

INTEGRATED

Microsoft Dynamics™ NAV 5.0

Sales and Purchase Document Approval with SMTP email notifications

Technical White Paper

This white paper provides a general overview of the functionality in the Document Approval feature of Microsoft Dynamics NAV 5.0 and how it is set up.

The white paper is intended for administrators or managers who are responsible for the document flow in the organization.

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Introduction

The sales and purchase document approval system allows the user to submit a document, typically a purchase order or sales order, for approval according to a predefined hierarchy of approval managers with certain approval amount limits.

It is also possible to define other approvers in roles that are relevant for approving the specific document, for example the responsible sales or purchase employees connected to a specific order.

In case the specified approver is out of office, it is also possible to set up the system to pass the document on to a substitute approver. (The administrator has to set it up manually.)

The approval of a document can be initiated by an e-mail notification sent to the user. Similarly, the user will be reminded of overdue approvals.

If the company chooses not to use the e-mail notification option, the user can view pending approvals from the Order Processing menu.

The focus and tasks in the approval system vary depending on the roles in the company. Therefore, it is important that the appropriate roles are assigned to be approvers etc. in the approval processes.

With a few exceptions the overall principles and workflow is the same for both purchase and sales documents.

Approval Set Up

The general features of the new sales and purchase approval system are set up in Administration – Document Approval – Setup in the Navigation Panel.

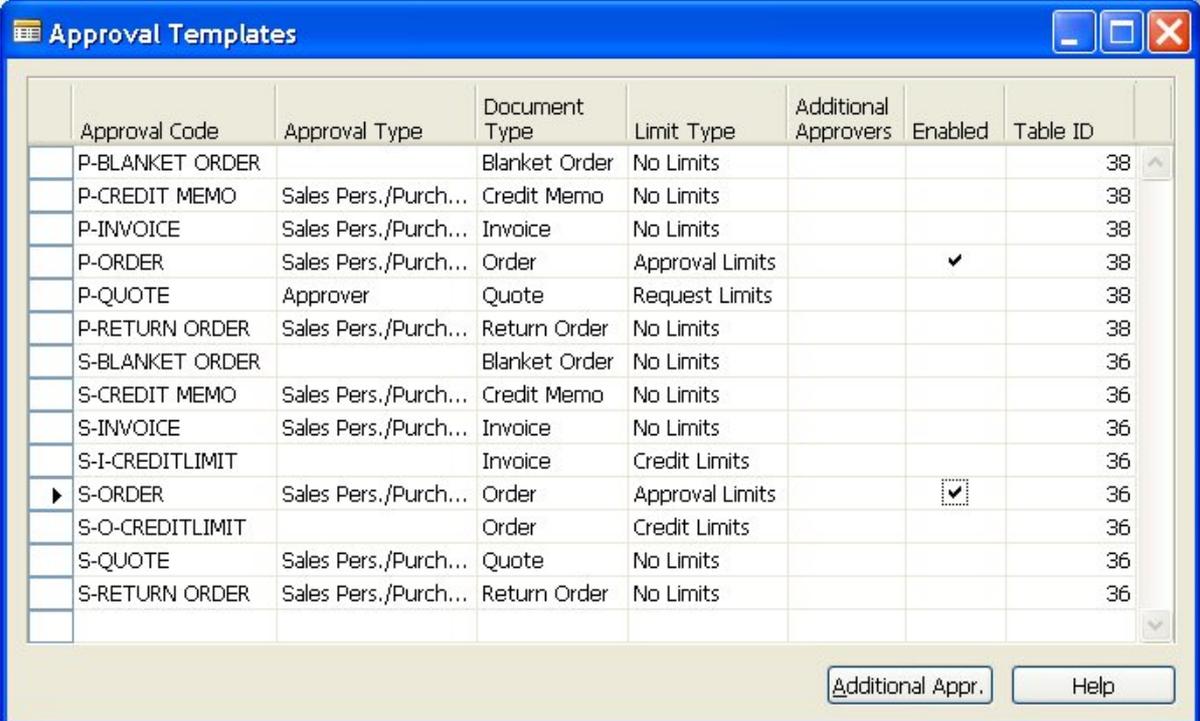
The Approval Setup window provides access to all the overall settings, such as:

- **The formula for the date by which approvals must be made, for example within one week (1W).**
- **The administrator of the approval system. The administrator has access rights to set up all the users and can go in and check documents for all users.**
- **The necessary selection if the rejection of a document should be explained by the approver in a comment note.**

The administrator has access to all the setup functions and maintains the hierarchy of approvers and which sales and purchase documents must be approved.

Approval Templates

Users can choose which types of sales or purchase documents to include in the approval process and which approval type and limit type to use for each document.



Approval Code	Approval Type	Document Type	Limit Type	Additional Approvers	Enabled	Table ID
P-BLANKET ORDER		Blanket Order	No Limits			38
P-CREDIT MEMO	Sales Pers./Purch...	Credit Memo	No Limits			38
P-INVOICE	Sales Pers./Purch...	Invoice	No Limits			38
P-ORDER	Sales Pers./Purch...	Order	Approval Limits		✓	38
P-QUOTE	Approver	Quote	Request Limits			38
P-RETURN ORDER	Sales Pers./Purch...	Return Order	No Limits			38
S-BLANKET ORDER		Blanket Order	No Limits			36
S-CREDIT MEMO	Sales Pers./Purch...	Credit Memo	No Limits			36
S-INVOICE	Sales Pers./Purch...	Invoice	No Limits			36
S-I-CREDITLIMIT		Invoice	Credit Limits			36
▶ S-ORDER	Sales Pers./Purch...	Order	Approval Limits		☐	36
S-O-CREDITLIMIT		Order	Credit Limits			36
S-QUOTE	Sales Pers./Purch...	Quote	No Limits			36
S-RETURN ORDER	Sales Pers./Purch...	Return Order	No Limits			36

Additional Appr. Help

A set of standard templates have been provided for this purpose in the Approval Templates window. The options are:

- **Quote (Quotation)**
- **Order**
- **Invoice**
- **Credit Memo**

- **Return order**
- **Blanket Order**

All the templates above are created for both purchases (P) and sales (S) except for the purchase receipt.

The templates define for each document type how the approval process is managed – the route to follow, and the fields to check.

Approval code is just a short name for the template. (The document type defines the document.)

Approval Type

The type of approval defines the flow of the approval process, in other words, who will approve a specific document as the next person in the hierarchy of approvers:

- **The normal approval flow is used when this is set to Approver.**
- **The alternative flow is used when this is set to Sales Pers./Purchaser (It requires a sales or purchase person to be defined in the Approval User Setup screen to work properly.)**

For example, the salesperson is naturally connected to a Sales Order, which is therefore connected to the sales person's approval flow.

For the purchase order in the example above, the normal approver flow is used, following the hierarchy of approvers of the person who creates the order.

Approval Limits

The limit type explains how this document type will be handled according to amount limits:

- ***No Limits* means that there is no check at all on amount limits. (This option requires that an additional approver is set up and is typically used in a situation where a hierarchy of users is not established, but where the same additional approver approves everything.)**
- ***Approval limits* means that there is a check on the approver's approval limit when the approver approves this document.**
- ***Request limits* is used for a purchase request and checks if the approver has permission to make a purchase request on that amount.**
- ***Credit limits* means that the credit limit for the customer is checked. This normally applies to sales documents.**

The limits are checked against the Approval User Set up, except for the Credit Limit type. This is checked against the credit limit specified for that particular customer.

NOTE: In order to use the approval limits type Credit limits for sales documents, the credit limit must always be active and greater than zero for the customer.

Enabling the templates

A template is selected by highlighting the line and placing a check mark in the column Enabled. In the example above, the Purchase Order template and the Sales Order templates are enabled.

