

SAP Functions in Detail
mySAP Supply Chain Management



REPLENISHMENT **PROCESSES ON THE** **SAP® INVENTORY** **COLLABORATION HUB** **(SAP ICH)**

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INTRODUCTION TO THE SAP® INVENTORY COLLABORATION HUB

As traditional supply chains evolve into supply networks, collaboration becomes increasingly critical. For manufacturers and their suppliers, successful collaboration starts with making sure that everyone has clear visibility into inventory information, so suppliers know what their customers need and when they need it. Often, however, that visibility is not easy to achieve. Supply networks are typically complex and involve a wide range of suppliers, making it difficult to share timely inventory information. The SAP® Inventory Collaboration Hub (SAP ICH) is an Internet-based solution within mySAP™ Supply Chain Management (mySAP SCM) that is designed to help you enhance visibility, collaborate more effectively with suppliers, and increase the overall speed, accuracy, and adaptiveness of your supply network. With SAP ICH, you and your supply network partners share inventory information easily and seamlessly.

BENEFITS OF THE SAP INVENTORY COLLABORATION HUB

SAP ICH brings to your replenishment what you may want most: **visibility** and **ease of use**. Furthermore, by getting a better overview of your replenishment processes with easy-to-use software you will even benefit from lower cost of ownership.

SAP ICH is a Web-based solution connecting you and your business partners on a shared, easy-to-use platform. It serves as a single point of entry for your company and your business partners, whether you are in the customer's or the supplier's role.

Large-size enterprises having an elaborate software system in place can profit from SAP ICH just as well as smaller companies with a less sophisticated environment because Internet access with a browser is all you need to get started.

Whether some partners wish to work with just the handy supplier-managed inventory (SMI) process, others with only release processing, and yet others with both processes – SAP ICH helps you get the “big picture” of all your processes.

SAP ICH is a platform for message-based collaboration. For example, every time a new message arrives, the partners are updated on the situation. You work with electronic messages only, and since all messages are brought to the same format, the data quality is improved and extra work for completion and correction is reduced to a minimum.

Establishing SAP ICH offers advantages to all business partners, to customers, as well as to suppliers. Benefits per situation are listed below.

If your company is in the **customer's role**, advantages of SAP ICH include:

- You can more easily delegate the responsibility for your inventory to a business partner and thus profit from the business partner's greater planning expertise.
- You get the overview of all your suppliers' routine activities at a glance on your customer-specific overview, whenever you wish.
- You can rely on notifications automatically issued by the system to inform you about critical situations in real time, so regular monitoring is not required.
- Your company's stock is constantly replenished without effort for procurement.
- You can reduce the risk of material shortage on one hand – and excessive holding costs on the other.
- Your production runs smoothly with minimum risk of bottlenecks or production downtimes caused by material shortage.
- You own a cost-saving solution.

If you are in the **supplier's role**, advantages of SAP ICH include:

- You can take over replenishment for your customers more easily, because SAP ICH assists you in monitoring all products you are responsible for at whatever location “at a glance” on the supplier-specific overview. No sophisticated software environment is needed.
- SAP ICH gives you visibility into your customers' inventory levels and demands, thus helping you to enhance your planning and scheduling of shipments.
- SAP ICH supports you with automatic alerts and notifications that help you to notice critical situations in advance and give you sufficient time to proactively avoid problems.

OVERVIEW OF BUSINESS SCENARIOS FOR REPLENISHMENT

SAP SCM 4.0, which is part of mySAP SCM, offers the following business scenarios for replenishment:

- Supplier-managed inventory (SMI) – An easy-to-use, stand-alone process for constant replenishment without effort for purchasing
- Release processing – A way to make your releases from long-term scheduling agreements visible on the same platform as your SMI processes

SCENARIO 1: SUPPLIER-MANAGED INVENTORY (SMI)

SMI is a new scenario within the mySAP SCM solution. It is designed for suppliers who are responsible for the monitoring and replenishment of stocks at a business partner's location (such as a warehouse or plant). The main characteristic of this process is that a company (customer) hands over the replenishment task to an external business partner that is usually the supplier of a product required for the customer's production.

SMI is relevant for business situations where a company wishes to delegate the responsibility for replenishment to a business partner in order to save effort, or to rely on the business partner's greater business experience with the handling of the replenishment process.

SAP ICH serves as a jointly used platform for all business partners involved in the process (such as a customer and any number of its first-, second-, and third-tier suppliers or more), and allows the partner that has to fulfill the replenishment task visibility into its customer's inventory data. The customer periodically transmits current inventory data and gross demands to the SAP ICH system. SAP ICH keeps the records of the minimum and maximum inventory level for each product and location combination that was officially agreed upon between both business partners (such as in a blanket PO or a long-term contract).

