

Payment Card Processing (SD-BIL-IV)



HELP.SDBILIVPC

Release 4.6C



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Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax
	Tip

Contents

Payment Card Processing (SD-BIL-IV)	5
Payment Cards in Sales and Distribution	7
Payment Card	9
Business Partner - Payment Card Processing	10
Payment Cards in Master Data	11
Payment Cards in Sales Orders	12
Payment Card Plan	13
Creating Sales Orders - One Payment Card	15
Creating Sales Orders - Multiple Payment Cards	17
Authorization	19
Payment Card Interface to Clearing Houses	20
Setting and Carrying Out Authorization	23
Risk Management for Payment Cards	27
Changing Sales Orders with Payment Cards	28
Referencing Sales Orders with Payment Cards	30
Payment Cards in Deliveries	32
Payment Cards in Billing Documents	33
Work Lists in Payment Card Processing	34
Internet Functions	36
Procurement Card Functions	37

Payment Card Processing (SD-BIL-IV)

Purpose

Payment cards frequently replace cash as a means of payment, becoming indispensable to customers and valuable tools for businesses. The importance of payment cards requires their integration into modern business processes.

Payment card processing in the R/3 System offers you a wide range of functions in Sales and Distribution, Retail point of sale, Financial Accounting, and Internet commerce. It contains the basic tools you need to handle payment cards in a variety of business environments.

Integration

Sales and Distribution (SD)

Install the SD component to process payment card data in master records, sales orders, and billing documents. With this component, you can:

- Integrate payment card activities into the sales, delivery, and billing processes
- Exchange information with clearing houses for authorization
- Manage complicated sales scenarios involving payment cards
- Handle procurement cards

Payment cards play an important role in [Risk Management \[Ext.\]](#). As of Release 4.0, you can use payment cards to secure payment guarantee for your receivables.

To configure payment card functions, choose *Billing* → *Payment cards* in Customizing for Sales and Distribution.

Financial Accounting (FI)

Install the FI component to carry out settlement and payment functions to complete your activities in Sales and Distribution, and process payment card data in accounting documents. With this component, you can:

- Set up an open item-managed, general ledger account for each clearing house
- Record processing fees charged by the clearing house for its services
- Manage information sent back by clearing houses to accept or reject card transactions
- Carry out bill-back processing when a customer disputes a transaction

Retail

Install the Retail component to process payment card transactions from point of sales (POS) systems. With this component, you can:

- Carry out authorization from external systems
- Import data into the R/3 System from external systems
- Process POS data in billing and accounting documents

Internet Application Component (IAC)

Install the IAC component to do business on the Internet. With this component, you can:

Payment Card Processing (SD-BIL-IV)

- Automate order entry
- Handle electronic payment

Human Resources (HR)

Install the HR component to process [walking cards \[Page 9\]](#). This is not a new function, however. Walking card processing has been a part of the standard system in Travel Expenses since Release 3.0D.

Constraints

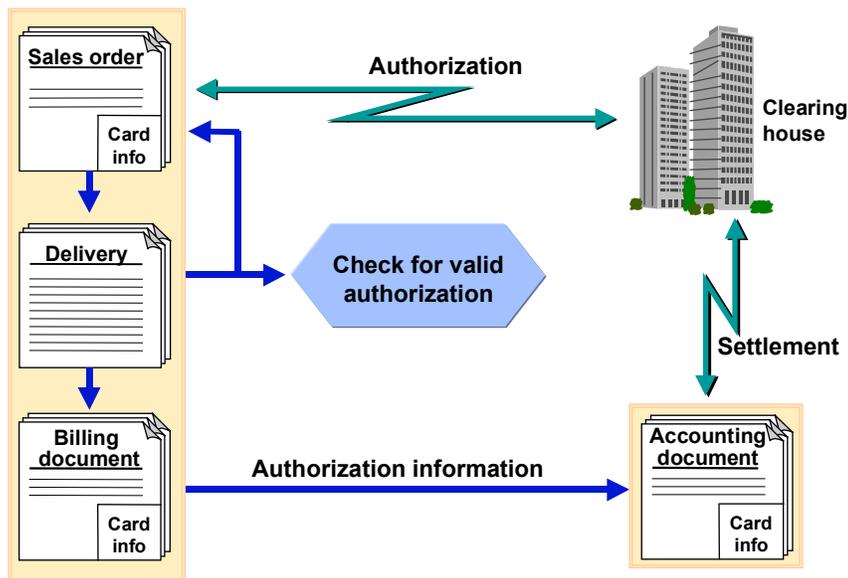
Although banks and purchasers are included in the payment card concept, this first phase of payment card processing has been designed specifically for merchants.

Payment Cards in Sales and Distribution

Purpose

In Sales and Distribution, you can enter payment card data in the sales order and use it throughout the order to cash cycle.

