't accidentally leave out a specific component.

Prerequisites

- To use sales BOMs in solution orders, scope item Solution Order Management (4GT) must be active in your system.
- To ensure that you can process BOMs in the follow-up sales orders, scope item Sales Order Processing for Sales Kits (31Q) must also be active in your system.

  Note
  For more information about these scope items, see SAP Signavio Process Navigator.

- You have created at least one BOM in the **Maintain Bill of Material** app with all necessary components and their respective quantities. Note that the BOM usage must be 5 for sales and distribution.

Use

If you want to use sales BOMs in your solution orders, instead of entering a single product number, you enter the number for a BOM and press Enter. The system then automatically pulls the individual components into the list of items (this is the so-called BOM explosion) and displays two kinds of items:

- The main item (or higher-level item): This item stands for the product you sell, including all components.
- Two or more subitems: These items represent the individual components of the product.

By exploding the BOM, you get an overview of all the items and their quantities.

Processing of Sales BOMs

BOMs can be processed in different ways. The difference is that pricing, inventory control, and delivery processing are performed on either main item or subitem level. The type of processing is determined by the item category group that you enter in the product master record for relevant products. You do so on the second tab for sales organization in the **Create Material** app.

- Processing on main item level: You would usually use this way of processing for assembled products. Pricing, inventory control, and delivery processing are performed on main item level. This means that the components only serve as text items for information purposes and are not relevant for delivery.
- Processing on subitem level: You would usually use this way of processing for products that are not assembled. Pricing, inventory control, and delivery processing are performed on subitem level. This means that only the subitems are relevant for delivery.

Overview of Items

The following table provides an overview of items for sales BOMs.

		Processing on Main Item Level		Processing on Subitem Level				
Main Item	Item Category Group	ERLA		LUMF				
	Item Category	Main item with price (S0X2)	Main item with price (free of charge) (S0X3)	Price at subitem (S0X4)			Price at subitem (free of charge) (S0X5)	
	Item Category in Follow-Up Sales Order (SOR)	TAQ	TAQF	TAP			TAPF	
Subitem	Item Category Group	NORM, NLAG		NORM		NLAG	NORM	NLAG
	Item Category	Explanation in BOM (S0X1)		Sales item (S0SA)	Free of charge sales item (S0T1)	Non-stock sales item (S0S5)	Free of charge sales item (S0T1)	Free of charge non-stock sales item (S0T6)
	Item Category in Follow-Up Sales Order (SOR)	TAE		TAN	CBXN	TAX	CBXN	TAXN

Changing Item Categories of Main Items

After you enter the number for a BOM and press Enter in a solution order, the item category field is no longer editable. In case you want to use the items for another scenario (such as free of charge), you must change the item category before pressing Enter.

Plants in Sales BOMs

When you use BOMs, the system determines a plant for the main item. In case you want to assign a specific plant to the main item before the plant field is no longer editable, you must switch to the sales items view first and then enter the plant, then press Enter when you create the item. The system automatically applies the plant for the main item to all subitems. You can assign another plant to an individual subitem.

Releasing Sales BOMs

For the subsequent sales order fulfillment, you can change the status of main items to released. The status change of the main item to released triggers the status change of the subitems to released. Therefore, for the purpose of releasing, the sales BOM (the main item along with all subitems) is regarded as a single, indivisible unit. Solution order orchestration controls the creation of follow-up sales orders, and of the Sales BOMs they contain. Note that you can add new components to a sales BOM (or remove some from it) only **before** the item status changes to released.

Related Information

[Sales Items in Solution Orders]
[Bills of Material in Sales Documents]

Service Items, Expense Items, and Service Part Items in Solution Orders

Get an overview of items for one-time service and how you can use them in solution orders.

Use

You can use service items and service part items to sell one-time services and service parts to your customers. You can also use expense items to charge expenses incurred during service execution. If you've agreed a fixed price with your customer, you can use the respective fixed price items.

You can use the following types of items:

- Service items (SOSR)
- External service items (SOEW)
- Expense items (SOEP)
- Service part items (SOSP)
- Non-stock service part items (SONP)
- Fixed price items
  - Fixed price service items (SOFS)
  - Fixed price external service items (SOFW)
  - Fixed price expense items (SOFE)
  - Fixed price service part items (SOFP)
  - Fixed price non-stock service part items (SOFN)

Prerequisites

Ensure that the products used as the items are assigned to the following item category groups in your product master.

Item	Item Category Group
Service items, external service items, fixed price service items, fixed price external service items	SRVP
Service part items, fixed price service part items	SVST, NORM
Expense items, fixed price expense items	SRVE
Non-stock service part items, fixed price non-stock service part items	SRVM

Features

Service Contract Determination

When you add a service item, a service part item, or an expense item, the system automatically determines the service contracts that you can assign to the item. When you confirm that a service contract item is applicable, the relevant data from the contract item, such as the price information defined in price agreement and the attributes in service level agreements (SLA), is copied to the service item, service part item, or expense item. This data is subsequently forwarded to the follow-up service order after the item is released. For more information, see Service Contract Determination.

> **Note**
>
> Whether SLA information is included in service contract determination or not depends on your configuration of SLA determination. For more information, see Service Level Agreements (SLA).

Accounting Indicator

You can use the accounting indicator to define whether items are billable or non-billable in the follow-up service orders. The indicator controls how the costs accrued by the item are posted to accounting. It does not define that your customer is provided a service free of charge.

Reference Objects

Reference objects are objects on which service activity are planned. You can use either functional locations or equipment as reference objects.

Overtime Category

You can use overtime categories to define planned overtime for service employees who perform the services. Overtime is defined at the item level for service products. Your customer is charged either a higher fixed rate or percentage-based rate depending on the pricing defined for the overtime category. This information is forwarded to the service confirmations once they are created based on the follow-up service order.

Information Related to Service Execution

After release of the items mentioned above, a follow-up service order is created, for which service confirmations can be subsequently created to record the actual consumption of time and materials during service execution. In the solution order, you can always track the following information after you release the items:

- Checkbox at the item level, which indicates that at least one service confirmation for the follow-up service order of the item has been created.
- Completed status of the item, set automatically by the system when the item in the follow-up service order is completed.

Configurable Product

You can add and configure a configurable product as a service item and fixed-price service item. For more information, refer to Configurable Products in Service Order Management.

Related Information

Service Orders
Service Confirmations
Solution Order: Specifics for Service Orders

Service Contract Items in Solution Orders

Get an overview of service contract items and how you can use them in solution orders.

Use

You can use service contract items in solution orders to sell long-term service agreements to your customer. You can use the following types of service contract items:

- Service contract items without billing request lines (SOCB)
- Service contract items (SOSC)
- Service contract items for price adaptation (SOPA)
- Service contract items for ad hoc billing (SOAB)

Prerequisites

Ensure that the products used as the items are assigned to the item category group SCNP in your product master.

Features

Service Level Agreements (SLA)

You can define attributes for Service Level Agreements (SLA) in the service contract items. These attributes are forwarded to the follow-up service contract for further processing. For more information about the SLA in service contracts, see Service Level Agreements (SLA).

