Workflow Management User Guide

Infor Distribution A+ Version Number 10.03.02

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Workflow Management Overview

It is crucial for users at all levels of a business to be well-informed not only about the day-to-day processes requiring their attention but also and especially about any exceptions to normal processing which may require action on the part of others as well. It is imperative that users be aware of the 'workflow' of the daily events applicable to their job that make the entire business thrive.

The Workflow Management Coalition (www.wfmc.org) is a non-profit organization whose objective is to advance opportunities for the exploitation of workflow technology through the development of common terminology and standards. The Workflow Management Coalition defines workflow as:

> The automation of a business process, in whole or part, during which documents, information or tasks are passed from one participant to another for action, according to a set of procedural rules.

Components of Workflow Management

The Workflow Management module is based on application scenarios or conditions generating alerts which then trigger messages to the appropriate user using an Alert Processor. The application scenarios or conditions (e.g., an order being placed on hold) which generate the alerts, as well as the details to be contained in the ensuing message (e.g., the order number and hold code) and the user(s) to receive the message are all predefined. When the condition occurs and the alert is automatically generated, the message that is triggered can also contain reports or hyperlink to an application function (such as an order inquiry) which allows the recipient to easily access additional information. Messages are delivered to internal recipients (e.g., Distribution A+ users) through Application Mail. When the Mail Server module installed, messages can also be delivered to internal or external recipients (e.g., customers or vendors) through e-mail. Within Infor Ming.le, workflow alerts can also be sent to display as tasks, notifications and alerts and also to prompts users to complete these tasks.

The Workflow Management module can be divided into five main parts:

- alert capture
- message definition and tailoring
- alert tailoring
- the Workflow Alert Processor
- message delivery and management tools.

Workflow Management is designed to maintain its files independently. It will purge alert requests and message requests from its files based on the number of days specified in Workflow Management System Options Maintenance (MENU MGFILE).

Sent messages are purged only when the last escalation has been completed and the number of days since completion of the escalation is greater than or equal to the number of days to keep message requests. Messages are purged once a day, based on your system date, regardless of how many times you stop and start the Workflow Alert Processor that day.

Alerts

An alert is an application entity which represents an event or situation that requires the performance of a business action or function. To automatically notify a system user that some action or function is required, a program captures the occurrence of the event and records it for further processing. Additionally, related data from the application is also captured. This data is then used to select the applicable alert, tailor its messages, and determine the recipient for each message.

The capture program uses parameters (or arguments) consisting of the name of the alert and up to 35 data elements from the application. The parameters are captured and stored for later use in the Pending Alert File (MGPND) in a delimited data string. This file is the main input to the Workflow Alert Processor which generates and sends the messages, the main purpose of the Workflow Management module.

The following application conditions are examples of those addressed by the alerts:

- an order is placed on hold
- an order is backordered
- special order line items were entered
- a purchase order approval is required
- an open order is a specified number of days from its cancel date
- there is an offline order entry error
- a purchase order is overdue
- an order is at status 1 (Pick slip ready)
- an order has been ship confirmed

When you first install Workflow Management, all of the alerts will be inactive. You must manually activate each alert to be used and specify one or more message recipients, a send time, an escalation recipient, and whether multiple messages to the same recipient should be sent separately, as they are triggered, or consolidated. You can also specify conditions for each alert. For example, you can specify that the 'order on backorder' alert should trigger a message only if the order is for one of a specified group of customers.

The message generated for an alert is first defined using a message template. You can create and modify message templates through Message Maintenance (MENU MGFILE). The message template contains the text of the message. The template can also contain placeholders for:

- data pertinent to the application that generated the alert, such as the customer number

- hyperlinks to application functions, such as the Customer Collection Inquiry

- Workflow Management "reports," which contain selected groups of related application data, such as the fields in a customer's ship-to address or the line items on an order

The Workflow Alert Processor replaces each of these placeholders with the appropriate data or link when it generates the message.