Process flow



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1. When you create a [sales order \[Page 12\]](#), you can enter credit card data manually, or copy it from the payer master record. You can enter one card in the sales order overview screen. You are able to enter multiple cards, or multiple authorizations on one card, in the payment card plan in the sales order header. The system automatically [authorizes \[Page 19\]](#) the sales order when you save it.
2. At a later time, you create the [delivery \[Page 32\]](#). The authorization may have expired in the meantime, so the system checks to ensure that it is still valid. If the authorization is no longer valid, the system tells you to reinitiate authorization in the sales order. You complete and save the delivery.
3. When all the items are picked, packed, and goods issue is posted, you create a [billing document \[Page 33\]](#). Here, payment card data is copied from the sales order, or uploaded directly into the billing document from an external system, as in the case of point of sale. The system uses the authorizations in the payment card plan to calculate billing amounts. You process the billing document and release it to Financial Accounting.

Payment Cards in Sales and Distribution**Result**

When you release the billing document, the system copies the payment card information, billing amount, and authorization information into the **accounting document**. In accounting, receivables are posted to a special cash clearing account for the clearing house. The appropriate settlement process is then carried out according to the category of the card used. For instance, if a procurement card is used, additional data about the purchase is submitted for settlement.

Payment Card

Definition

Card used for cash-free payment in a variety of business transactions, from buying goods at a local store or over the Internet, to procuring goods and services on behalf of a company.

The main payment card categories involved in payment card processing in the SAP environment are:

- Credit cards
Used for purchasing goods and services with regular billing, usually with extended credit.
- Customer cards
Used by customers to buy goods and services from a specific merchant or group of merchants.
- Debit cards
Used as a means of cashless payment. The cardholder's bank account is debited instantly.
- Procurement cards
Issued on behalf of companies to employees for purchasing items up to a given amount.
- Walking cards
Issued on behalf of companies to employees for purchasing a wide range of goods and services for company travel.



The payment card functions in Sales and Distribution (SD) allow for sales involving these categories of cards, with the exception of walking cards, which are supported by Human Resources (HR), and debit cards, which are supported by Retail (SAP Retail) using point of sale (POS).

Business Partner - Payment Card Processing

Business Partner - Payment Card Processing

Definition

A person, group of people, or company outside of your organization with whom you transact your payment card business.

The different partners involved in card processing in the SAP environment are the:

- **Cardholder**
Uses a payment card to purchase goods and services.
- **Merchant**
Provides goods and services and accepts cards as payment.
- **Clearing house**
Issues authorizations and provides services for processing settlement data supplied by the merchants.



The payment card functions in Sales and Distribution focus on business transactions between the merchant and the clearing house.

Payment Cards in Master Data

Use

To quickly and efficiently process sales orders with payment cards, you can store card data in the payer master record. When you create a sales order, you simply call up a list of cards for the customer using the matchcode on the *payment card number* field. The system automatically copies the card data into the sales order for the card or cards that you choose from this list.

The one-time customer record is a collective account, in the master record, for a group of unrelated customers. For this reason, you cannot maintain payment card data for one-time customers.

Features

You can enter the following card information in the payer master record:

- Card type, for example VISA, MC, or AMEX
- Card number

The system checks the card numbers you enter to ensure that they correspond to the numbering standards of the relevant payment card company (for example, checking to make sure that a Visa card number begins with "4"). This reduces the risk of having to go through a lengthy authorization process in the sales order with an incorrect card number.

The system also checks to ensure that a payment card belongs to only **one** customer. You cannot enter one payment card in two different master records.

- Expiration date
- Cardholder or company name as it appears on the card
- Card category, such as credit card, customer card, or purchasing card
- Blocking reason

If required, you can block the payment card by entering a reason, for example 01 for "card stolen". You maintain blocking reasons in Customizing for payment cards in the Billing section of the IMG.



A block is for a particular payment card only. If one of the customer's payment cards is blocked, he or she may use another.

Also, a block does **not** effect sales documents that have already been created with the card. You can, however, run a standard search to determine all documents in which the card number is used.

- Card valid-from date
- Default card

You can assign a default card if there is more than one card for a customer. When you call up a list of cards for the customer in the sales order, this card is highlighted.

Payment Cards in Sales Orders

Payment Cards in Sales Orders

Use

With this function, you can:

- Create or change sales orders with payment cards
- Authorize transactions
- Call up work lists of sales orders with payment cards

Features

Because payment information is particularly relevant in the sales order, the sales order header includes a payment card plan. The card data you enter in the payment card plan is used throughout the order to cash cycle.

Another main feature in the sales order is authorization. Payment card processing allows you the flexibility to authorize your sales orders in a variety of ways: from preauthorization to authorizing in batch.

Payment Card Plan

Definition

Plan attached to the sales order header and billing document header that contains information on payment cards used in a transaction.

You reach the payment card plan by choosing *Header* → *Payment cards*.

Structure

The payment card plan contains a **header** which displays:

- The authorized amount
- The total sales order value (net value + tax)
- The amount to be authorized for the next service or delivery as well as the date of the next service or delivery

You use these fields to process sales orders with multiple delivery dates.

The header includes a section on **authorization**, indicating:

- Whether requirements for the authorization were met

The system uses the requirements that you set in Customizing to decide whether or not to authorize the sales order. For example, you could set the system to automatically authorize complete sales orders. Or, you could disallow authorization in the sales order and use a report to authorize in batch at a later time.