NOTE: You have to activate each template here in this way for the approval system to be enabled. It is disabled by default because otherwise the users cannot post anything on these documents.

The table ID for the table connected to the template is displayed for information. For example, the ID displays that this is connected to the purchase header.

Additional Approvers

If you want additional approvers to approve a certain document type, they can be identified in the Additional Approvers column.

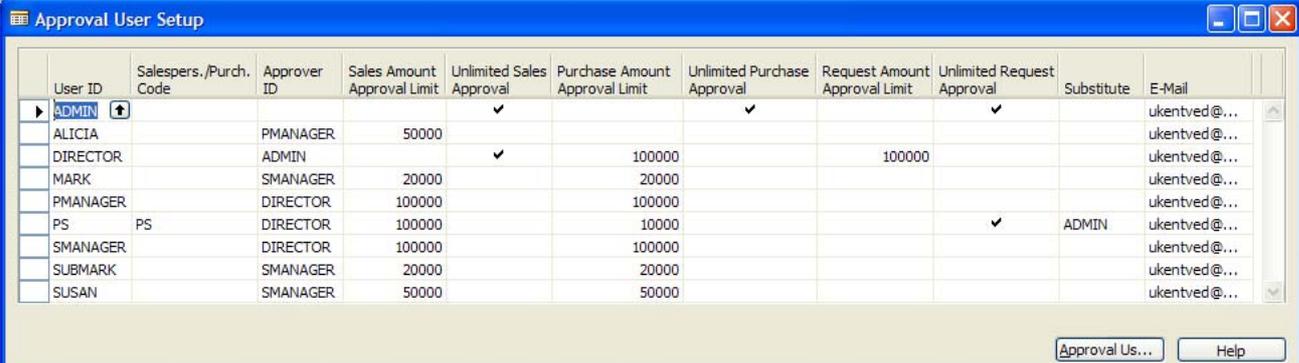
NOTE: This can also be used as a shortcut to defining the approval hierarchy if you do not want to specify all the roles and management levels in the Approval User set up. For example, it can be used in a small company where the manager or the owner has to approve everything. Then the manager can be set as additional approver for all documents.

The approval templates are prepared for partners to add additional templates as a business opportunity.

Approval Users and Amount Limits in a hierarchy

The hierarchy of users approving the documents in the document approval work flow, as well as the amount limits, is set up in the Approval User Setup screen. (This action requires that the users are already set up in Microsoft Dynamics NAV with permissions and log on ID). The Approval User Setup screen can be seen as the main set up screen in the Approval process.

The following screen shows an example of an approval hierarchy from Cronus:



User ID	Salespers./Purch. Code	Approver ID	Sales Amount Approval Limit	Unlimited Sales Approval	Purchase Amount Approval Limit	Unlimited Purchase Approval	Request Amount Approval Limit	Unlimited Request Approval	Substitute	E-Mail
ADMIN				✓		✓		✓		ukentved@...
ALICIA		PMANAGER	50000							ukentved@...
DIRECTOR		ADMIN		✓	100000		100000			ukentved@...
MARK		SMANAGER	20000		20000					ukentved@...
PMANAGER		DIRECTOR	100000		100000					ukentved@...
PS	PS	DIRECTOR	100000		10000			✓	ADMIN	ukentved@...
SMANAGER		DIRECTOR	100000		100000					ukentved@...
SUBMARK		SMANAGER	20000		20000					ukentved@...
SUSAN		SMANAGER	50000		50000					ukentved@...

In this hierarchy, Susan is the Sales Order Processor and Alicia is the Purchasing Agent. They have amount limits set to 50.000 for both sales and purchase. Their managers are the Purchase Manager (PManager) and Sales Manager (SManager) respectively. The managers have amount limits of 100.000 for both purchase and sales.

Heading the two managers is an overall Director of the company. The Director has unlimited sales approval and a high request amount approval limit because the Director collects purchase receipts for the whole company.