Product List

You can add products to the product list to define the services and service parts in a service contract item. The product list is forwarded to the follow-up service contract for further processing. For more information about the product list in service contracts, see Service and Product List.

Object List

You can add products, equipment, or functional locations in the object list of service contract items. The object list is forwarded to the follow-up service contract for further processing. For more information about the object list in service contracts, see Object List

Billing Plan

You can define settlement rules for settlement periods and billing dates in the billing plan of service contract items. Also, you can view the settlement periods (including the settlement, billing, and price details) that are generated based on the settlement rule and billing dates. The billing plan is forwarded to the follow-up service contract for further processing. When the first settlement period of the item in the follow-up service contract is billed, the system automatically sets the item in the solution order to the completed status. For more information about the billing plan in service contracts, see Service Contract Items.

i Note

- When you add a product to be a service contract item, the default option is the service contract item without billing request line (SOCB). In this case, the settlement periods are not visible in the billing plan. This can reduce the system response time due to the generation of billing request lines in service contract items. In the follow-up service contracts, billing request lines are generated automatically by the system.

- For ad hoc billing items (SOAB), you can only define the billing plan in the follow-up service contracts.

Price Adaptation

You can choose a product and assign it to be a service contract item for price adaptation (SOPA). This lets you set flexible pricing dates or define manual prices at billing request line level. The information you have defined is forwarded to the follow-up service contract for further processing. For more information about price adaptation items in service contracts, see Price Adaptation for Service Contracts.

Ad-hoc Billing

You can choose a product and assign it to be a service contract item for ad-hoc billing (SOAB). This allows you to include an ad-hoc billing item, but you can only define the ad-hoc billing plan in the follow-up service contract after releasing the item. For more information, see Ad Hoc Billing for Service Contracts.

Auto Renewal

You can enable auto renewal and specify a renewal period and a contract extension for service contract items (SOCB, SOSC and SOPA), depending on how the product master is configured. After you release the service contract items in solution orders, the specified auto renewal information is forwarded to the service contract items in the follow-up service contracts. Note that the auto renewal doesn't affect the items in solution orders. Auto renewal only affects the items in the follow-up service contracts. For more information, see the *Auto renewal* section under Service Contract Items.

Configurable Product

You can add and configure a configurable product as a service contract item. For more information, see section *Features* under Configurable Product.

Related Information

Solution Order: Specifics for Service Contracts

Subscription Billing Items in Solution Orders

Get an overview of subscription billing items and how you can use them in solution orders.

Use

You can use subscription billing items in solution orders to sell subscriptions to your customers.

Prerequisites

The scope item Subscription Management with Sales Billing (57Z) must be activated because it provides the foundation for subscription management in SAP S/4HANA Cloud. It enables sales billing in SAP S/4HANA Cloud to create invoices for subscriptions from SAP Subscription Billing.

Ensure that products used in subscription billing items are assigned to the item category group SBPD in your product master. Master data such as products, sold-to parties, and sales areas must be consistent with the products, customers, and markets in SAP Subscription Billing.

If you use the pricing models and prices from the Price Calculation service for SAP Subscription Billing, ensure that you have configured the custom output attributes with the condition types (such as `PMP1`) that are included in the pricing procedure (such as `A17024`) of solution orders in SAP S/4HANA Cloud. For more information, see Price Element Specifications.

i Note

SAP Subscription Billing is an application on SAP Business Technology Platform that requires a separate license.

Features

Subscription Terms

Subscription terms in subscription billing items enable you to overwrite the default terms from SAP Subscription Billing. By doing so, you can govern the life cycle of a follow-up subscription, including when the subscription may end, whether it auto-renews, how it can be canceled, and more.

Subscription terms consist of the following terms:

- For cancellation policy:
    - Withdrawal period
    - Term of notice
    - Allow mid-bill cycle expiration (yes/no)
- For duration:
    - Minimum term
    - Fixed term
    - Expected term
- For renewal:
    - Renewal term

Rate Elements

A rate element contains a rate element ID, a rate element type, and a net value. These three attributes are retrieved from the SAP Subscription Billing system. The rate element also provides the tax amount and the gross value, which are calculated based on the pricing procedure of the solution order. The net value, tax amount, and gross value are also used to calculate the pricing values in the subscription billing items and the solution order header.

Subscription Parameters

You provide subscription parameters with an ID and a value to configure subscriptions by defining additional attributes for your subscription product, such as the number of licenses (seats) for a software product. The subscription parameter that you specify must have been configured in the product in the SAP Subscription Billing system. The value is the actual amount. For more information about subscription parameters in SAP Subscription Billing, see Subscription Pricing.

Pricing Parameters

You provide a pricing parameter with an ID and a value to overwrite the price for individual subscriptions. Note the following features:

- The pricing parameter is of the type amount or percentage.

- Default values are retrieved from SAP Subscription Billing after simulation.
- You can specify a manual value that differs from the default value.
- You choose either a manual value or a default value as the value to apply in the follow-up subscription.
- The pricing parameter that you specify must have been configured in the rate plan template that is assigned to the product in the SAP Subscription Billing system.

For more information about pricing parameters in SAP Subscription Billing, see Subscription Pricing.

Price Calculation

If you use a subscription product that utilizes the pricing models and prices from the Price Calculation service for SAP Subscription Billing, you can view and customize the price details in the **Price Calculation** assignment block of the subscription billing item. These price details are retrieved from the corresponding subscription product in SAP Subscription Billing. They influence the net value of the subscription billing item in a solution order.

i Note

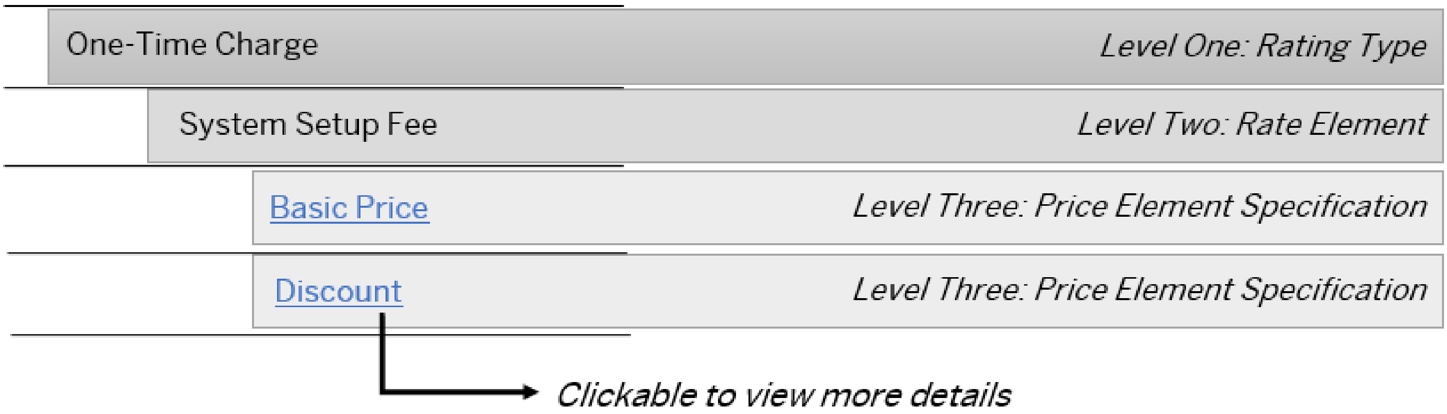
When the subscription product utilizes the pricing models and prices from the Price Calculation service for SAP Subscription Billing, the pricing parameters are not applicable.