- Whether the system has set a block
- The call status of the authorization, detailing if transmission to and from the clearing house was successful and whether a response was received
- The results of checks by the clearing house on payment card data

A third section in the payment card plan contains **card items** and **authorization items**:

Card items contain detail on the payment card, such as card type, card number, expiration date, and billing information

- Authorization items contain detail on the authorization

For an overview of the authorization, scroll right in the authorization item. For detailed information, select an item and choose Detail. The system displays all current information pertaining to authorization, including codes, accounts, times, and dates.

Card items and authorization items at first glance may appear similar. To tell the difference between these items, note that authorization items:

- Do not have a *Limit to* indicator or a maximum amount

Payment Card Plan

- Have a traffic light in the status field and authorized amount

There are two additional features at the bottom of the payment card plan. The first is the **settled in billing docs** button. This function provides you with billing information for cards in the payment card plan that have already been billed. The second feature is the **manual authorization** button. With this button, you can manually authorize a sales order during a telephone call to the clearing house. Manual authorization requires special permission determined in authorization profile V_VBAK_AAT.

Creating Sales Orders - One Payment Card

Prerequisites

The payment plan type "payment card plan" must be assigned to the sales document type for the document you are processing. You can assign this in Customizing for Sales and Distribution by choosing *Billing* → *Payment Cards* → *Maintain Payment Card Plan Types*.

Payment card data may only be entered at the header level, so you cannot enter card data for each item.

The card authorization must cover the entire sales order value. If it does not, the system will warn you to reauthorize.

Features

When creating a sales order you can define multiple authorization values for a single payment card. Choose *Header* → *Payment Cards* and enter the data for multiple authorizations in the Payment Card Plan. To set the system to automatically create multiple authorizations for a single card see user exit AUTHORIZATION_VALUE_SPLIT (in include MV45AFZH). If you need only one authorization you can enter the data directly in the fast entry field in the sales order.

Procedure

You create a sales order with a payment card just as you do a standard sales order.

1. Create a [sales order \[Ext.\]](#).
2. Use the fast entry field in the overview screen to enter the card type, number, and expiration date, or use the matchcode on the *payment card number* field to select a card listed in the payer master record. For multiple authorizations, enter data in the payment card plan. This data is required to continue processing the sales order.

The system checks the card number you have entered to ensure that it corresponds to the numbering standards of the relevant payment card company (for example, checking to make sure that a Visa card number begins with "4"). This reduces the risk of having to go through a lengthy authorization process with an incorrect card number.

The system also checks the expiration date for any irregularities and issues a warning message when it finds past dates or expiration dates in the near future. In this way, if you type in an incorrect date, the system catches your mistake. If the expiration date is approaching, you can take special care that the card is still valid when the items are delivered.

Result

The system automatically authorizes card information when you save the sales order. It issues a message informing you that the authorization was successful. If the clearing house rejects the card data or authorization value, the system blocks the sales order and issues a warning message.

To display current authorization data, return to the sales order in display mode. Call up the payment card plan to view the status of the authorization. You will be able to see:

- If the system has set a block

Creating Sales Orders - One Payment Card

- Whether the clearing house was reached
- The result of the individual checks at the clearing house

For an overview of an authorization, scroll right in the authorization item. For detailed information, select the item and choose *Detail*. The system displays all current information pertaining to authorization, including codes, accounts, times, and dates.

Creating Sales Orders - Multiple Payment Cards

Customers may want to use multiple payment cards in a sales order, particularly when the item prices exceed the credit limit of a single card. Enter data for multiple payment cards in the payment card plan attached to the sales order header.

Prerequisites

The payment plan type "payment card plan" must be assigned to the sales document type for the document you are processing. You can set this in Customizing for Sales and Distribution by choosing *Billing* → *Payment Cards* → *Maintain Payment Card Plan Types*.

Payment card data may only be entered at the header level, so you cannot enter data for each item.

The payment card authorizations must cover the entire sales order value. If they do not, you will be warned to reauthorize.

Procedure

You create a sales order with payment cards just as you do a standard sales order.

1. Create a [sales order \[Ext.\]](#).
2. Choose *Goto* → *Header* → *Payment cards* to enter card data.
The system displays the sales order value (net value + taxes).
3. Enter the payment card types, numbers, and expiration dates, or use the matchcode on the *payment card number* field to select cards listed in the payer master record. This data is required to continue processing the sales order.
The system checks the card number and expiration date.
4. Enter *maximum* billing amounts for the cards.
Select *Limit to*, choose *Enter*, and enter an amount in the *Maximum amount* field. To specify an unlimited amount for a card, leave the *Limit to* indicator blank. You can do this for only one card per order.
Note that splitting amounts between cards may result in rounding.
5. Choose *Back* and save the order.



A customer has ordered \$1000 USD worth of merchandise and told you to charge two payment cards. When you create the sales order and enter data in the payment card plan, you split the sales order amount between the two cards.