By regularly checking the inventory status on the SAP ICH Inventory Monitor, the supplier can always keep the inventory level within the agreed range between the minimum and the maximum level.

SAP ICH also supports the supplier with alerts about any exceptional situation on the Alert Monitor. This guarantees that critical understock situations – or worse, running out of stock – can be avoided. The risk of bottlenecks or production downtimes is significantly reduced.

Additionally, users can define individual settings for automatic notification about any exceptional situation. This means an employee does not even have to check the Inventory Monitor regularly. The employee is automatically notified about alerts by an e-mail or a fax, and only then needs to start the Inventory Monitor for clearing the situation.

The business process also includes a simulation function, which simplifies the replenishment task. Before publishing a goods issue (GI) and an advanced shipping notification (ASN) on the Inventory Monitor, the person responsible can simulate the step and will launch the activity only after having calculated the adequate quantity.

Working with SMI on SAP ICH allows companies to save the time and effort of standard procurement with purchase requisition and purchase order creation for each requirement. Document transmission across company boundaries is no longer an issue.

Example: SMI Scenario

Here is an example to better illustrate the SMI scenario. Your company is part of the automotive supply network. You are a first-tier supplier producing brake systems. Your second-tier supplier produces electronic parts for antilock-braking systems (ABS). Your company wishes to delegate the replenishment of electronic parts at different production plants to your supplier (the second tier).

The supplier takes over the responsibility for the inventory at your location. You and your business partner agree on minimum and maximum stock levels for the product at that location. The supplier monitors the agreed-upon inventory level on SAP ICH, takes care of timely replenishment, and informs you about the next shipments, thus ensuring the smooth flow of your production without downtimes.

Both business partners can check the inventory level of each material on SAP ICH whenever they wish. SAP ICH creates alerts informing them about any critical situation, so that they have the possibility to react to it on time. Employees can define, by using individual settings, what alerts they wish to be automatically informed about by a notification such as an e-mail. This especially helps employees who do not work with SAP ICH on a daily basis.

Keyfigures	Initial	28.02.2003	01.03.2003	02.03.2003	03.03.2003	04.03.2003	05.03.2003	06.03.2003	07.03.2003
Demand			100,00	100,00	100,00	100,00	100,00	100,00	100,00
Planned receipts		80,00			300,00	100,00	100,00		
In transit									
Projected stock	100,00	20,00	-60,00	-160,00	20,00	20,00	20,00	-60,00	
Max. proposal	0,00	80,00	180,00	280,00	380,00	180,00	180,00	180,00	
Min. proposal	0,00		100,00	200,00	300,00	100,00	100,00	100,00	
Minimum stock	20,00	20,00	20,00	20,00	20,00	20,00	20,00	20,00	
Maximum stock	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	
Days of coverage	1,60	0,20			0,20	0,20	0,20		

Figure 1: Inventory Monitor

SCENARIO 2: RELEASE PROCESSING

Release processing is a new scenario within the mySAP SCM solution that simplifies replenishment of material stocks at a company's site. Companies that are using SAP ICH because they wish to hand over the replenishment task for certain materials to external business partners by supplier-managed inventory, often wish to handle their replenishment by releases from delivery-scheduling agreements on SAP ICH, as well.

The reason is that in supply networks with multiple partners involved, the desire is to run both processes on the same platform. Establishing SAP ICH as the common platform for all business partners involved (such as the customer, manufacturer, and buyer and any number of first-, second-, or x-tier suppliers), allows the partner who has to fulfill the replenishment task visibility into its customer's inventory data. All replenishment processes can be centrally monitored at the same site.

In contrast to the SMI process, where the supplier initiates the replenishment according to the inventory levels and demands published on SAP ICH, replenishment with release processing is triggered by the customer. The customer periodically transmits releases from long-term scheduling agreements, which are published on the SAP ICH Release Overview. The business partner supplies the required products according to the releases. Both partners can monitor their activities on SAP ICH at any time.

As with SMI, SAP ICH supports the partners with alerts on the Alert Monitor. However, in release processing, the significant alert is the appearance of a new release. Users can define individual settings for automatic notification. This means an employee does not even have to check the Release Overview regularly. The employee is notified by e-mail or a fax about a new release, and only then needs to start the Release Overview to carry out the task.

The supplier ships the required products, and from the delivery schedule lines in the release, creates an ASN to inform the customer about the shipment. If the customer wishes, he or she can send a message to inform the supplier that the goods receipt has been posted.