The price details are displayed in a tree table that is structured into three levels:

- The first level is based on the rating types (one-time charge, recurring charge, or usage-based charge).
- The second level is the rate element that you have configured in SAP Subscription Billing.
- The third level is the price element specification that you have configured in SAP Subscription Billing. From this level, you can view more details about each price element specification and customize them. The customization status tells whether you can customize the price element or not.

  At this level, an indicator also informs you whether a price element is statistical or not. Statistical price elements aren't considered in the total price of a charge. Note that you can flag price elements as statistical only in the pricing scheme of SAP Subscription Billing.

The following graphic illustrates an example of the structure of the price calculation. This example is about a one-time charge for the system setup fee which contains a basic price and a discount.



An Example of Price Calculation

For more information about price calculation in SAP Subscription Billing, see Subscription Pricing.

Customization Status

The customization status of a price element specification indicates whether you can customize that price element specification or not. The following table explains each status.

Customization Status	Meaning
Non-customizable	You can't customize the price calculation specification but only view its details.
Customizable	You can customize the price element specification.
Is customized	The system sets this status after you have customized the price element specification.

Customization of Price Element Specifications

With customizable price element specifications, you can customize the subscription-specific prices (or discounts) and price models. To do so, you must set up the following attributes.

1. Type: Also called price condition type. Used to define whether a scale is used, and, if yes, which type of scale is used for the price element specification.

Type

Type	Meaning
Single	Stands for a single price without any scale
Volume	Stands for linear or scaled pricing
Tier	Stands for a graduated scale

2. Based on: Used to specify whether price element specification is to be based on amounts (monetary numbers) or on quantities. Note that this attribute is not relevant for the single type.

Based On

Based On	Meaning
Amount	When you choose the amount, you can specify scales up to specific amounts and set the currency
Quantity	When you choose the quantity, you can specify scales up to specific quantities and set the unit of measure

3. Price type

Price Type

Price Type	Meaning
Linear	When you choose the linear price type, you can specify a certain value per unit of measure and its price, for example, USD 10 per 2 pieces.
Fixed	When you choose the fixed price type, you can specify a fixed price or a discount. Fixed prices and discounts can be specified in terms of their value and and currency. It can be a fixed price or discount for the single pricing or the scaled volume.

Price Type	Meaning
Percentage	You can specify a percentage for discounts, such as a 5% discount.

According to your choices, the system provides required fields (also called overridable fields) for you to customize prices or discounts for the price element specification.

i Note

- Every time you change a type, the system removes all the existing configuration and creates a new default row.
- When you swap options among amount, quantity, and price type, the system clears the data in the fields that is not required.

After you finish customizing, the system forwards the customized data to SAP Subscription Billing and updates the net value of the subscription billing item in the solution order.

For more information about customized pricing in SAP Subscription Billing, see Customized Pricing.

Simulation

You use the simulation function to trigger the communication between the SAP S/4HANA Cloud system and the SAP Subscription Billing system. The following tasks are accomplished in every simulation:

- Validation of whether the data about pricing parameters and subscription parameters is consistent with the data in the SAP Subscription Billing system.
- Retrieval of the missing pricing parameters and subscription parameters, and their default values, from the SAP Subscription Billing system.
- Retrieval of rate elements and terms from the SAP Subscription Billing system.
- Forwarding of the parameter values and terms that you have specified to the SAP Subscription Billing system and retrieval of the calculated values (including item values, rate element values, and price calculation results) based on the calculation rules in the SAP Subscription Billing system.

→ Recommendation

We recommend you perform a simulation in the following cases:

- When the simulation status is pending.
- When default values are missing but the simulation status is completed.

By doing so, you can always get the default data for reference and view the real-time data, such as the calculated values, from the SAP Subscription Billing system.

You can see the simulation status in the subscription billing item details. The following table explains each simulation status.

Simulation Status	Meaning
Pending	Simulation has not yet started or is pending to start after new inputs are entered.
Error	Errors occurred during the simulation.

Simulation Status	Meaning
Completed	Simulation has completed without any error and data has been updated.
Not required	Simulation is not required. This is the case when, for example, the item has the released status.

Note

In cases where you don't manually simulate the subscription billing item before you save the item (that is the subscription billing item is saved with the pending status), an asynchronous process is triggered to perform the simulation and you must refresh the solution order to see the data after the asynchronous simulation.

The following table lists the actions that may cause the simulation status to change.

Action	Resulting Change to Simulation Status
• Create a new item • Change the item product • Change the contract start date or the fixed term • Change a pricing parameter • Change a subscription parameter • Change a subscription term	Set to pending
• Choose the simulate button	Set to completed if no technical error occurs (business error may exist in this case). Remains as pending status if any technical errors occurred. For more information about error types, see Forward Data Exchange.
• Choose the save button when the simulation status is pending • Create a new item and edit it for the first time	Set to completed if the asynchronous simulation process is successful (business errors may exist in this case). Set to error if any technical errors occur during the asynchronous simulation process.
• Choose the redistribute button when the simulation status is error	The system redistributes data for the solution order and therefore also triggers the asynchronous simulation process. Set to completed if the asynchronous simulation process is successful (business errors may exist in this case). Set to error if any technical errors occur during the asynchronous simulation process.

Releasing Subscription Billing Items

When you release a subscription billing item, the system forwards all of its data to create a subscription in the SAP Subscription Billing system. You can find the subscription in the transaction history and navigate to the SAP Subscription Billing system for more details. Once the subscription is set to active (depending on the product configuration, follow-up subscriptions can be created as pending), the subscription billing item in the solution order is set to the completed status. For more information about subscriptions in SAP Subscription Billing, see Subscriptions.

Additional Information

For more information about the integration between solution order management and SAP Subscription Billing, see Subscription Management with Sales Billing (57Z) or the scope item Subscription Management with Sales Billing (57Z) in SAP Signavio Process Navigator.

For more data mapping details, see Solution Order API and SAP Subscription Billing APIs.

For more information about SAP Subscription Billing, see SAP Subscription Billing.

Related Information

Solution Order Orchestration
Subscription Management with Sales Billing
Integration of Solution Order Management with SAP Subscription Billing

Project Items in Solution Orders

Get an overview of project items and how you can use them in solution orders.

Use

You can use project items (item category SOPR) in solution orders to include services to be delivered as customer projects in your solution selling.