According to what the customer tells you about the limits on the different cards, you enter a \$400 USD maximum amount for one card, and an unlimited amount for the other. The system authorizes \$400 USD and \$600 USD for the cards respectively, and invoices the transaction in the same way.

Creating Sales Orders - Multiple Payment Cards

Result

The system automatically authorizes card information when you save the sales order. It issues a message informing you that the authorizations were successful.

If any of the card data or authorization amounts are rejected by the clearing house, the system blocks the sales order and issues a warning message.

To **display authorization data**, return to the sales order in display mode. Call up the payment card plan to view the statuses of the authorizations, such as:

- If the system has set a block
- Whether the clearing house was reached
- The result of the individual checks at the clearing house

For an overview of the authorizations, scroll right in the authorization items. For detailed information, select an authorization item and choose *Detail*. The system displays all current information pertaining to authorization, including codes, accounts, times, and dates.

Authorization

Use

When a customer pays for goods and services using a payment card, the card number, the relevant amount and the payer's name and address are forwarded to the clearing house for authorization. The clearing house checks this information, and either authorizes the transaction or turns it down. A successful authorization is a guarantee of payment.

Prerequisites

You require a [third-party software \[Page 20\]](#) to carry out authorization.

The system relies on settings in [Customizing \[Page 23\]](#) for payment cards to determine how and when to carry out authorization.

[Risk Management \[Page 27\]](#) affects authorization process.

Features

With the authorization functions in payment card processing, you can:

- Set the system to authorize sales orders according to a certain set of requirements
- Preauthorize sales orders
- Automatically authorize sales orders
- Manually authorize sales orders
- Determine which colleagues are permitted to manually authorize sales orders (authorization profile V_VBAK_AAT)
- Run a report to carry out authorizations in batch ([RV21A010 \[Page 34\]](#))
- Run a report to call up a list of sales orders with payment cards according to document features that you specify ([RV21A001 \[Page 34\]](#))
- Display complete current authorization information in the [payment card plan \[Page 13\]](#)
- Use the authorization log to check the history of authorization changes in a sales order, including change dates and responsible parties (Choose *Environment* → *Changes*)

Constraints

You can carry out authorization in the sales order **only**. Partial authorization of a sales order value is not possible.

Payment Card Interface to Clearing Houses

Use

The payment card interface is an application software that acts as a bridge between SAP's R/3 System and your financial institution's software. We have designed the payment card interface with remote function call (RFC) to provide you functions to communicate with any of your partners, including clearing houses, banks, credit card companies, and merchant services.

Features

The interface program supports:

- An RFC server and client functions to communicate with R/3
- Converting data from R/3's output structure to the financial institution's structure
- Communication protocols between the payment card application server and the financial institution
- Converting data from the financial institution's response format to R/3's input format
- Processing using multiple RFC servers
- Time-out scenarios

Technical Information

Authorization Function Module

SAP can provide solutions for transmitting card data to many major clearing houses and other financial institutions. Contact your SAP consultant for more information.

The standard system includes the function module `CCARD_AUTH_SIMULATION` that you can use to test the authorization process before obtaining software from your clearing house, or writing your own. SAP also provides the testing function `CCARD_SETTLEMENT_SIMULATION` for Financial Accounting (FI).

When you trigger the authorization function, the system accesses the logical destination that you have specified in Customizing. This is either an SAP internal system, or an external program (RFC). Choose *Sales and Distribution* → *Billing* → *Payment cards* → *Authorization and settlement* → *Maintain clearing house* → *Set authorization/settlement control per account* in Customizing to set the function module for authorization.



If you do not replace the function module `CCARD_AUTH_SIMULATION` with your own, the system only **simulates** authorization, even in a productive system.

Data Flow

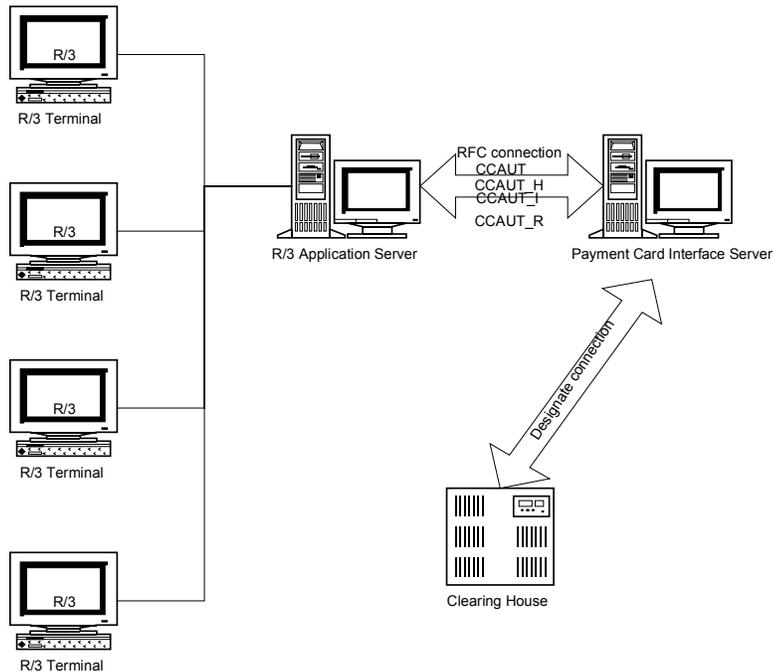
Authorization data is provided by the R/3 calling function module `SD_CCARD_AUTH_CALL_RFC` with four tables:

- `CCAUT` - Primary request information
- `CCAUT_H` - Additional information for procurement cards at header level

Payment Card Interface to Clearing Houses

- *CCAUT_I* - Additional information for procurement cards at item level
- *CCAUT_R* - Response message

The interface program converts the first three tables, maps the data to the requester's format, sends the data through the connection to the financial institution, and waits for the response. The program then sends the response, via *CCAUT_R*, to the original R/3 caller.