Example: Release Processing Scenario

Here is an example to better illustrate the release processing scenario. Your company is part of the automotive supply network, using SAP ICH for replenishment of different products at various locations. You are a first-tier supplier producing brake systems. Your second-tier supplier produces electronic parts for ABS systems. Your company wishes to have the second-tier supplier replenish the electronic parts at several production plants. Therefore, you negotiated a long-term scheduling agreement with your supplier. The supplier replenishes the inventory at your location according to the releases you periodically transmit to him/her from SAP ICH. The supplier takes care of timely replenishment and informs you about the next shipments, thus ensuring the smooth flow of your production without downtimes.

SYSTEM LANDSCAPE

SAP ICH creates alerts when a new release is transmitted. With individual settings, employees can define that they wish to be automatically informed about a new release with a notification, for example via an e-mail, so that they can react to it on time. This especially helps employees who do not work with SAP ICH on a regular basis.

Additionally, you have established the SMI process in SAP ICH with suppliers of C-materials (such as nuts, bolts, and so on). So *all* your replenishment processes can be monitored on the same platform.

SAP SCM 4.0 offers SAP ICH as a stand-alone solution. The user interface (UI) is built with SAP Business Server Page (BSP) technology (for example, the ABAP code is converted directly into HTML code for browser access). BSP is part of the SAP Web Application Server (SAP Web AS) 6.20. Therefore no separate UI layer, such as an Internet transaction server (ITS) or Java-based server is necessary. This keeps the system landscape easier and less expensive to maintain.

As the business partner who carries out the replenishment task, you can access the SAP ICH hosted by your business partner using your Internet access and a browser, which is the only requirement. It is possible to download releases from SAP ICH, for example, if you wish to use them in office software like Microsoft Excel.

As the business partner who hosts SAP ICH, you only have to implement SAP SCM 4.0. You can operate it on any enterprise resource planning (ERP) system (such as SAP R/3® or others), and with or without an SAP Advanced Planning and Optimization (SAP APO) system.

The solution uses SAP SCM 4.0 as its application basis and SAP Web AS 6.20 as its technical basis. The master data resides in SAP APO. Figure 2 illustrates the architecture of SAP SCM 4.0.

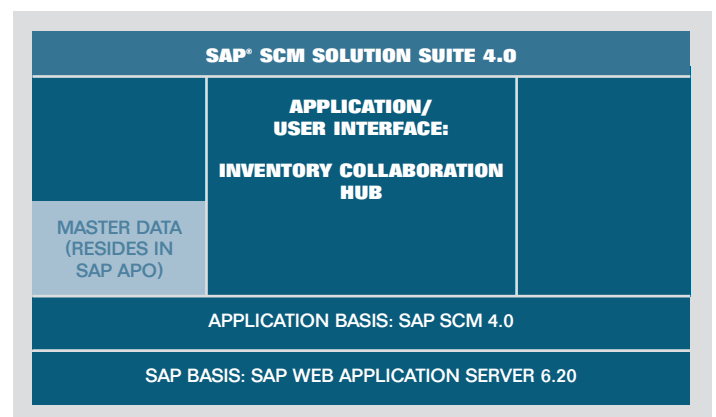


Figure 2: SAP SCM 4.0 Architecture

FEATURES OFFERED BY SAP ICH

The following paragraphs give you an overview of the features of SAP ICH.

MAPPING YOUR BUSINESS LANDSCAPE WITH BUSINESS PARTNER CONCEPT FOR COMPANIES, USERS, AND LOCATIONS

Each business partner (such as the customer's or supplier's company) involved in a business process on SAP ICH is maintained as a "business partner" in the underlying SAP SCM basis system.

In the system, each employee is represented as a "business partner" and the person's user has to be assigned to the company to which he or she belongs. For each employee a user has to be created by the company that hosts SAP ICH (this is the customer). You can delegate this task to the suppliers when you work with SAP User Management 3.0. Then you will only have to create one super user with administrator rights per supplier's company. This user can then easily create any number of operative users for employees. A company's plants or distribution centers are represented as "locations" and are assigned to the "business partner." Because the employee's users are assigned to "business partners" (which are companies), they are automatically assigned to locations. A user of supplier's company 1 will therefore only be able to view data that is relevant for his or her company and the locations assigned to that company; hence, authorization is implicit.

The assignment and administration of business partners, users, and locations are currently offered as SAP graphical user interface (GUI) services.

MASTER DATA MANAGEMENT

In order to organize replenishment on SAP ICH you have to create the following master data:

- A business partner (of type organization) for each company involved (such as suppliers and customers)
- A business partner (of type person) for each employee of the respective company (an SAP SCM user and Internet user)
- Product masters for the materials to be replenished
- A location for each plant or distribution center of the companies involved
- A transportation lane to link the start location (for example, the supplier) and destination location (such as the customer) for the shipment of a product

Currently, the maintenance of that master data is offered as an SAP GUI service. Mass uploads, such as for an initial load can be implemented specifically per project using standard SAP interfaces (BAPI®s).