Prerequisites

Ensure that the products used as the items are assigned to the item category group SPRJ in your product master.

Features

You can perform the following tasks, which are specific to project items:

- Set or display the project item status, project start and end dates, service organization (project), cost center, and profit center.
- Set or display the project manager as a party involved in the project item.
- Define the net value of the project item using the manual price condition (PMV1). If the net value is changed in the follow-up customer project, the project item in the solution order is updated accordingly.
- Link an existing customer project to the project item or unlink it from the project item. For more information, see the section *Linked Projects and Unlinking* below.
- Release the project item (without a linked project) so that the system uses the corresponding information to create a customer project as the follow-up document. Note that the follow-up customer project doesn't contain any work package.

Note

You can only reject a project item in the open or in-process status by rejecting all items from the solution order header. If you want to reset the item rejection, you can only do this from the header as well.

Linked Projects and Unlinking

You can link a customer project that already exists in the system to a single project item in a solution order. Linking to a project is possible only when the following criteria are met:

- The project is in the in-planning stage.
- The project uses the new billing process.
- Customer of the project matches the sold-to party of the project item in the solution order.
- Service organization of the project matches the sales organization of the project item in the solution order.
- The project is not a follow-up document that was created from another project item in a solution order.
- The project has not been linked to another project item in a solution order.

After the link relationship is established, releasing the project item does not create a new project as a follow-up document, but instead only updates the linked project. The linked project references the solution order number of the corresponding project item. If changes are made to the linked project, relevant information of the corresponding project item is updated accordingly.

Once a project is linked to a project item in this way, you can't link the project to any other solution order items. To unlink a project, you have the following options:

- For open or in-process project items, clear the linked project ID from the project item or delete the corresponding entry in the transaction history.
- For released project items, you can only delete the corresponding entry from the transaction history. In this case, the system is unable to delete the transaction history entry immediately, but only through orchestration. Before the system deletes the transaction history entry, the status of the entry is set to **to be deleted**.

Related Information

Solution Order: Specifics for Customer Projects
Solution Order Orchestration

Solution Order Orchestration

Use

Solution order orchestration is a combination of various functions within the solution order. It controls the creation and change of follow-up transactions. Additionally, it is responsible for receiving and processing all relevant information from the follow-up transactions, and triggering appropriate reactions. These can be automatic updates or meaningful notifications for the user.

Features

Solution order orchestration offers the following features:

- Forward Data Exchange: It creates or updates a follow-up transaction from the solution order.
- Backward Data Exchange: It updates the solution order based on changes in a follow-up transaction.
- Item Distribution Status and Technical Monitor: The distribution status is used to understand the orchestration progress and handle orchestration errors. The technical monitor enables you to view forward and backward data exchange messages.

- Extensibility: Solution Order Orchestration: Solution order orchestration supports process extensibility and field extensibility.

Related Information

Solution Orders
Manage Solution Orders

Forward Data Exchange

Use

Forward data exchange creates or updates a follow-up transaction from the solution order, simulates sales and subscription billing items, and links and unlinks a project item. A follow-up transaction is created when an item is released and its reference is maintained in the transaction history. If an error occurs during follow-up transaction creation, the status of the solution order item reverts to in process. Forward data exchange is executed asynchronously. For more information, see Item Distribution Status and Technical Monitor.

Features

Forward data exchange creates or updates a follow-up transaction.

- The following updates are possible for solution order items with a follow-up transaction:
    - For all sales items that are not yet completed, the requested delivery date, delivery block reason, billing block reason, plant, and rejection reason can be updated.
    - For service items, the requested service start date, requested service end date, and rejection reason can be updated.
    - For service contract items, the rejection reason and the billing block reason can be updated.
    - For subscription billing items, no update is possible after the creation of follow-up subscriptions.
    - For project items, no update is possible after the creation of follow-up projects.
- Project linking and unlinking: Project linking establishes the linkage between the project item in the solution order to an existing customer project. After the linkage is established, releasing the project item does not create a new project as a follow-up transaction, but only updates the linked project. You can link only an existing customer project to a solution order item. Project items are updated with the project manager, project duration, profit center, project name, project item status, and net value from the linked project. To remove the linkage established between the project item in the solution order and the existing customer project, you can trigger unlinking. To unlink a project item in the released status, delete the corresponding entry in the transaction history. When the status of the customer project is changed to in execution, the life cycle status of the project item in the solution order is set to completed and no further updates are allowed.
- Simulation of subscription billing item: You can use the simulation function to trigger the communication between the SAP S/4HANA Cloud system and the SAP Subscription Billing system. Simulation is used to retrieve the latest subscription price details, parameters, and terms from SAP Subscription Billing without creating the actual follow-up transactions. You can trigger the simulation by choosing the simulation button. The data is then updated synchronously. Alternatively, the system triggers an asynchronous simulation when you save the solution order. You can also trigger simulation when you customize the price element specification in the **Price Calculation** assignment block of the subscription billing item. It is also triggered when you navigate within the subscription billing item.

  You can see the simulation status under the subscription billing item details. The following table explains each status:

Status Code	Simulation Status	Meaning
A	Pending	Simulation has not yet started or is pending to start after new inputs are entered.
B	Error	Errors occurred during the simulation.
C	Completed	Simulation has been completed without any errors and data has been updated.
Blank	Not Required	Simulation is not required. For example, when the subscription billing item is released without simulation.

The following errors may occur during the simulation of subscription billing items:

- Technical errors: Errors due to connection issues or downtime in SAP Subscription Billing. Use the technical monitor to view these errors. Redistribute data once the connection issue or downtime is resolved.
- Business errors: Errors due to incorrect or missing data in business-critical fields. Update the data and redistribute them.

- Simulation of sales order item: You can simulate sales order creation when you edit a solution order in the sales item view. By simulating, the system checks whether a sales order can be created successfully, the inventory availability, and also the schedule of the delivery.
- Follow-up transaction behaviour: The documents that are created as a follow-up for each solution order item after releasing the solution order items.
  - All the sales items of a solution order are part of a single follow-up sales order transaction.
  - The follow-up service order and service contract are created when additional service order items and service contract items are released.
  - Every single subscription billing item of a solution order has one follow-up subscription that is created in SAP Subscription Billing
  - Each project item in the solution order has one follow-up customer project.

Related Information

Solution Orders
Manage Solution Orders
SAP Subscription Billing
Customer Projects

Backward Data Exchange

Use

Backward data exchange updates solution order items based on changes in follow-up transactions. It is executed asynchronously. For more information, see Item Distribution Status and Technical Monitor.

Features

Backward data exchange updates the relevant information to the solution order items from the follow-up transaction.