Remote Function Call Library

RFC programs are interactive programs that enable communication and data transfer between R/3 and external programs. In register mode, the RFC server program is started before receiving a call from R/3. It registers at an SAP gateway and then waits for RFC requests from the R/3 System.

When testing the authorization function, use transaction SM59 to create a TCP/IP connection. Use register mode and specify a program ID for the external RFC server. Finally, set up the gateway to configure a multiple R/3 application server environment. The RFC Library contains the following:

- *RfcListen* - Checks if an RFC request is available.
- *RfcAccept* - Accepts an incoming connection.
- *RfcInstallFunction* – Registers callable functions to allow the *RfcDispatch* routine to route RFC requests properly.
- *RfcInstallStructure* - If structures or internal tables are to be transferred from a R/3 System to the external program, only homogeneous structures or tables can be transferred.
- *RfcAbort* - Sends an error message, if possible, and closes the connection.
- *RfcClose* - Closes an RFC connection.

Payment Card Interface to Clearing Houses

- *RfcDispatch* - Waits for the next function calls.
- *RfcGetData* - Receives the parameters of a function.
- *RfcSendData* - Sends back the return values.
- *RfcRaise* - Reports errors that occur during the execution of an RFC function.

Setting and Carrying Out Authorization

Prerequisites

How and when the system performs authorization depends on the settings you make in Customizing for **checking group** routines. In Customizing for Sales and Distribution, choose *Billing* → *Payment cards* → *Authorization and settlement* → *Maintain checking groups*. The three main settings which influence authorization are:

- Authorization requirements
- Authorization horizon
- Preauthorization

See the *Special Features* section below and the [payment card interface \[Page 20\]](#) topic for information on the many other factors that influence authorization.

Setting Authorization Requirements

The system automatically authorizes a sales order with payment cards when you save it, unless you specify otherwise. In the *AuthReq* field, you can set the system to authorize:

- Automatically for complete sales orders only
- In batch for complete sales orders using a [report \[Page 34\]](#)
- According to your own requirements which you set in *Billing* → *Payment cards* → *Authorization and settlement* → *Maintain authorization requirements*

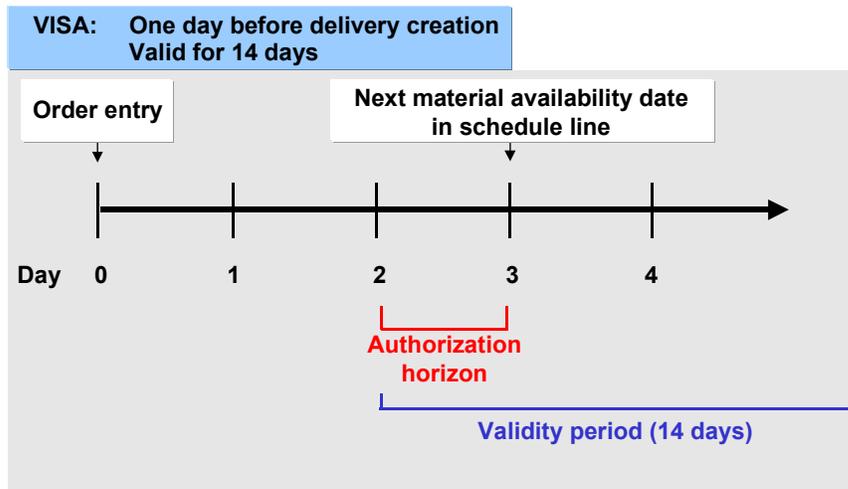
The requirement is stored in the R/3 system as ABAP/4 code. It is assigned to a checking group which in turn is assigned to a sales document type.

Setting the Authorization Horizon

Authorizations may sometimes expire before an order is delivered or billed. To reduce the chances that this will happen, you may want to authorize orders only several days before they are due for shipping, or billing.

The authorization horizon specifies the number of days before the material availability date, or billing date, that the system is to initiate authorization. If a sales order is saved within the authorization horizon, the system carries out authorization immediately. If a sales order is saved before the authorization horizon comes into effect, the system does not authorize at all, or carries out preauthorization.

Setting and Carrying Out Authorization



In this example, the system has been set to authorize one day before delivery creation. The system does not carry out authorization when the order is saved on Day 0, rather on Day 2. Note that the authorization validity period has been set to 14 days in Customizing (*Authorization and settlement* → *Specify authorization validity periods*). The transaction will have to be reauthorized if delivery activities take longer than 14 days.