PERSONAL SETTINGS FOR YOUR SAP ICH

For the following data, every user can define individual settings to personalize his or her SAP ICH:

- Master data
- Time buckets profile
- Personal selections
- Alert notification

Master Data

Once the SCM master data is created, you can maintain it on the SAP ICH Web screens:

- Partner-specific location number and description
- Partner-specific product number, description, and unit of measure
- Additional SMI-specific master data:
 - Minimum and maximum stock level
 - Minimum and maximum days' supply

Time Buckets Profile

Users can define the display of their SMI monitor individually, with a so-called time buckets profile. Depending on how you wish to work, you can define the length of the time axis to be displayed as rather short-term, for the next few days only. Or rather long-term, for example, for the next two months to come (“telescoping”). Furthermore you can define the partition of the time axis. For example, for a time axis of one month, you may wish to display the first two weeks in days for a closer view, and the third and fourth week in weeks for an overview.

Individual Selections

On a special screen for selection assignment, a system administrator or super user can define individual scopes of data for various users belonging to different companies. For each user the selection brings up the data he or she is usually most interested in. When opening the application, these predefined selections will get users to their scope of interest in a minute – per default, without typing in ranges of locations or products every time they access the system.

For example, a super user might specify a selection, “all products for customer Bradley” for a certain user, and, “all products for customer Baker” for another. When starting the application, the system offers the relevant selection.

Assumed, user Smith is in charge of products A1 to B12, then a specific selection for all the products in that interval is created for Smith’s alert monitor to present that data. User Johnson is responsible for all products to be replenished by SMI at location Yorktown, so in the Inventory Overview Johnson has an extra selection to have the required data at hand. Another user is responsible for shipping to location Danbury; therefore, his or her due list and ASN Overview comes up with that selection.

Companies may choose whether they prefer to establish central maintenance and assignment of selections to users, or to decentralize the assignment so that users can create selections of their own for each working area of SAP ICH.

Alert Notification

In the alert notification profile, each user can define which alerts he or she wishes to be notified, for example by an e-mail. For example, user A may wish to be automatically informed only about critical out-of-stock situations of a certain product at a specific location, occurring in the next few days. User B may wish to be notified a much longer time ahead about possible understock situations.

SMI INVENTORY MONITOR – YOUR REPLENISHMENT SITUATION AT A GLANCE

SAP ICH offers a specific view for customers and suppliers. In the following sections, the features for both business partners are presented, though focusing more on the supplier’s perspective, since the customer will usually not wish to monitor the processes on SAP ICH permanently. Once the replenishment processes are established, customers will access SAP ICH only when notified about an exception.

Inventory Monitor Overview

The **inventory monitor overview** displays the status of your products per location to be replenished. Color coding facilitates quick evaluation of the stock situation. You get the relevant product and partner information at a glance, and the current replenishment status is represented on a time axis. The length of the time axis and its partition into days or weeks can be defined for each product by the individual user.

Depending on your personal settings, the stock situation could be represented as follows:

- For today and tomorrow the stock situation is in the range between minimum and maximum stock level = color green
- In the following days the situation needs attention, because the stock quantity drops under the minimum stock level = color orange
- If no shipment is planned by then, the situation becomes critical, because you will run out of stock in the following days = color red

Inventory Monitor Details

The **inventory monitor details** represent the following data of a single product at a specific location in a grid:

- **Stock on hand** – Customer’s current stock level, which is updated periodically from the customer’s system
- **Demand** – Requirements and prognosis of future demand, which is updated periodically from the customer’s system
- **Planned receipts** – The supplier’s replenishment plan, which is entered manually
- **Stock in transit** – Automatically updated by the system after the creation and transmission of an ASN
- **Projected stock** – The stock calculated by the system as follows, starting with the column “initial,” which aggregates the data from the past (before today):
 - “Initial” value + stock on hand + planned receipts + stock in transit - demand = projected stock
- **Minimum and maximum proposal** – Figures proposed by the system to help the user enter the exact quantity to replenish the stock up to the agreed minimum or maximum level
- **Days’ supply** – Calculated by the system, indicates for how many days the projected stock of a specific column will last, taking into account the current demand and supply figures. (See Table 1).

	Initial	Today	Day						
			1	2	3	4	5	6	7
Demand		10	10	10	10	20	10	20	30
Projected stock	48	38	28	18	8	60*	40	30	0
Days’ supply		3.8	2.8	1.8	0.8	3.0	2.0	1.0	0

Table 1: An Example of Days’ Supply

The system indicates that your projected stock of 38 pieces will last for 3.8 days from today onwards.