- The following backward updates are possible for the solution order items:
  - Standard sales order items and Bought-in sales items are updated with the latest schedule lines (confirmed delivery date and confirmed quantity), delivery status, and billing status from the follow-up sales order. Third-party deals are updated with the latest schedule lines and billing status from the follow-up sales order. Sales item for service is updated with the billing status from the follow-up sales order.
  - Service order items are updated with the latest service confirmation status, billing status, and rejection status from the follow-up service order.
  - Service contract items are updated with the latest billing status and rejection status from the follow-up service contract.
  - Subscription billing items are updated when the subscription is created, activated, and withdrawn. When a subscription created from a solution order is withdrawn in subscription billing, the subscription billing item is rejected in the solution order.
  - Project items are updated with the project manager, project duration, profit center, project name, project item status, and net value from the follow-up project.
- Life cycle completion status of solution order items:
  - The table below explains when the life cycle status of sales order items is set to completed.

Sales order item	Life cycle status set to completed
Standard sales item Bought-in sales item Non-stock sales item Configurable sales item Free of charge sales items Free of charge bought-in sales item Free of charge non-stock sales item Free of charge configurable sales item	When the sales order item is fully delivered.
Sales item for third party with shipping notification Sales item for third party without shipping notification Free of charge sales item for third party with shipping notification Free of charge sales item for third party without shipping notification	When the follow-up purchase order is created.
Sales item for service Free of charge sales item for service	When the billing document from the follow-up sales order is created.

i Note

If you want to reject the sales order items in the completed status, follow the steps mentioned in customer returns. For more information, see Accelerated Third-Party Returns (1Z3), Accelerated Customer Returns (BKP), and Return Order Processing for Non-Stock Material (3TE) in SAP Signavio Process Navigator.

  - The life cycle status of the service order item is set to completed when the follow-up service order is completed.

- The life cycle status of the service contract item is set to completed when at least one billing request line in the follow-up service contract is billed.
- The life cycle status of subscription billing items in the solution order are set to completed once the follow-up subscriptions are set to active in SAP Subscription Billing. Depending on the product configuration in SAP Subscription Billing, follow-up subscriptions can be created as pending.
- The life cycle status of the project item in the solution order is set to completed when the stage of the follow-up project changes to in execution. Whereas, the life cycle status of a project item linked to an existing customer project is not set to completed when the stage of the linked project changes to in execution so that the project item can be linked to another customer project.

Related Information

Solution Orders
Manage Solution Orders
SAP Subscription Billing
Customer Projects

Item Distribution Status and Technical Monitor

Use

Distribution status indicates the progress of forward data exchange. You can understand the progress of forward data exchange and resolve orchestration errors by using the redistribute operation. Items with distribution status errors are reprocessed and items with distribution status success or incorrect can be changed. You can view the item distribution status in the **Manage Solution Orders** app and **Business Solution Order** API.

There are four distribution statuses to identify the forward data exchange:

- Started

  The distribution started status indicates the solution order item is undergoing a forward data exchange. The follow-up transaction is either being getting created or updated. You cannot edit the solution order items whose status is set as distribution started. You can modify the item only after the distribution status is set as success or incorrect.

  The table below explains the various scenarios when the distribution status is set to distribution started for each item type in solution orders:

Item Type	Item set to distribution started status
Sales Order Item	◦ When the sales order creation process is set to in progress. ◦ When the sales order update process is set to in progress. ◦ When the sales order is created successfully but the document number is not maintained in solution orders. ◦ When the sales order is created successfully but there is a technical error during updating the transaction history.

Item Type	Item set to distribution started status
Service Order Item and Service Contract Item	- When a follow-up transaction creation process is set to in progress. - When a follow-up transaction update process is set to in progress.
Subscription Billing Item	- When the subscription billing document creation process is set to in progress. - When the subscription billing document is created successfully but the document number is not maintained in solution orders. - When the subscription billing document is created but there is a technical error during updating the transaction history.
Enterprise Project Item	- When the enterprise project creation process is set to in progress. - When the enterprise project is created successfully but the document number is not maintained in solution orders. - When the enterprise project is created but there is a technical error during updating the transaction history.

Note

You can check the technical monitor with interface `SOLO_UPD` for the error messages.

- Success

The distribution success status indicates that forward data exchange was successful. Once the item distribution status is set to success, you can modify certain information in the item to update the follow-up transaction.

The table below explains the various scenarios when the distribution status is set to distribution success for each item type in solution orders:

Item type	Item set to distribution success status
Sales Order Item	- When the sales order is created successfully and the transaction history has been updated back to solution orders. - When a sales item is added to the sales order and the transaction history of the item is updated back to solution orders. - When the sales order is updated successfully without any errors.
Service Order Item and Service Contract Item	- When the follow-up transaction is created and updated successfully without any errors.

Item type	Item set to distribution success status
Subscription Billing Item	◦ When the subscription billing document is created successfully and the backward data exchange to update the transaction history in solution orders is successful.
Enterprise Project Item	◦ When the enterprise project is created and the backward data exchange to update the transaction history in solution orders is successful.

- Incorrect

  The distribution incorrect status indicates that a business error has occurred during forward data exchange. You can fix the error by correcting the data (for example, external reference, incoterms, and so on) in the solution order. Errors that occur in a follow-up transaction during orchestration are returned to the solution order as a warning messages.

- Error

  The distribution error status indicates that a technical error has occurred during forward data exchange. Once the distribution status is set to error, use the redistribute function to orchestrate the items. You can also check the technical monitor for the error messages.

  The table below explains the various scenarios when the distribution status is set to error for each item type in solution orders.

Item type	Item set to distribution error status
Sales Order Item	◦ When the solution order is trying to update sales order when it is locked by other applications ◦ When a technical error occurred during orchestration. **i Note** You can check the technical monitor with interface `SOLO_SLSO` for the error messages.
Service Order and Service Contract Item	◦ When a technical error occurred during orchestration. **i Note** You can check the technical monitor with interface `SOLO_SRVO` for `Service Order Item` and `SLSO_SC` for `Service Contract Item` for the error messages.

Item type	Item set to distribution error status
Subscription Billing Item	◦ When a technical error occurred during forward data exchange. (For example, the communication scenario setup was done incorrectly or subscription billing tenant is not configured correctly.) ◦ When a technical error occurred during orchestration. **Note** You can check the technical monitor with interface `SOLO_SB` for the error messages.
Enterprise Project Item	◦ When a linked project item in solution order is released and the project is locked by another application. **Note** You can check the technical monitor with interface `SOLO_PROJ` for the error messages.

Technical Monitor

You can view the technical error messages that are raised during orchestration in the **Message Dashboard** app or **Message Monitoring Overview** app. You need to be assigned to the solution order recipient (Namespace: /CMSRV, Recipient Name: SOLO_RECEIVERS). If a new business user is created by copying the solution order specialist role, the administrator has to assign recipients to a business user using the **Assign Recipients to User** app to view the messages. For more information, see Assigning Users to Recipients.

Related Information

Solution Orders
Manage Solution Orders
SAP Subscription Billing
Customer Projects

Extensibility: Solution Order Orchestration

Use

Solution order orchestration supports process extensibility and field extensibility.