Setting Preauthorization

Select *Preau* for preauthorization.

The system performs preauthorization when you enter and save a sales order. In this procedure, a 'soft' authorization is sent to the clearing house with an amount of \$1 to check that the name, address and card number are correct. In this way, the risk of problems with the actual authorization, made at a later date, is reduced.

The system carries out preauthorization when the material availability date, or billing date lies outside of the authorization horizon, that is, **before** the authorization horizon takes effect. When the authorization horizon does take effect, the system **does not** carry out authorization automatically. You must regularly run a [report \[Page 34\]](#) to list sales orders due for authorization and authorize them in batch.

Special Features

Manual Authorization

Sometimes, you may not be able to reach the clearing house computer system or technical problems may occur. In these cases, you can call the clearing house and manually enter the authorization information they give you in the sales order. Choose *Manual authorization* in the [payment card plan \[Page 13\]](#). Manual authorization requires special permission determined in authorization profile V_VBAK_AAT.

System Reactions to Document Changes

Note that the system automatically reauthorizes when you:

- Add an item to the sales order
- Raise the sales order value

Setting and Carrying Out Authorization

- Change a schedule line quantity

The system issues a message, warning you to reauthorize when you:

- Increase quantities in the [delivery \[Page 32\]](#)
- Increase the value of the [billing document \[Page 33\]](#)
- Have an incomplete delivery for which the authorization has expired

Batch Authorization

With [report RV21A010 \[Page 34\]](#) you can authorize documents in batch to support sales orders and deliveries with long processing cycles.

Multiple Authorizations on One Payment Card

When you define multiple authorizations on a single payment card, the system will automatically scan and choose the authorization amounts, trying to match the sales order value. In order of preference it will look for:

1. the same amounts
2. the next largest amount
3. the sum of two or more amounts



The following example explains how the system covers a sales order value with the sum of two authorizations.

Sales order value:	USD 500.00
Authorization 1	USD 100.00
Authorization 2	USD 200.00
Authorization 3	USD 300.00

In this case the system scans the authorization amounts, starting with the lowest of USD 100.00, to find the value closest to USD 500.00 and chooses Authorization 3. It then scans again, starting with the lowest amounts, looking for the authorization closest to the uncovered portion of the sales order value, which in this case is USD 200.00. It chooses Authorization 2, thus covering the entire sales order value.

System Reactions to Unsuccessful Authorization

In some cases, an authorization may be insufficient or the clearing house may request a block for a lost or stolen card. The system reacts to a failed authorization, by:

- Setting the overall credit status to 'Not approved' in the sales order header (status *B*)
- Setting the authorization block in the payment card plan

Use report [RV21A001 \[Page 34\]](#) to process blocked sales orders. You can then reauthorize by removing the block and saving the sales order.

- Resetting the confirmed quantity to zero in the sales order and blocking the entry in the shipping index.

Requirements in copying control prevent the user from creating and picking a delivery as well as posting goods issue. To disallow subsequent functions, choose *Subsequent functions* in Customizing for payment cards. Here you can control:

Setting and Carrying Out Authorization

- Availability requirements
- Purchase requisition/assembly
- Delivery due index
- Copying requirements for deliveries
- Copying requirements for billing documents
- Picking, packing and goods issue

Handling Unsuccessful Authorizations

If you run authorization in batch, the system informs the appropriate person when authorization is unsuccessful: the credit controller if the authorization is denied due to customer credit, or the system administrator when technical problems occur. If you handle authorization online, the system issues a message informing you of the problem. You can then review the various statuses in the payment card plan.

You can regularly run a report to process sales orders with authorization problems. Use the authorization analysis [report RV21A001 \[Page 34\]](#) to identify when and where errors have occurred during the authorization process. The system lists sales orders that have failed authorization. You can then:

- Release an order without authorization (and take your chances on collecting)
- Resubmit an order for authorization
- Change an order (which will trigger automatic reauthorization by the system)

Risk Management for Payment Cards

Use

Risk Management plays a central role within Sales, providing you with checks and functions to minimize your credit risk. In addition to letters of credit and export credit insurance, payment cards are among the payment guarantee forms that you can use to insure payment for sales order items.

Integration

See [Risk Management \[Ext.\]](#) for more information, including a [comparison \[Ext.\]](#) of payment cards to the other forms of payment guarantee.

Note that when a payment card is used in a sales order, the payment guarantee form for payment cards takes precedence over the others and is activated first.

Prerequisites

Because Risk Management affects amounts and dates in the authorization process, you must make the appropriate settings for sales order types in which payment cards are used. Choose *Authorization and settlement* → *Risk Management for payment cards* in Customizing for payment cards. Here, you can define payment cards as a form of payment guarantee, and maintain an appropriate procedure.

Features

In the same way as for the credit check in Credit Management, the system sets an internal status for Risk Management that influences the overall credit status. You can use this status to prevent certain [subsequent functions \[Page 23\]](#) from being carried out for documents that have been blocked due to payment guarantee, in this case failed authorization.