The Administrator (Admin) person is the highest level in this hierarchy. The Administrator has unlimited approval in all categories, even approval rights above the Director.

The **User ID** refers to the user ID from the user's log on information, for example "Admin".

The **Salespers./Purch. Code** field refers to the code that can be used to refer to this person from a document, for example sales order or purchase order. In this way the system can be set up to use this person's approval flow instead of the original approver's flow.

The **Approver ID** is the user ID of the approving person, for example the Manager.

Sales Amount refers to the amount limit for the sales order process. When the sales order exceeds this limit, the document will be sent to the approver.

Purchase Amount refers to the amount limit for the purchase order process. When the purchase order exceeds this limit, the document will be sent to the approver.

Request Amount refers to the amount limit for the purchase request process. When the purchase request exceeds this limit, the document will be sent to the approver.

The **Substitute** field relates to the possibility to add a substitute approver.

There must always be an administrator to set this up. The administrator has rights above everyone else. The administrator can go in and add new users, set substitute approvers and connect new documents to approve. The administrator can also go in and view pending approvals for all users.

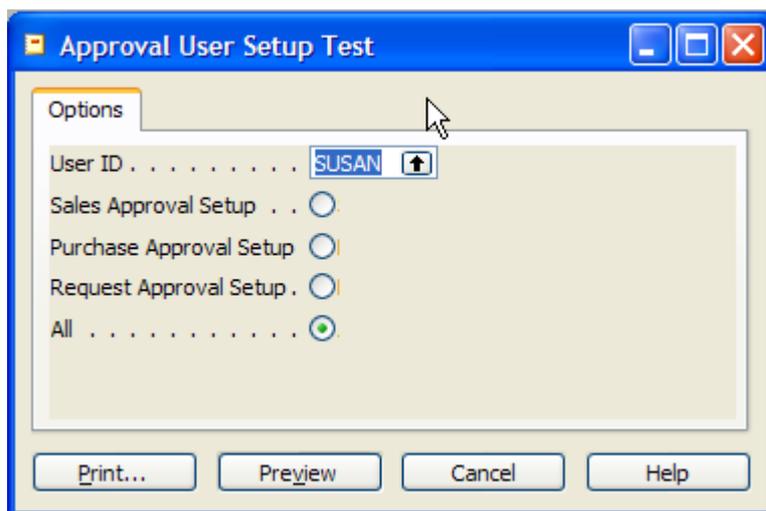
An e-mail address of each approver is specified so that the notification system can send e-mails out for approval (if the notification system is used).

Testing the Approval User Setup

It is required to test the user setup for errors before using the document approval system. Again this is done by the implementation consultant in close corporation with a person from the customers company that knows the users and their roles.

In the Approval User Setup panel click the button Approval User Setup Test.

The test is done user by user by entering the user ID in the screen that appears.



You can test each user for either the sales approval setup, purchase approval setup or request approval setup, depending on what flow this user is a part of.

It is recommended to select All.

The test ensures that there are no loops in the approval process and that the amount limits on different manager levels are set up correctly.