Workflow Management Tasks

Alerts are generated based on the rules defined in Workflow Management or by you as you edit and create your own alerts. The rules for an alert are called the argument. The process of alert creation is outlined in this section.

1. A situation arises within the Distribution A+ application that matches the argument for an alert.
2. The Pending Alerts table is updated with the data for the alert.
3. The Workflow Alert Processor processes the pending alert and
   a. generates all the required message requests defined for the alert.
   b. performs any special (programmer defined) and limits (user-defined) processing that may alter the conditions for the alert creation.
   c. determines the message recipient.
   d. determines when the message should be sent.
   e. determines if the message is a duplicate. Duplicate messages are removed.
   f. places generated data in the Generated Report table.
4. The message requests and data for the alert are merged to create the actual message text. Any report data is also merged into the message.
5. Messages are consolidated.
6. Messages are sent via Application Mail, e-mail, or sent to Infor Ming.le.

Workflow System Options

As with most of the Distribution A+ modules, the system options allow an installation to tailor the Workflow Management processing and control parameters, thereby providing flexibility in the way the system functions. These tailoring options are found on the Workflow - File Maintenance Menu (MENU MGFILE).

The system options enable you to specify which user will be the Workflow System Administrator. This user will be the user to receive all messages that cannot otherwise be delivered. For example; if a recipient cannot be determined during the message generation (most likely due to incorrect or missing setup data), the message will be sent to the Workflow System Administrator. The Workflow System Administrator would then be responsible for determining who should have received the message, and what corrections to the setup are required to ensure that future messages of the same type are delivered correctly.

Other fields within the system options enable you to specify:

- the name of the Distribution A+ job queue that will be used to run the Workflow Alert Processor
- the Query Alert library where alert queries will be found
- whether query alerts will be processed by the Workflow Alert Processor
- if escalation processing is to be used
- the wait cycle for the Workflow Alert Processor
- when to send hourly messages
- the six times to send selective messages
- purge parameters for workflow processing files.

Messages and Message Delivery

There is great flexibility as to how the alerts and messages function. Options in the Workflow Management module enable you to tailor alerts and the messages they generate to best fit your business practices. Sending the right message to the right person requires the definition and setup of control data. This control data can be divided into two types: system control data and message tailoring data.

Message Tailoring Data

Message tailoring data consists of:

- system control options
- message data
- alert tailoring data
- alert filter data
- alert control values.

Much of the message tailoring data is provided by Infor in the form of sample message templates and alert tailoring data. This sample data can then be copied and changed by the user to achieve the desired results.

Message tailoring data is maintainable by the end user; however, the user that maintains this data should be a sophisticated user. This user would most likely be the person who has been designated as the alert administrator and given responsibility for alert processing at your company.

Message Maintenance

Using the Message Maintenance option on the Workflow Management File Maintenance Menu (MENU MGFILE), users create and maintain the messages that will be sent by an alert.The Message Maintenance program is a simple message editor where you can create a new message template or modify an existing template.

 A message can contain:

* header text

* body text (repeats for consolidated messages)

* data codes (placeholders for values)

* function numbers (placeholders links to application functions)

* report codes (placeholders for Workflow Management reports)

* footer text

Message templates can include simple text, data placeholders, function placeholders and report placeholders. You can also use special control placeholders to divide the message up into sections.

* Simple Text: Text that will remain unchanged from the message template when it is placed into the final message during message generation.

* Data Placeholder: A named placeholder that is used to represent an element of data from the application. The data itself is captured when the alert is generated and is available to the Workflow Alert Processor. The Workflow Alert Processor will replace the placeholder with the actual application data that corresponds to the placeholder when the message is formed.

* Function Placeholder: A named placeholder that represents a link to a current application function or process. When the message is formed, this placeholder will be replaced with a hot link. When the recipient reads the message, clicking on this hot link will provide access to the application function.

* Report Placeholder: A named placeholder that represents a Workflow Management Report "report," which is a group of related data from the application, such as the fields in a customer's ship-to address. When the message is formed, the report data is merged with the message template, starting at the line represented by the report placeholder.