Changing Sales Orders with Payment Cards

Changing Sales Orders with Payment Cards

Purpose

The customer may want to add items to an existing sales order, or the clearing house may deny authorization. In the first case you will need to reauthorize and in the second to change the payment card plan attached to the sales order.



Once a card item has been billed, you cannot change data for the card in the payment card plan.

Features

When you raise a sales order value, the system automatically creates a new authorization to cover the difference between the old and new sales order values. The original authorization remains valid and is applied.



For example, if you add an item to a sales order, increasing the sales order value from USD 200.00 to USD 250.00, the system will execute a new authorization for USD 50.00. The first authorization for USD 200.00 remains valid and will be applied.

Process Flow

1. You call up a sales order to change payment card data.
2. You review the amounts already billed to cards in the payment plan.

Before changing your payment card data, you can review the billing status of the cards by choosing the *Settled in billing docs* button at the bottom of the payment card plan. This function provides you with information on cards that have already been billed. You can use this information to change the sales order more efficiently.

The system generates a list of information including:

Card number

Expiration date

Charges

Currency

Billing documents

Authorization information

3. You change the payment card plan.

To **delete a card item** that has not been billed, you must first delete all of its authorizations. If the card item has already been billed, you can no longer delete it. You can, however, set the maximum amount to the amount already billed. This ensures that the system will not take the card item into account when creating new billing documents.

Changing Sales Orders with Payment Cards

To **add a card item**, you simply enter the new card into the payment card plan.
Remember to review all maximum amounts.

Referencing Sales Orders with Payment Cards

Referencing Sales Orders with Payment Cards

Purpose

When you create a return, a credit memo or debit memo with reference to a sales order with payment cards, the R/3 System reminds you that this sales order includes payment cards. You can then take the cards into account when creating the target document.

Process Flow

1. You create a document with reference to a sales order.
2. The system determines whether the sales order contains payment cards. If so, it issues a message to remind you to take the payment cards into account.
3. You review the payment card plan and item detail in the source document to decide which payment cards and amounts to enter in the new document. **You must enter this data manually.**
4. When you save the new document, the system carries out a "negative" authorization, in effect reversing the amount reserved for the transaction on the customer's payment card account.

Example

A customer orders two lasers from you costing \$5,000 USD each. She pays for the items using two credit cards. You create a sales order and enter the relevant card data in the payment card plan. In doing so, you limit the first card, MasterCard, to \$6000 USD. You specify that the Visa card is unlimited by leaving the *Limited to* indicator blank. You authorize the amounts and save the sales order.

Two weeks after the lasers are delivered, the customer calls to inform you she is returning one of the lasers. When you create a return with reference to the relevant sales order, the system does not automatically copy payment card data from the sales order. This is because there may be several different ways of combining payment cards and amounts in the return. The system does, however, issue a message reminding you that there are payment cards in the order that need to be taken into account. You call up the payment card plan in the sales order to review the card data:

Type	Card Number	Exp. date	Maximum amount	Limit to	Status	Auth. amount
MC	54522540897	04/01/00	\$6000 USD	<input checked="" type="checkbox"/>		
Visa	49965092745	08/01/02		<input type="checkbox"/>		
MC	54522540897	04/01/00			valid/open	\$6000 USD
Visa	49965092745	08/01/02			valid/open	\$4000 USD

Then you decide what information you want to enter in the return. There are two ways to create this return for \$5,000 USD: you can either credit the full amount of the return to the first card, or you can split the amount between the two cards:

- In the first case, you enter only the MasterCard in the return. Because you are working with one card, you do not call up the payment card plan. Instead, you use the fast entry field in the

Referencing Sales Orders with Payment Cards

overview screen. You may decide to use the payment card plan, in which case you enter the MasterCard and leave the *Limited to* indicator blank. The total amount of the return (\$5,000 USD) is automatically credited to the MasterCard when you save (and authorize) the return.

- In the second case, you enter both the MasterCard and Visa card in the payment card plan in the return. You use the same proportion as the authorization and billing amounts (60/40) to credit the cards. When you set the *Limit to* indicator and enter a maximum amount of \$3,000 USD for the MasterCard, the system automatically credits the Visa card with the rest, \$2,000 USD, when you save (and authorize) the return.

Payment Cards in Deliveries

Payment Cards in Deliveries

Use

Although there is no card information stored in the delivery, the system does carry out several checks in the delivery relevant to payment cards. These checks ensure that:

- All expired authorizations are detected and reauthorized
- Any changes to the delivery quantity are covered by the authorization or authorizations that were granted in the sales order

Features

To make sure that the authorizations in the sales order are still valid when you deliver your product, the system checks the authorizations when you create a new delivery or change an existing one.

The system determines whether the authorizations are valid at the time of delivery based on the general validity period that you set for all authorizations in the R/3 System. You set this period in Customizing for Sales and Distribution by choosing *Billing → Payment cards → Authorization and settlement → Specify authorization validity periods*.