(* Moving along the time axis “days’ supply,” which is calculated by the system, takes into account the *continuously changing* values resulting from new demands and replenishment activities, such as new goods receipts, new stock in transit, and new planned

receipts. The figures for projected stock and days’ supply of day 4 may therefore be different from what you might first expect. Having a quantity of planned receipts on day 4 that increases the projected stock influences the days’ supply shown from day 4 onwards, accordingly.)

PLANNING MADE EASY WITH SIMULATION

As a supplier, before you decide on your next shipments to a customer, you can enter quantities to be shipped in the field entitled “planned receipts” for simulation only. The date of the planned receipt is the date on which your shipment is scheduled to arrive at the customer’s location (goods receipt). After having decided on the adequate quantity to be shipped, you can save the data. The quantity is then taken over into the system’s calculation of the projected stock. Furthermore, planned receipts are used for proposal of dates and quantities in the delivery. From the detail screen you can also proceed directly to ASN creation. After you have created an ASN, it is published in SAP ICH and sent to the customer.

ADVANCED SHIPPING NOTIFICATIONS (ASN) – KEY INFORMATION AT HAND

Advanced shipping notifications (ASN) are key information in a supply network. With ASNs, suppliers inform their customers about packaging and shipping they have just executed. By monitoring ASNs, the customer can see what deliveries can be expected to arrive in the near future. The quantity announced is shown as stock in transit in SAP ICH.

SAP ICH offers you the ASN overview for both customer and supplier, and specifically for the supplier’s activities, a due list and a menu for direct manual maintenance of ASNs without reference data is available.

ASN Overview and Details

The overview shows all your ASNs of a period in the different statuses, from draft to done (for example, goods receipt posted at the customer). The overview allows you to quickly check the status of your deliveries, and for the supplier, to flexibly

select ASNs based on diverse search criteria, such as searching by business partners or dates, reference numbers or products, and so on.

The main delivery statuses are:

- Draft (non-official, only for the supplier's planning purposes)
- Published (official, transmitted to the customer, represented as stock in transit)
- Cancelled
- GR (goods receipt posted)

Starting from the list, you can go to the details of an individual ASN and you can display, change, or copy ASNs (depending on your perspective as supplier or customer). In the details screen, you can display and maintain an individual ASN.

Due List – Quick and Easy Referencing

The due list is an instrument for the supplier that facilitates the creation of deliveries and ASNs. First, it shows all the shipments you have planned for the current period, for example, the shipments that are becoming “due.” Second, it allows you to easily create legally valid, official ASNs to the customer, based on either the data of your planned receipts or the data of ASNs having so far only the status of draft.

Direct Creation of ASNs – Without Reference Data

In this menu you can create an ASN directly, for example, without referencing existing draft deliveries or planned receipts. In that case you of course have to manually provide the following information:

- Ship-from location/ship-to location
- ASN number
- Estimated date of arrival

As soon as the delivery and ASN is published on SAP ICH, the system automatically creates an ASN and sends it to the customer. ASNs consist of a document header and one or several lines for different items. If desired, you can also provide information on transportation details, such as reference numbers, carrier, and total weight or volume in the delivery.

RELEASE PROCESSING

If business partners decide to visualize and process the releases from a long-term scheduling agreement (for example, in an SAP R/3 or SAP APO system) on SAP ICH, they will use release processing. The customer can profit from the special alert and notification functionality offered by SAP ICH, to ensure that releases are acknowledged and fulfilled on time by the supplier. If any irregularity occurs, the business partners will be notified in time to prevent replenishment risks to production.

The release overview is your starting point on SAP ICH. The overview displays the current releases processed on SAP ICH.

The most recent releases of a product by a certain customer can be selected based on general criteria such as partner and product, dates (document date and first due date of release schedule line items), and the release's status information.

Releases can be seen, printed, downloaded, and set to “acknowledged” in the release overview.

Releases can have the following statuses:

- Viewed (set to “in processing” by supplier)
- Acknowledged (supplier acknowledges having seen the customer's releases)
- Printed
- Downloaded

ALERTS AND NOTIFICATIONS – BRINGING CRITICAL SITUATIONS TO YOUR ATTENTION

SAP ICH offers you a valuable alerting and notification service for the different work areas. On the Alert Monitor, you can regularly check whether there are any alerts that need action. However, you do not have to constantly and closely monitor all your ongoing replenishment activities; rather, you can rely on the system to inform you in time – before an exceptional situation occurs. Once you have defined in your personal settings for which types of alert you wish to be notified (for example, when the stock level drops under the minimum value), SAP ICH will support you with automatic notifications with

e-mails to your inbox, whenever such a noteworthy or critical situation occurs. Thus you are assured that you'll always have sufficient time to react to any exception and can avoid severe supply network problems like running out of stock.