* Special Control Placeholders: Placeholders that are used to mark the beginning and the end of a special section of a message. Special control placeholders can be used to divide the message text into three areas: header, detail, and footer. There are four special control placeholders which are used to denote the beginning and end of the header section, and the beginning and the end of the footer section. Each message can have one header section, which must be the first section of the message, and one footer section, which must be the last section of the message. Header and footer sections are generally used within messages that are to be consolidated so that the body of the message will be repeated for each alert that is part of a consolidated message, but the header and/or footer section will appear only once.

Message Delivery and Management Tools

Alert messages can be delivered to internal recipients via Application Mail, and to external recipients, such as customers or vendor, via e-mail using the Mail Server module. For internal recipients, Application Mail also provides the tools required to manage and respond to alert messages.

Integration of Distribution A+ Workflow with Infor ION provides a new technique of delivery - via Infor ION ActivityDeck, so users that are working in Infor Ming.le can receive Distribution A+ alerts as ION ActivityDeck Alerts, Tasks and Notifications. Additionally, the Infor ION interface provides a **Send Email** option and when it is checked, Infor Ming.le users will also receive emails. See "Infor Ming.le" on page 1-16 for more information.

Application Mail

Registered Distribution A+ users can use the Application Mail program to access and work with messages generated by alerts. Application Mail, which is included with the base modules of Distribution A+, will handle alert messages in addition to user messages.

Once an alert message is received via Application Mail, the recipient has a number of choices as to how they will respond to the message. The recipient of an alert message can choose any of the following actions:

- Acknowledge - Acknowledging a message indicates that the recipient assumes responsibility for investigating and resolving the situation that caused the alert. The alert is flagged as completed.

- Defer - Deferring a message indicates that it has been received, but the recipient is not prepared to address the issue at the current time. Deferring a message does not update the status of the alert, although it does add a log to the activity file noting the action.

- Delegate - Delegating a message passes the responsibility for investigating and resolving the situation that caused the alert to another user. Delegation is a manual escalation to another user chosen by the original (or last) recipient of the message. The person delegating a message can select the new recipient and the time frame for the next escalation of the message should there be one. Additionally, the original message recipient can choose to have the message escalate back to them if the message is not acknowledged by the new recipient before the escalation time is reached.

Messages cannot be deleted or purged from the system until they have been acknowledged, deferred, or delegated.

If a message contains links to application functions, these links appear as hyperlinks when viewing the message. Distribution A+ users can activate the link by placing their cursor on it and pressing a function key. When the link is activated, it opens the application function it refers to. The information that is displayed is determined by the entity referenced in the hyperlink. For example, a message can contain an hyperlink to an order inquiry which appears as the company, order number, and generation number of an order. Activating the link will bring the user to the order inquiry, displaying order information for the order that was noted in the hyperlink.

Mail Server

External messages are sent to the user as e-mails using the Mail Server application, which is also included in the Distribution A+ base modules. The body of the alert message is turned into an attachment document and sent to the recipient as part of an e-mail message. Once an alert message has been sent in this manner, the Workflow Management module considers the message closed, because it can no longer track its progress.   As a result, alert messages delivered via e-mail cannot be escalated.

For more information about the Amail Inquiry (MENU MGMAIN) or the Mail Server module, refer to the Mail Server User Guide.

Alert Tailoring

Once you have created the messages you want to use with an alert, you can activate the alert and further tailor its messages through Alert Tailoring (MENU MGFILE). Alert Tailoring enables you to select which message should be sent for a given alert and to whom. For any one alert, you can choose to send

- a single message to a single user
- a single message to multiple users
- two or more different messages to a single user
- two or more different messages to multiple users

Alert Tailoring lists all of the messages you have created for an alert. From this list, you can select which message(s) should be sent. For each message selected, you specify:

- a recipient
- when the message should be sent (immediately, on the hour, or at selected times)
- whether the message will be consolidated with like messages
- whether the message will interrupt the recipient when it is sent
- whether duplicates of the message will be allowed
- whether the message will be sent to ION
- whether the message is active for the alert
- whether the message will be escalated and the escalation interval
- filters to specify the conditions for which a message should be sent

Messages may need to be consolidated so as not to overwhelm the message recipient. For example, if a message is being sent to the credit manager each time an order is placed on credit hold, the credit manager in a high-volume business could be inundated with these messages. The credit manager should have the option of having these messages bundled and sent once per hour (or at some other interval), with each message containing information about multiple orders.