If the authorizations are no longer valid, the system sets the authorized amount in the sales order to "0" and warns you to reauthorize the sales order. At the same time, the system sets the delivery status to *Not approved*. This status in the document header can be used to control the posting of goods issue, or other subsequent functions. For more information on controlling subsequent functions in the delivery, see Customizing for payment cards in the Billing section of the IMG.

If you change the delivery amount, the system compares the new sales order value to the authorized amount. If the authorization does not cover this new value, the system warns you to reauthorize the sales order.

Payment Cards in Billing Documents

Use

When you create a billing document, the system copies the payment card plan from the sales order. The system then determines:

- Which cards in the payment card plan are to be billed
- In what order they are billed
- The billing amounts

When you release the billing document to Financial Accounting (FI), the payment card data, billing amount, and authorization information are copied from the payment card plan of the billing document into the accounting document for use in the settlement process.

Activities

You can carry out the following activities:

Display card data in billing documents

The [payment card plan \[Page 13\]](#) attached to the billing header contains items with detailed card information, including several billing functions. You can review payment card transactions with the settled in billing docs button, or review the billing status of the authorization(s) in the sales order. Note that, unlike in the sales order, the payment card plan in the billing document is for display only. You cannot change it.

- Cancel billing documents with payment cards

When you create a billing document, technical or pricing errors may occur, or billing data may be posted to an incorrect account. In these cases, you must cancel the billing document.

Note the following when canceling these documents:

- You should have the same payment card data in the canceled document and the source document
- When canceling a document, you cannot reuse the authorizations in the sales document

Print card data in billing documents

When you invoice customers who have used a payment card to pay for your product, you need to inform them in the invoice that payment has been handled with a payment card. They do not need to pay you directly. You can print this information in the billing document using SAPscript.

- Change the amount of a billing document

When you increase the amount of a billing document containing payment cards, the new amount must be completely covered by the relevant payment card authorization. The system will warn you to reauthorize to cover the difference between the old billing document amount and the new amount.

Work Lists in Payment Card Processing

Work Lists in Payment Card Processing

Prerequisites

Several of these reports are available from the menu. To access the others, use transaction **SE38**, or call up the reporting tree by choosing *Information systems* → *General report selection*.

Use

With report **RV21A001** (*Order* → *Subsequent functions* → *Payment cards: Work list*), you can list and process sales orders and deliveries with payment cards.

Among the functions in the report, you can:

- Select a display variant
Display variants "010" for sales documents and "011" for deliveries are available in the standard system.
- Select documents according to different authorization statuses, for example all sales orders with blocked authorization
- Process an individual document by selecting it with a double-click
- Authorize one or more documents directly from the list by selecting the document(s) and choosing *Edit* → *Release for authorization*

The system initiates authorization when you save the report list.

- Reject one or more sales orders or returns by selecting the document(s) and choosing *Edit* → *Reject*

You may want to reject all sales orders with blocked authorizations, for example.

- Release one or more documents by selecting the document(s) and choosing *Edit* → *Release*

You may want to release documents manually, for example if a card is blocked or if authorization cannot be carried out due to technical problems.

- Cancel any of the above functions by choosing *Edit* → *Cancel*
- Review the information log by choosing *Goto* → *Log*

With report **RV21A010**, you can initiate batch authorization.

By specifying a status of the last authorization, or a date, you can for example process blocked sales orders or orders whose dates lie within the authorization horizon. Use the *Next check* field for your authorization horizon dates.

Select *Log info messages* if you want the system to list the documents processed in the report, as well as any errors that occur.

With report **RV20A001**, you can call up a list of one or more customers. You can then quickly maintain payment card data in the master records directly from the list.

Work Lists in Payment Card Processing

With report **RV20A002**, you can call up a list of payment cards of a certain type, for example all AMEX cards. You can filter the search by entering a range of card numbers.

With report **RV20A003**, you can list payment cards that expire within a certain time frame. You can also use this report in a more general way, for example to list cards according to cardholder, or payment card block.

Internet Functions

Internet Functions

SAP payment card software is compatible with electronic market places such as the Internet, allowing fully automatic order entry with payment cards. For more information, see the Sales [scenario \[Ext.\]](#) for creating orders on the Internet.

Procurement Card Functions

Use

More companies are using [procurement cards \[Page 9\]](#) as a way of controlling purchases. When goods are paid for using a procurement card, the company that issued the card requires detailed information on the transaction for authorization and settlement, such as:

- What was purchased?
- Has the product or product group been cleared for purchase?
- What is the product description?
- Is there a purchase order or budget number?

Features

There are several Customizing settings designed specifically for procurement cards. Choose *Billing* → *Payment cards* → *Maintain card categories* in Customizing for Sales and Distribution.

- You can specify whether there can only be one card per sales order. This is designed for tax restrictions often associated with procurement cards.
- You specify whether additional data is to be copied to Financial Accounting (FI) for authorization and settlement. The system then retrieves item details from the [relevant tables \[Page 20\]](#) and forwards it to the clearing house.
- You assign card types and number ranges to procurement cards. For example, all Visa cards that begin with "492" are procurement cards. The system uses this information to automatically determine whether a card entered in the sales order is a procurement card. It then processes the card accordingly.