The following describes the predefined alert types of each application area.

Alerts for SMI

For the SMI process, the following alert types are offered:

- Projected stock: is out of stock
- Projected stock: is under minimum limit
- Projected stock: is above maximum limit

Alerts for Release Processing

For release processing, the following alert types are offered:

- New release received on platform – Information for the supplier that a new release has been issued by the customer
- Release acknowledged – Information for the customer that the supplier has viewed the release. (If the supplier does not acknowledge an incoming release within three days, an alert can be triggered to inform the customer that the update has not yet been acknowledged.)

Alerts for ASN Processing

For working with ASNs, the following alert types are offered:

- Goods receipt quantity deviates from ASN quantity
- Past due ASN – Alert created periodically, if an ASN on SAP ICH is not set to “goods receipt posted” within a certain time

Alerts for Inbound Messages

These messages help the system administrator to solve technical problems, if ever an inbound message cannot be processed correctly by the system. For inbound messages the following alert types are offered:

- Master data check – Triggered if the message contains unexpected information that does not conform to the data defined as master data
- Message validation – Triggered, if the message structure violates the XML format

COOPERATION BETWEEN BUSINESS PARTNERS IN SAP ICH: MESSAGE-BASED WITH SAP EXCHANGE INFRASTRUCTURE

SMI and release processing in SAP ICH are stand-alone, message-based business processes. This means that whatever you and your business partners' current software environment is, you can start working with SAP ICH right away.

SAP's platform for process integration among business partners is SAP Exchange Infrastructure (SAP XI), which is based on the exchange of XML messages. It transforms messages of any format from any back-end system to SAP XML and maps and routes them correctly between the start and destination location.

Tightly integrated with SAP applications and open to non-SAP components, SAP XI provides you with a technical infrastructure and delivers business-process and integration knowledge with SAP's predefined integration scenarios. What is more, SAP XI offers an integrated toolset to help you build your own integration scenarios by defining the appropriate messaging interfaces, mapping and routing rules needed to connect application components or to create collaborative processes involving various business partners. Figure 3 illustrates this process.

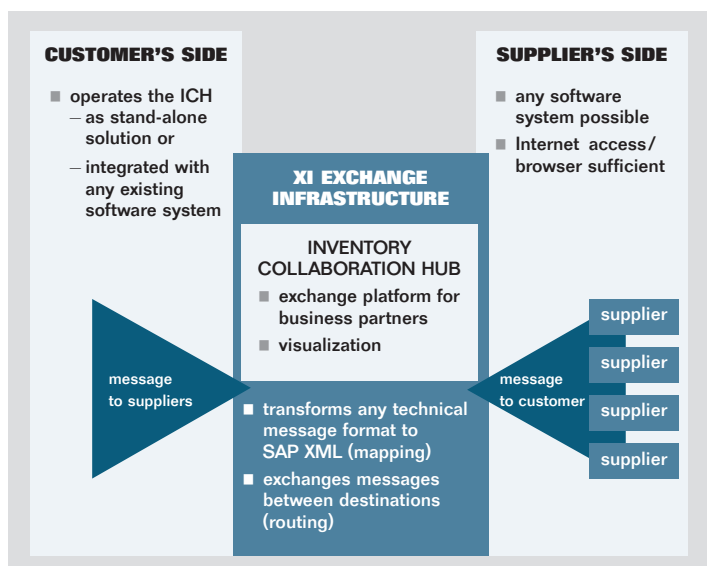


Figure 3: SAP Exchange Infrastructure with SAP ICH

SUMMARY

Messages for the SMI Process

For the SMI process, there are several message types. Inbound means that they come from any system to SAP ICH and outbound means that they leave SAP ICH. Message types include:

- **Demand data (inbound)** – Communicates customer's demand data to SAP ICH
- **Stock-on-hand data (inbound)** – Communicates customer's stock-on-hand data from the customer to the supplier
- **Goods receipt (inbound)** – Informs the supplier that the goods receipt is posted at the customer's system.
- **ASN (inbound)** – Communicates ASN data (for the customer) from the supplier's system to SAP ICH. It is necessary for suppliers who create ASNs to do so not directly on SAP ICH, but in a back-end system of their own.
- **ASN (outbound)** – Communicates the supplier's ASN data (for the customer) from SAP ICH to the customer.

Messages for Release Processing

For this business process there is only one message (inbound):

- **Delivery schedule notification** – Communicates scheduling agreement releases (SA releases) from a customer to a supplier.