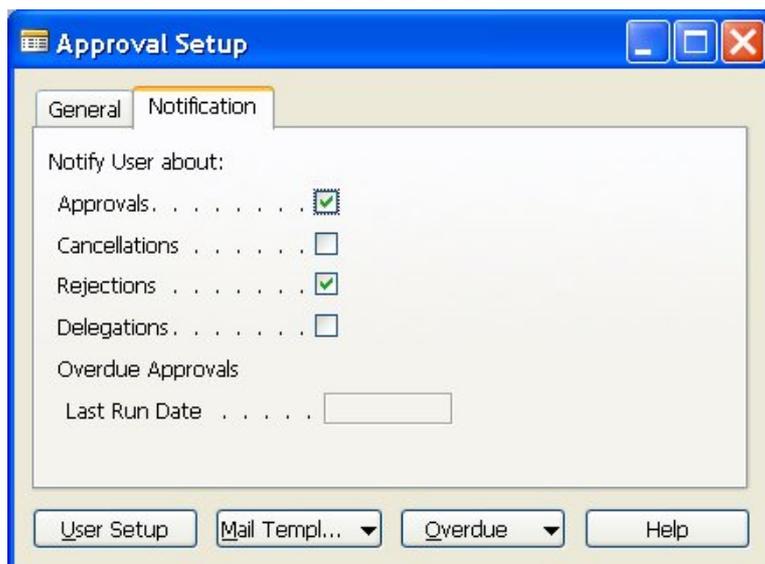
For example, if the amount limit is set to 50.000 for the Purchasing Agent, the amount limit for the Purchasing Manager must be set to be equal to or more than 50.000 for the system to work properly. After running the test, users can print the report or preview it on the screen.

The Notification System

The Notification System in Microsoft Dynamics NAV 5.0 is a system you set up to ensure that users who must approve (or reject) documents get notified when there are documents waiting for them to be approved.

Setting Up the Notification System

You use the Approval Setup window, the Notification tab, to specify when the system should automatically send notification e-mails about events.



- **Approvals** is selected when you want the system to notify you of approvals. This must always be set when you want to use the new document approval system in Microsoft Dynamics NAV version 5.0.
- **Cancellations** is selected if the approver wants to be notified about any cancellations made on the documents the approver has approved. You may find it convenient to be able to follow the process for a document you have approved, but the resulting e-mails can also affect system performance.
- **Rejections** is selected if you want to be notified if any of your documents sent for approval have been rejected. It is recommended to activate this setting to be able to know if any documents are rejected.
- **Delegations** is selected if you want to be notified that an approval task has been delegated to another person – a substitute approver.

NOTE: These selections are disabled by default, so the user must actively go in and activate them.

At the bottom of the window you can view the last time the Overdue Approvals function was run.

The use of the notification system is optional. If you do not want to use it, make sure none of the boxes are selected in the Notifications screen.

Alternatively, each user can go in directly and view the pending approvals from the Approval Entries window located in the Order Processing part of the Sales and Marketing and Purchase menus.

Getting an E-mail Notification

The approval process is often initiated by an e-mail notification sent to the responsible manager, sales or purchase contact person.

This notification can be customized in a variety of ways to suit the individual customer's needs.

An e-mail notification looks similar to this:

Navision Document Approval System

Sales Order 1001 requires your approval.

To view your documents for approval, please use the following link:

<C:\Program Files\Microsoft Dynamics NAV\CSIDE Client\>

Sales Order 1001

Amount	625,50
Amount (LCY)	625,50
Customer	1000 The Cannon Group PLC
Due Date	31-12-06
Available Credit Limit (LCY)	0

The notification tells you who sent the approval notification and contains some details about the amount, due date and the customer or vendor in question.

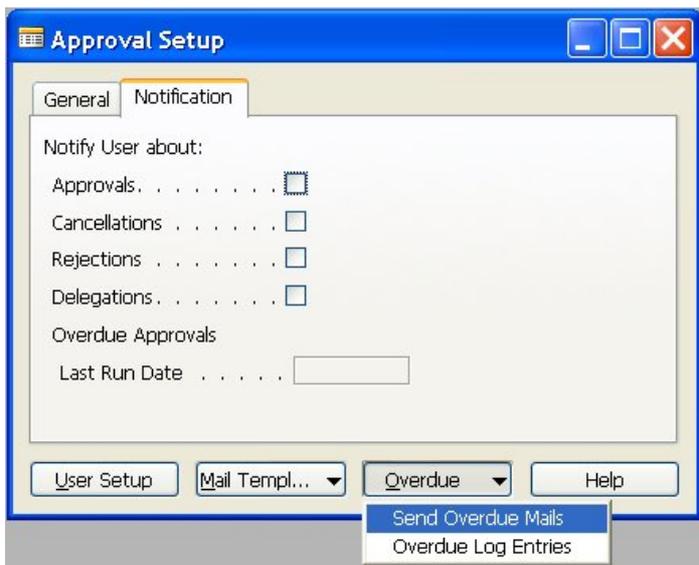
E-mails about cancellation and rejection look similar to the notification shown above.