Process Extensibility

Once the system is configured correctly, you can connect the extensibility of the solution order to sales documents and their follow-up transactions. This allows you to extend the end-to-end process from solution order creation to follow-up sales and service transactions by adding custom fields at any stage of the process and enabling their transfer. The custom fields of the solution order header and item are automatically connected to the follow-up service transactions service order and service contract. Key users can enable the following business scenarios in the **Custom Fields** app to enable the flow of custom fields from a solution order to a sales document:

Business Context	Business Scenario
Service Header	Service Header to Sales Document at Header Level
Service Item	Service Item to Sales Document at Item Level

Field Extensibility for Subscription Billing Items

The business add-in (BAdI) `CRMS4_SOLO_ORC_SB_SUBSC_MODIFY` is available to enable field extensibility for subscription billing items in the solution order. You can use the **Custom Logic** app to implement the BAdI. The system calls the BAdI during orchestration or simulation of subscription billing items in the solution order. You can use this BAdI to modify the subscription data based on your requirements.

Note

The BAdI is classified as non-RAP compliant.

You can modify the following custom fields at subscription header and item level.

- Custom references and bill split element (on subscription header and item level)
- Technical resource and contract account (on subscription item level)

  Note

  You can't add a contract account of more than 12 characters.

- Subscription profile and billing profile (on subscription header level)

Related Information

Key User Extensibility
Custom Fields App and Custom Logic App
App Extensibility: Manage Solution Orders

FAQ for Solution Order Management

Why are the prices not determined while creating a subscription billing item in solution orders?

You need to perform the simulate action on the subscription billing items to check the prices as the pricing parameters aren't maintained in SAP S/4HANA Cloud. During simulation, the pricing details along with the latest parameters, terms, price agreements, and so on are retrieved from SAP Subscription Billing.

The item status is showing in the in-process status even though I have released the solution order item. What is the reason for this?

The follow-up transaction creation has failed for the solution order item. The reason for the failure of the follow-up transaction creation is due to missing data, incorrect data, missing customization, and so on.

For example, sales order creation fails if the customer reference is not maintained in solution orders. You can check the orchestration error message for the exact information. For more information, see Item Distribution Status and Technical Monitor.

How do I resolve the following issue? "OAuth 2.0 client profile SAP_COM_0642 not assigned to an OAuth 2.0 client".

The OAuth credentials must be maintained correctly in the communication system used in the communication arrangement SAP_COM_0642. The OAuth 2.0 client ID and client secret are found in the service key that is created in SAP Subscription Billing.

I have released a solution order item, but the distribution status is set to an error. What can I do in this situation?

A distribution status error occurs due to technical errors in solution orders. For example, the backward update on the solution order has failed as the solution order is locked.

You must use the redistribute action to resolve the errors. You can also check AIF messages to find out more information. You can use the Message Dashboard or Message Monitoring Overview app to check AIF messages.

> **Note**
>
> You can view the messages in the Message Dashboard or Message Monitoring Overview app only when you are assigned to the solution order recipient: (Namespace: **/CMSRV**, Recipient Name: **SOLO_RECEIVERS**).

Why can't I find a specific service organization in the value help of my project item, even though the same service organization is available for projects?

The service organization that is defined for projects must have the identical sales organization, distribution channel, and division that are also used for your project item in the solution order. If these attributes don't match, the system excludes the service organization from the value help. If you enter that service organization directly in your project item, a system message informs you that the service organization (project) doesn't match the sales organization.

Solution Business Analytics

You can use solution business analytics to make data-driven business decisions based on your sales and financial KPIs. You can make your decisions at the level of solution orders or selected items.

Solution Orders Overview

App ID: F7130

With this app, you as a sales manager or a solution order specialist can obtain a graphical overview of key solution order data and gain insights. You can display detailed information that helps you examine and analyze data across various dimensions.

Key Features

You can use this app to do the following:

- Display solution order data using charts and lists
- Filter results by sales organization, distribution channel, division, sales office, and sales group
- Specify a preferred currency to display results
- Navigate to related apps to drill down into the data
- Create personalized views and share them with others

Cards

Card	Description
Solution Orders by Sold-To Party	• Displays the top five solution orders by sold-to party. The result displayed is sorted in descending order by solution order net value. • You can navigate to the Manage Solution Orders app to obtain additional information.
Solution Orders by Product	• Displays the top five solution orders by product. The result displayed is sorted in descending order by solution order net value. • You can navigate to the Manage Solution Orders app to obtain additional information.
Solution Order List	• Displays the top ten solution orders by net value. The result displayed is sorted in descending order by net value. • You can navigate to the Manage Solution Orders app to obtain additional information.

→ **Tip**

If you want only specific cards to be displayed in Solution Orders Overview, you can hide the cards that you don't need using the Manage Cards setting in the user actions menu. Your personalized setup stays until you change it again.

Default Filter Values

If you want the system to display the data for a specific sold-to party and/or sales organization in a specific display currency every time you start the app, you can set default values for the filters Sold-To Party, Sales Organization, and Display Currency under Settings > Default Values in the user actions menu.

i **Note**

If you don't maintain a default value for Display Currency, the system automatically inserts EUR because this parameter is mandatory.

i **Note**

If you set default values for sold-to party and/or sales organization, you also need to set a default value for display currency. Otherwise, the Display Currency field is not filled and therefore no data is displayed in Solution Orders Overview when you start the app.

Supported Device Types

- Desktop
- Tablet

Solution Order Profitability

With this app, you as a sales manager can analyze data on the net value of solution orders based on various criteria (that is, key figures), such as recognized revenue, recognized cost, recognized margin, and many more.

For example, you can see whether your recognized margin is low for a single solution order or multiple solution orders for a selected time period.

In user settings, you can define the user default values which get populated as a story filter. These story filters are applied to all the pages.

The app provides predefined filters for each page, which you can adjust, and further freely definable filters within the charts. Each page contains charts in which you can analyze various key figures by sold-to party, item life cycle status, product, country/region, region, and time periods. If you want to filter the report with respect to profit center heirarchy, see Solution Order Margins app. To use this app you need a sales accountant role.

User time zone setting is a prerequisite for using the Solution Order Profitability dashboard. Once you set your time zone the **Creation Date** and **Filters** are reflected as per the settings maintained.

The dashboard provides you with the following 3 pages to analyze the solution orders:

Page	Description
Overview	Provides you an overview of your solution order business with respect to various criteria/key figures.
Solution order list	In this page you can view list of solution orders and number of solution orders by different life cycle statuses.
Profitability	You can view various financial key figures for a single or multiple solution orders.

Each page is explained in detail below.

The **Overview** page enables you to see at a glance how your solution orders have developed over time in terms of the following criteria:

- Net value of solution orders
- Recognized revenue
- Recognized cost
- Recognized margin
- Margin in percent

The following charts are provided:

- **Net Value of Solution Orders by Country/Region and Region**

  You can switch between country/region and region. The result displayed is sorted in descending order by net value. You can view these key figures for the top 5 country/region and region.

- **Net Value of Solution Orders by Sold-To Party**

  You can view these key figures for the top 5 sold-to parties. The result displayed is sorted in descending order by net value.