If you are thinking about consolidating your various replenishment activities in collaboration with a number of different suppliers from a single site, if you need more visibility for you and your partners than you have today, and if you wish to do better planning with less time and money, then think of checking out the SAP Inventory Collaboration Hub.

With its new replenishment scenarios, SMI, and release processing, SAP ICH offers you reliable, up-to-date key figures on a central monitor at any time you require them. And what is best: With its Web-based scenarios you not only get all the information you need on one screen in improved design, SAP ICH will also notify you whenever a critical business situation needs your attention – so you may just forget about monitoring at all.

GLOSSARY

A

advanced shipping notification (ASN) – Informs the customer about the quantity of a product that the supplier has shipped, and the date and time of delivery at the customer's location.

The **ASN** can be created in the supplier's back-end system or directly on SAP ICH. From SAP ICH it is transmitted to the customer's back-end system. The ASN is displayed on SAP ICH, no matter where it is created. Usually, the quantities indicated in planned receipts (in the planning phase) are taken over as ASN quantities when the planning phase is finished and the product is shipped. With the quantity indicated in the ASN, SAP ICH updates the stock-in-transit quantity.

alert – Message generated by SAP ICH and published on the alert monitor, as soon as an exceptional situation occurs in the normal flow of replenishment. For example, the minimum stock level agreed between customer and supplier is violated. Depending on user-specific settings, an alert can trigger a notification by e-mail or fax.

B

buyer – In the relationship between two business partners in a supply network, the company that has another company take over the replenishment task for a product. This is often the partner who hosts SAP ICH to allow business partners visibility into the company's inventory and demand data.

This term is used in the automotive industry and other discrete industries. SAP uses the term *customer*.

Synonyms: Customer, manufacturer, and original equipment manufacturer (OEM).

C

customer – In the relationship between two business partners in a supply network, the company that has another company take over the replenishment task for a product. Often the partner who hosts SAP ICH to allow business partners visibility into the company's inventory and demand data.

SAP uses this general term; it includes the more industry-specifically used terms manufacturer, OEM, and buyer.

D

demand – Quantity of a product required for production or consumption at a location at a specified date. In the SMI process in SAP ICH, it is always a *gross* demand. The customer enters the gross demand in SAP ICH, not taking into account the stock on hand and the stock in transit announced by ASNs. SAP ICH supports the supplier in calculating the *net* demand from the given data.

In release processing on SAP ICH, it is always a *net* demand. The customer calculates the net demand and specifies it in releases from a delivery scheduling agreement, which is displayed in SAP ICH. The supplier ships according to the indicated quantity.

E

exception – A situation in the normal flow of the replenishment process that requires user interaction. For exceptions, SAP ICH generates alerts and – if desired – also notifications to directly inform the person responsible by e-mail or fax.

L

location – Identifies a distribution center, a warehouse, a plant, or an unloading point at a plant belonging to a business partner in a supply network. A location is the starting point or the destination for product shipments.

M

manufacturer – In the relationship between two business partners in a supply network, the company that has another company take over the replenishment task for a product. Often the partner who hosts SAP ICH to allow business partners visibility into the company's inventory and demand data.

This term is used in the automotive industry, the high-tech industry, and other discrete industries.

Synonyms: Original equipment manufacturer (OEM), buyer, and customer.

material – Physical product that can be manufactured or procured by a company for consumption/production or sale. Used in SAP R/3.

Synonym includes product.

SAP ICH uses the term product.

N

notification – Message sent by SAP ICH when an alert is generated. Depending on user-specific settings, the message can be in the form of an e-mail, SMS, or fax. It informs an employee that an exceptional situation requiring action has occurred in the replenishment process.

O

original equipment manufacturer (OEM) – In the automotive industry, this is a synonym for car manufacturer.

In the high-tech industry, a company manufacturing products that are built into another company's final product, such as electronic parts for PCs. This is often a synonym for supplier.

SAP uses the term *supplier*.

P

part – Physical product that can be manufactured or procured by a company for consumption/production or sale. Used in the automotive industry.

Synonyms: Material, product.

SAP ICH uses the term product.

planned receipt – Date at which a quantity of a product the supplier is planning to ship to the customer is scheduled to arrive at the customer's location (goods receipt). Planned receipts reflect the supplier's internal planning schedule; therefore, they serve for information purposes only and have nonofficial character.

Planned receipts are displayed in SAP ICH allowing the customer visibility into the supplier's shipment planning. As a rule, in the course of time, the supplier ships according to this planning data. The quantities actually being shipped are indicated in ASNs.

Synonym (not allowed) is planned shipment.

planned shipment – Synonym (not allowed) for planned receipt. SAP uses the term planned receipt.

product – Physical product that can be manufactured or procured by a company for consumption/production or sale.