From the e-mail notification there is a link to the document, in the example above, a sales order. When clicking on the link, the program opens the Approval Entries window and it is now possible to approve it and also to see all outstanding approvals for this user.

Overdue Notifications

The overdue notifications are sent out by the administrator, for example as a weekly routine, to make sure all users will remember to approve their documents.

To send overdue notification to all the users, click the **Overdue** button – Send Overdue Mails.



The e-mails are now sent to the approvers.

The **Last Run Date** field is updated with the date for the last Overdue Notification run.

The date formula ensures that overdue approvals already sent out are not sent out again. It is calculated as the last run date plus the due date formula specified in the due date formula field on the **General** tab in the **Approval Setup** window.

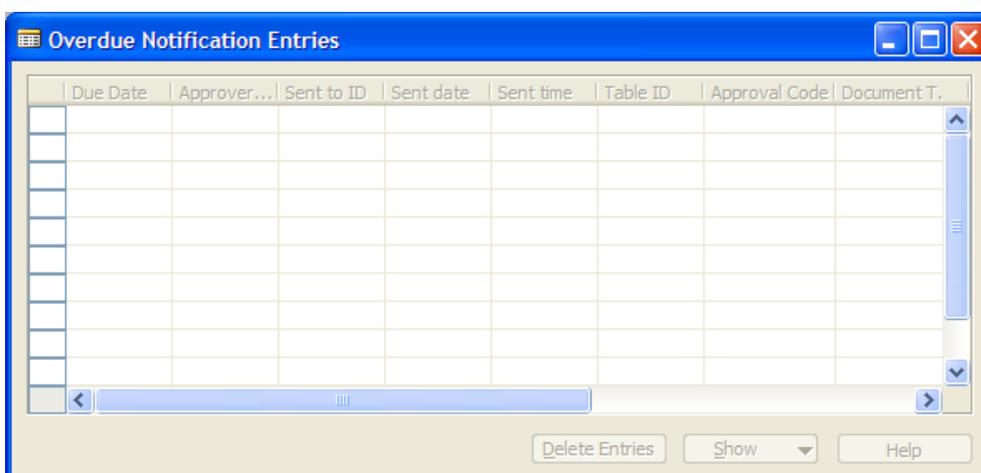
Overdue documents

For all documents a creation date is entered. A due date is calculated by using the due date formula (for example creation date plus one week). Documents are overdue if the current date exceeds the due date.

Example.

Overdue messages are sent out today. The approvals that have a due date before today's date receive an overdue notification. When the overdue check is run next time, the system checks the last run date plus one week (according to the due date formula). Everything that has due date before this date receives a notification.

A list of all the overdue approvals that were found and sent out is shown in the Overdue Notification Entries window. This is a log showing if there are any entries. If the window is empty there are no overdue entries.