- **Net Value of Solution Orders by Item Life Cycle Status**

  You can display the information based on the life cycle statuses of solution order items. The life cycle statuses displayed are - open, in process, completed, and released.

- **Net Value of Solution Orders by Product**

You can view these key figures for the top 5 products. The result displayed is sorted in descending order by net value.

- Net value of Solution Order Items by Time Period

  You can switch between the calendar month, calendar quarter, and calendar year as time periods. The time period in this chart is based on the creation date of the solution order item.

The Explorer Available feature provides you with various drill-down options for a chart. You can add multiple dimensions and view the required information in the charts. Additionally, you can change the visualization based on the available chart types.

The Solution Order List page enables you to see at a glance:

- No. of Solution Orders in status Open/ In Process
- No. of Released Solution Orders
- No. of Completed Solution Orders

A solution order item follows the following life cycle statuses:

Open > In process > Released > Completed.

Overview of Life Cycle Statuses

The following table provides an overview of the life cycle statuses that solution order items have. The description also applies to the header statuses. You can't change the header status because the system automatically updates it according to the item statuses.

Life Cycle Status	Description
Open	This is the default status that an item takes after it's created. It indicates that you're free to change the item.
In process	You set an item to this status when you start processing it. Any item in the solution order is set to the in process status, the header is automatically set to in process as well. Note that you can't set a released or completed item back to the in process status.
Released	This status indicates that the item has been finalized and no further changes are required. When this status is set, the item is ready for the follow-up process and the system automatically triggers a process transferring data and generating follow-up transactions. If any error occurs in the back-end system, the status is rolled back to in process.
Completed	Use this status when you want to end the process of an item, or when a released item fulfills specific conditions so that the system ends its process. The status in the solution order header is automatically set to completed when all the items in the solution order are completed.

In this page you can also view the list of solution orders. The list also displays the information like - solution order, solution order description, sold-to party, solution order status, creation date, net value of solution orders, recognized revenue, recognized cost, and recognized margin for each solution order.

The Profitability page enables you to see at a glance how your solution orders have developed over time in terms of the following criteria:

- Recognized margin

- Margin in percent
- Recognized revenue
- Recognized cost
- Net value of solution orders

You can analyze a single solution order or multiple solution orders.

The following charts are provided:

- **Recognized Revenue, Recognized Cost, and Recognized Margin by Time Period**

  You can switch between the calendar month, calendar quarter, and calendar year as time periods. The time period in this chart is based on posting date of the solution order item.

- **Recognized Revenue, Recognized Cost, and Recognized Margin by Product**

  You can view these key figures for the top 5 products. You can also select specific products.

  The result displayed is based on recognized revenue and recognized cost and is sorted in descending order by revenue.

  You can also view the result for the profit margin as a variance.

- **Recognized Revenue of Solution Order Items by Time Period**

  You can switch between the calendar month, calendar quarter, and calendar year as time periods. The time period in this chart is based on posting date of the solution order item.

This page also provides the list of solution order item details. The list displays information like solution order, solution order item, solution order item description, sold-to party, product, net value of solution orders, recognized revenue, recognized cost, and recognized margin for each solution order item.

The app uses the following key figures:

Key Figures

Key Figure	Description
Net Value of Solution Orders	Total net value of the solution orders that have been created.
Recognized Revenue	Recognized revenue from the solution order items which are in the life cycle status released. The recognized revenue is the revenue that is posted to Financial Accounting (FI) when the sales of products or services are fulfilled.
Recognized Cost	Recognized cost of the solution order items which are in the life cycle status released. Recognized cost is the cost that is posted to Financial Accounting (FI) and matched with the corresponding recognized revenue in the same time period.
Recognized Margin	The difference between recognized revenue and recognized costs of the solution order items which are in the life cycle status released.
Margin in Percent	Margin in percent is calculated based on recognized revenue and recognized margin. Margin in Percent = (Recognized Margin / Recognized Revenue) *100
No. of Solution Orders in status Open/ In Process	Solution orders with the life cycle status open or in process.

Key Figure	Description
No. of Released Solution Orders	Solution orders with the life cycle status released.
No. of Completed Solution Orders	Solution orders with the life cycle status completed.

Supported Device Types

- Desktop

Related Links:

- SAP Analytics Cloud Stories
- Solution Order Margins

Journal Entries for Solution Orders

App ID: W0196

With this app, you can use a flexible combination of dimensions to analyze journal entries for solution orders.

For example, you as a sales manager can analyze data on the net value of solution orders based on various criteria (that is, key figures), such as recognized revenue, recognized cost, recognized margin, and many more.

Key Features

You can use this app to do the following:

- Analyze key performance indicators related to solution orders in multidimensional reports using the following measures:

Measure	Description
Recognized Revenue	Recognized revenue from the solution order items which are in the life cycle status released. The recognized revenue is the revenue that is posted to Financial Accounting (FI) when the sales of products or services are fulfilled.
Recognized Cost	Recognized cost of the solution order items which are in the life cycle status released. Recognized cost is the cost that is posted to Financial Accounting (FI) and matched with the corresponding recognized revenue in the same time period.
Recognized Margin	The difference between recognized revenue and recognized costs of the solution order items which are in the life cycle status released.
Recognized Revenue of Sales Items	The recognized revenue of sales item is revenue that is posted to Financial Accounting (FI) when the sales of sales items are fulfilled.
Recognized Revenue of Service Contract Items	The recognized revenue of service contract items is revenue that is posted to Financial Accounting (FI) when the sales of service contract items are fulfilled.

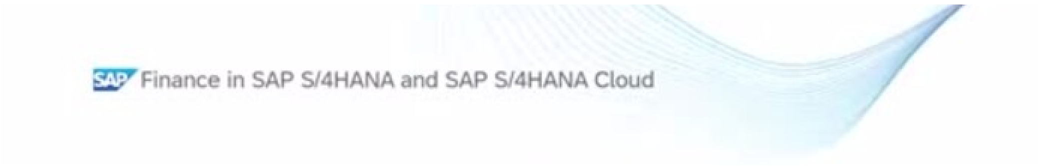
Measure	Description
Recognized Revenue of Service Expense Items	The recognized revenue of service expense items is revenue that is posted to Financial Accounting (FI) when the sales of service expense items are fulfilled.
Recognized Revenue of Subscription Billing Items	The recognized revenue of subscription billing items is revenue that is posted to Financial Accounting (FI) when the sales of subscription billing items are fulfilled.
Recognized Revenue of Service Part Items	The recognized revenue of service part items is revenue that is posted to Financial Accounting (FI) when the sales of service part items are fulfilled.
Recognized Revenue of Service Items	The recognized revenue of service items is revenue that is posted to Financial Accounting (FI) when the sales of service items are fulfilled.
Recognized Revenue of Project Items	The recognized revenue of project items is revenue that is posted to Financial Accounting (FI) when the sales of project items are fulfilled.