Synonym: Material.

This is a general term used by SAP ICH.

projected stock – Quantity of a product calculated by the system and displayed in SAP ICH. It is calculated as follows: stock-on-hand quantity + stock-in-transit quantity + quantity of planned receipts – demands

Synonym (not allowed) is calculated stock.

R

release processing – Business scenario on SAP ICH in which a company has an external business partner take over the replenishment task for a product at the company's location. The business partners have established a long-term scheduling agreement. The quantities required at the customer's location and the exact dates and times of shipment are periodically transmitted from customer to supplier by delivery scheduling releases. The releases are displayed on the release monitor of SAP ICH.

S

SA release schedule – From scheduling agreements. SA release schedules specify a time scale with the exact quantity of a product to be delivered from a supplier to a customer and the exact dates and times of delivery. SA release schedules are periodically transmitted from customer to supplier. They can consist of one or several schedule lines.

Synonym/Abbreviation is release.

schedule line – Individual item in a release schedule, specifying the quantity of a required product and the exact date and time of delivery. Release schedules can consist of one or several schedule lines.

scheduling agreement (SA) – Long-term outline agreement between two business partners, specifying the product to be delivered from supplier to customer and the price. The exact quantities, dates, and times of delivery are specified and periodically transmitted to the supplier in individual release schedules (releases), consisting of one or several schedule lines.

seller – In the relationship between two business partners in a supply network, the company to which another company hands over the replenishment task for a product. Usually the partner who is allowed visibility into the company's inventory and demand data on the SAP ICH in order to fulfill the replenishment task.

This term is used in the automotive industry and other discrete industries. SAP uses the term *supplier*.

Synonyms: Supplier, vendor.

stock in transit – Quantity of a product that is being shipped from the supplier's location to the customer's location. The supplier informs the customer about the shipment with an advanced shipping notification (ASN).

stock on hand – Quantity of a product available at a location for production or consumption at a specified date. The term specifies the product inventory level that is continuously updated and displayed on SAP ICH.

supplier – In the relationship between two business partners in a supply network, the company to which another company hands over the replenishment task for a product. Usually the partner who is allowed visibility into the company's inventory and demand data on SAP ICH in order to fulfill the replenishment task.

In a supply network, a supplier can be a large first-tier supplier, a second-tier supplier, or also a rather small third-tier supplier. Depending on the different roles a company can have in various business relationships in a supply network, a company may be a supplier and also an OEM. However, for describing business processes in SAP ICH, only the bilateral relationship is considered at a time.

This term is used in the automotive industry, the high-tech industry, and other discrete industries.

SAP uses this general term instead of the synonyms vendor or seller.

supplier-managed inventory (SMI) – Business scenario in which a company hands over the replenishment task to an external business partner.

Depending on industries and the company's role/perspective in the business process the process is called either:

- *Vendor*-managed inventory (VMI)/ Responsive Replenishment (RR)
- *Supplier*-managed inventory (SMI)

SAP offers SMI processes in logistics execution, SAP APO (releases 3.0 and higher) and, mySAP SCM.

With the SMI process in SAP ICH, SAP supports a company's procurement side, which offers suppliers software support. Whereas with the VMI/RR process on SAP ICH, SAP supports a company's sales side, which deals with customers.

The term SMI is used in the automotive and high-tech industries to differentiate the process from partly analogous processes that are common practice in other industries, but have different aspects and process details/features.

For example, a second-tier supplier replenishes electronic parts for a first-tier supplier in the automotive industry.

T

transportation lane – Link between the starting point (location A) and the destination point (location B) for product shipments.

V

vendor – In the relationship between two business partners in a supply network, the company to which another company hands over the replenishment task for a product. Usually the partner who is allowed visibility into the company's inventory and demand data on SAP ICH in order to fulfill the replenishment task.

This term is used in the consumer products industry. SAP uses the term *supplier*.

Synonyms: Seller and supplier.

vendor-managed inventory (VMI) – Business scenario in which a company hands over the replenishment task to an external business partner. Depending on industries and the company's role and perspective in the business process, the process is called either:

- *Vendor*-managed inventory (VMI)/Responsive Replenishment (RR)
- *Supplier*-managed inventory (SMI)

SAP offers VMI processes in logistics execution, SAP APO (releases 3.0 and higher), and mySAP SCM.

The term VMI is used in the consumer products industry to differentiate the process from partly analogous processes that are common practice in other industries, but have different aspects and process details and features.

With the VMI process in SAP ICH, SAP supports a company's sales side, which deals with customers. Whereas with the SMI process in SAP ICH, SAP supports a company's procurement side, which offers suppliers software support.

For example, a company producing consumer products supports the retailer in selling the products.

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