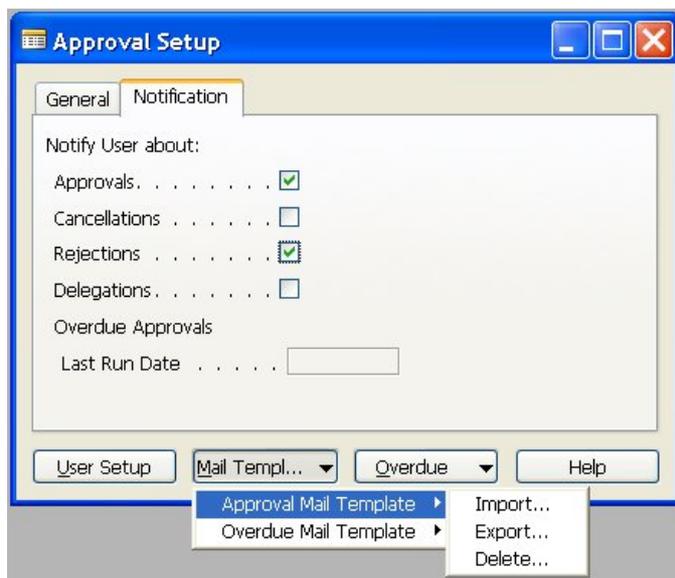


This window can be opened from Administration – Application Setup – Document Approval.

It is not possible to edit in the Overdue Notification Entries window. This is just an information log from the system.

Notification Templates

The templates for the e-mails to send out to the approvers can be customized using the Approval Mail Template function.



Use this function to import, export, or delete-mail templates to send out for approval of documents.

The corresponding templates for overdue documents can be managed in a similar way in the overdue mail templates function.

The implementation consultant together with the Accounting Manager and other people responsible for the implementation project will sit together and agree on the text for these templates. Afterwards, the implementation consultant will import them.

NOTE: Microsoft delivers these templates together with the demo data company. It must be copied from here to other databases. It is important to do it in this way for the templates to work properly.

Again, it is not mandatory to use the e-mail notification part of the document approvals system. But it is a great help to make the users remember to check for incoming approvals.

Amount Limits

Occasionally, documents are sent to an approver just to check if prices, discounts, delivery times and other parameters are set correctly. In other cases, the amount limits set up for the different roles in the company requires that a document is passed on to an approver and also to a second level of approval due to the amount limit (unless the amount criteria are turned off and additional approvers are used instead.)

This is to ensure that control is kept over how large a risk that an order processor or purchaser can create when making a new order entry.

The amount limits are set up as a part of the set up process of the document approval system that the Implementation Consultant is responsible for in close cooperation with the Account Manager or Finance Manager.

Alternative Approval Flow

The alternative approval flow functionality is relevant in case the person responsible for the document is not the one who creates the order or receives the invoice.

For example, the Order Processor creates the sales order. According to the normal document approval procedure, the Order Processor's manager is responsible for approving the order. But the one responsible for approving the order is the Sales Accountant in charge of that customer. If the Sales Order exceeds the amount limit of the Sales Accountant, it must be approved by the Sales Accountant's manager.

To use the alternative approval flow, enter a code in the Salesperson Code field on, for example, the Sales Order or the Sales Quote.

NOTE: This works similar for a Purchase Order or Purchase Quote. Then the field is called Purchaser Code.

Substitute Approvers

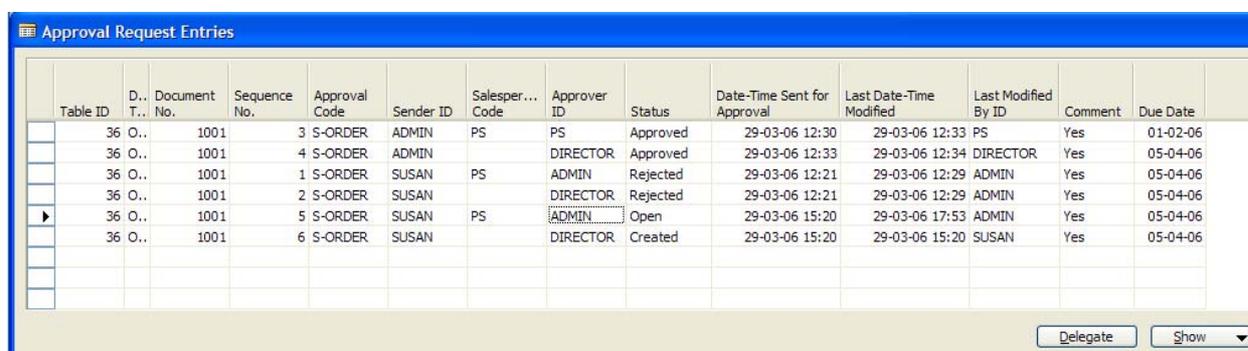
Delegating

The administrator is responsible for maintaining the Approval User Setup window where substitute approvers are added to the approval flow.