- Filter the items according to various criteria, such as sold-to party, sales organization, solution order, solution order item status, sales office, posting date, and so on
- Sort and display the report data as a table or a chart
- Export the report as an Excel or a PDF
- Navigate to the following apps to further analyze the solution order data:
    - Solution Order Items - Flexible Analysis
    - Solution Order Profitability
    - Solution Order Progress
    - Solution Orders - Flexible Analysis

For more information about how to analyze your data, see Multidimensional Data Grid Apps.

Working with Analytical Reports (English Only)

Watch the video to learn more about the general functions offered by this app.



Open this video in a new window

Supported Device Types

- Desktop
- Tablet

Related Information

Multidimensional Data Grid Apps

Solution Orders - Flexible Analysis

App ID: W0197

With this app, you can use a flexible combination of dimensions to analyze financial accounting data for solution orders.

For example, you can see the total number of solution orders with the life cycle status open or in process.

Key Features

You can use this app to do the following:

- Analyze key performance indicators related to solution orders in multidimensional reports using the following measures:

Measure	Description
Net Value of Solution Orders	Total net value of the solution orders that have been created.
No. of Solution Orders	Total number of the solution orders that have been created.
No. of Solution Orders in status Open/ In Process	Solution orders with the life cycle status open or in process.
No. of Released Solution Orders	Solution orders with the life cycle status released.
No. of Completed Solution Orders	Solution orders with the life cycle status completed.

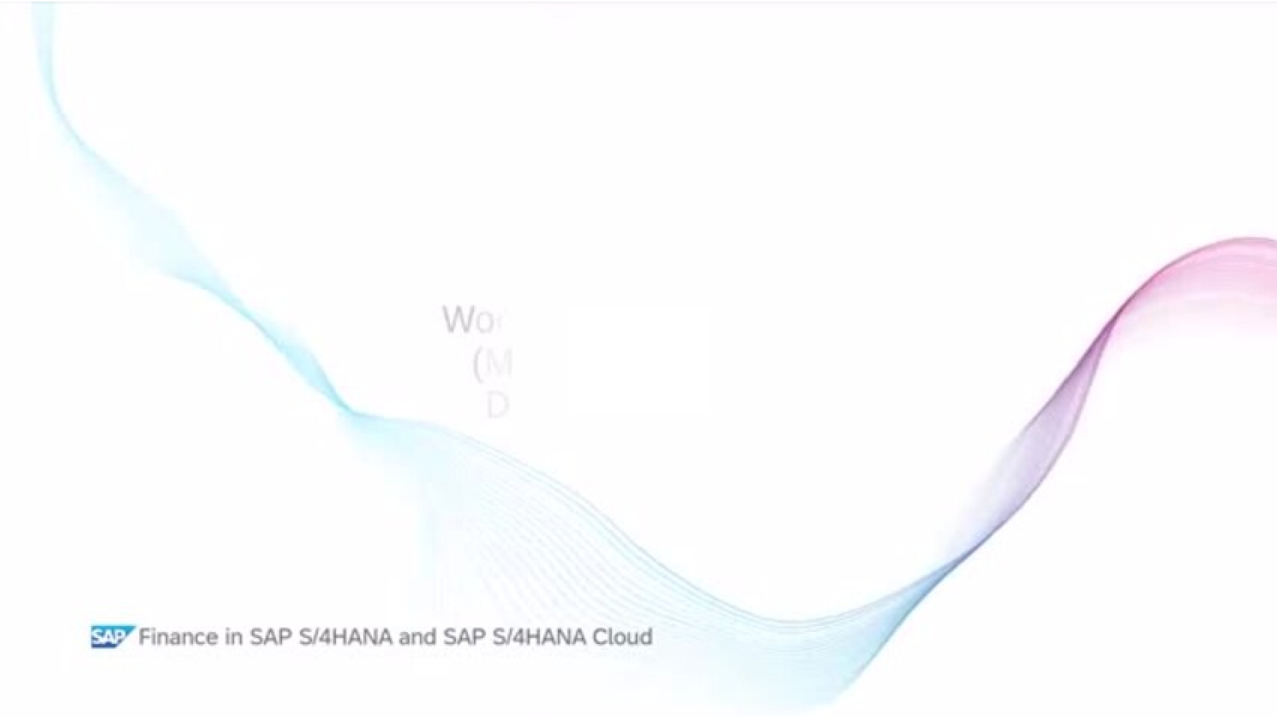
- Filter the items according to various criteria, such as sold-to party, sales organization, currency, sales office, posting date, and so on
- Sort and display the report data as a table or a chart
- Export the report as an Excel or a PDF
- Navigate to the following apps to further analyze the selected solution order data:
  - **Journal Entries for Solution Orders - Flexible Analysis**
  - **Solution Order Items - Flexible Analysis**

- Solution Order Profitability
- Solution Order Progress

For more information about how to analyze your data, see Multidimensional Data Grid Apps.

Working with Analytical Reports (English Only)

Watch the video to learn more about the general functions offered by this app.



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Supported Device Types

- Desktop
- Tablet

Related Information

Multidimensional Data Grid Apps

Solution Order Items - Flexible Analysis

App ID: W0195

With this app, you can use a flexible combination of dimensions to analyze financial accounting data for solution order items.

For example, you can see whether your recognized margin is low for a single solution order or multiple solution orders for a selected time period.

Key Features

You can use this app to do the following:

- Analyze key performance indicators related to solution order items in multidimensional reports using the following measures:

Measure	Description
Recognized Revenue	Recognized revenue from the solution order items which are in the life cycle status released. The recognized revenue is the revenue that is posted to Financial Accounting (FI) when the sales of products or services are fulfilled.
Recognized Cost	Recognized cost of the solution order items which are in the life cycle status released. Recognized cost is the cost that is posted to Financial Accounting (FI) and matched with the corresponding recognized revenue in the same time period.
Recognized Margin	The difference between recognized revenue and recognized costs of the solution order items which are in the life cycle status released.
Net Value of Solution Orders	Total net value of the solution orders that have been created.
Margin in Percent	Margin in percent is calculated based on recognized revenue and recognized margin. Margin in Percent = (Recognized Margin / Recognized Revenue) *100
Net Value of Sales Items	Total net value of the sales items that have been created.
Net Value of Service Contract Items	Total net value of the service contract items that have been created.
Net Value of Service Expense Items	Total net value of the service expense items that have been created.
Net Value of Subscription Billing Items	Total net value of the subscription billing items that have been created.
Net Value of Service Part Items	Total net value of the service part items that have been created.
Net Value of Service Items	Total net value of the service items that have been created.
Net Value of Project Items	Total net value of the project items that have been created.

- Filter the items according to various criteria, such as sold-to party, sales organization, item life cycle status, sales group, distribution channel, posting date, and so on
- Sort and display the report data as a table or a chart
- Export the report as an Excel or a PDF
- Navigate to the following apps to further analyze the selected solution order data:
    - Journal Entries for Solution Orders - Flexible Analysis
    - Solution Order Profitability
    - Solution Order Progress
    - Solution Orders - Flexible Analysis

For more information about how to analyze your data, see Multidimensional Data Grid Apps.

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