When a substitute approver is added to a user, all documents will be sent directly to the substitute person when the administrator activates the delegate entries function.

If the notification system is set up to send notifications when delegating documents, an e-mail is sent to the user that the document has been delegated. Otherwise no notification is sent.

The administrator will open the Approval Request Entries window and activate the function Delegate to send notifications to substitute approvers if anyone is out of office, for example, due to illness or vacation. (Select entries for bulk delegation).



The screenshot shows a window titled "Approval Request Entries" with a table of document approval entries. The table has the following columns: Table ID, D.. T.. No., Document No., Sequence No., Approval Code, Sender ID, Salesper... Code, Approver ID, Status, Date-Time Sent for Approval, Last Date-Time Modified, Last Modified By ID, Comment, and Due Date. The data rows are as follows:

Table ID	D.. T.. No.	Document No.	Sequence No.	Approval Code	Sender ID	Salesper... Code	Approver ID	Status	Date-Time Sent for Approval	Last Date-Time Modified	Last Modified By ID	Comment	Due Date
36	O..	1001	3	S-ORDER	ADMIN	PS	PS	Approved	29-03-06 12:30	29-03-06 12:33	PS	Yes	01-02-06
36	O..	1001	4	S-ORDER	ADMIN		DIRECTOR	Approved	29-03-06 12:33	29-03-06 12:34	DIRECTOR	Yes	05-04-06
36	O..	1001	1	S-ORDER	SUSAN	PS	ADMIN	Rejected	29-03-06 12:21	29-03-06 12:29	ADMIN	Yes	05-04-06
36	O..	1001	2	S-ORDER	SUSAN		DIRECTOR	Rejected	29-03-06 12:21	29-03-06 12:29	ADMIN	Yes	05-04-06
36	O..	1001	5	S-ORDER	SUSAN	PS	ADMIN	Open	29-03-06 15:20	29-03-06 17:53	ADMIN	Yes	05-04-06
36	O..	1001	6	S-ORDER	SUSAN		DIRECTOR	Created	29-03-06 15:20	29-03-06 15:20	SUSAN	Yes	05-04-06

At the bottom right of the window, there are two buttons: "Delegate" and "Show" with a dropdown arrow.

In the Approval Request Entries window, the administrator can see all entries in the document approval system. The administrator can check the status and check the dates for the approvals. The status Open indicates the Approval document that has to be approved next.

NOTE: In case the approver's substitute is also out of office, the administrator has to go in and change the substitute approver manually in the Approval Setup window.

Passing a Document on to a Substitute Approver

It is possible to manually set up the system to delegate to other approvers if certain approvers are out of office, for example due to vacation or illness. This is set up in the Approval setup, Approval User Setup window as a part of the set up process

In this window, a substitute approver can be set up for each approval person.

The delegation to substitute approvers can be created by the administrator as part of the maintenance routine where the administrator uses the Approval Request Entries window and manually delegates approval tasks to substitute approvers (mark entries for bulk delegation). The administrator can see all open approvals for all users in this screen. Any user can delegate approval tasks relating to a document they have sent for approval from the Approval Request Entries window.

If no substitutes can be found during the delegation run, an error will display.

The person delegating the approval will be notified by a screen message that the approval has been delegated from the old approver to the substitute. The document will now follow the substitute approver's route through the approval hierarchy or flow.

Users can also decide to delegate their own approval task to another user, for example, when they will not be in the office before the approval is due for completion. The **Delegate** button from the Approval Entries window is used for this purpose.

Any user with access to the documents requiring approval can also delegate the open approval task for a specific document from the Approval Entries screen relating to that document.

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