You can also set up an alert to send the same message to different recipients under different conditions. For example, if an alert triggers a message whenever an order is put on hold, you can specify that if the order is on credit hold, the message should be sent to the credit manager, but if the order is on warehouse management hold, the message should be sent to the warehouse manager.

Messages should be set to escalate to a higher level of management if the recipient does not respond within a specified period of time.

Message Send Times

Since some installations of Workflow Management could have multiple warehouses that reside in different time zones, the module is designed to take the different time zones into consideration when determining when to send a message. If you specify that a message should be sent at specific times through Alert Tailoring (MENU MGFILE), the Workflow Alert Processor considers the recipient's time zone when determining when to send the message so that the message will be sent when appropriate in the recipient's time zone.

Example:

The Workflow Alert Processor's system time zone is Central Standard Time (CST). A message that is defined to be sent at 10:00 a.m. is generated for two recipients. Recipient A's time zone is Eastern Standard Time (EST), which is one hour earlier than CST. Recipient B's time zone is Pacific Standard Time (PST), which is two hours later than CST. The Workflow Alert Processor will send the message to Recipient A at 9:00 a.m. CST and to Recipient B at 12:00 p.m. CST. Recipient A will receive the message at 10:00 a.m. EST. Recipient B will receive the message at 10:00 a.m. PST.

Alert Filters

With Alert Tailoring, you can set up filters that will be used to generate different messages for the same alert based on one or more conditions you set, or to specify that the message generated by an alert should be sent only under certain conditions. Or, if an alert generates a message whenever an order goes on hold, you can specify that if the order is put on credit hold, the message should go to the credit manager, but if the order is put on warehouse management hold, the message should go to the warehouse manager.

Example:

You can specify that the credit manager should be notified of orders that go on credit hold only if the value of the order is more than $2500. When an order goes on credit hold, an alert will be generated. If the total value of the order is less than or equal to $2500, no message will be sent; however, if the value is $2500.01, a message will be sent to the credit manager.

Workflow Management provides a set of operators (EQ, NE, LT, LE, GT, and GE) that you can use to set up the conditions that must be satisfied before the message is selected for message processing. The values checked in this series of comparisons are data elements that originated from the application function that generated the alert. When you set up the comparison, you use data codes to represent these data elements.

Alert Control Values

Some alerts will have additional inclusion/exclusion values, called alert control values, that determine if an alert is to be recognized or not. These control values provide the capability to set parameters for when the alert will be generated. For example, assume that an alert will be generated whenever an invoice is over a certain number of days old. Distribution A+ provides a dynamic alert control value to specify a number of days (e.g., 45) to the program that generates the alert. You can then set this value for the number of days you want used to generate the alert.

Alert control values are similar to filters because they, too are used define conditions for sending alert messages. However, there are two important ways in which control values are different from filters:

- Control values are defined on the alert header level; therefore, they determine whether an alert is to be generated. Filters are defined on the alert detail level and function only after the alert is generated to determine if a specific message should be sent.

- The logic to process a control value is built into the actual application program that would generate the alert. Therefore, new control values can be only added by a programmer. Filters can be added to an alert message at any time through Alert Tailoring (MENU MGFILE).

One or more control values may be assigned to an alert; however, control values are not required.

Although users cannot add a control value, they can change the actual value to be used in the control value logic through Alert Tailoring (MENU MGFILE). If one or more control values have been defined for an alert, an additional F2=ALERT VALUES will display on the Alert Detail List Screen (p. 8-5) to enable the user to change the value for the control value.

Example:

Alert GN106, Order Cancel Date, is an alert that uses a control value. The **Order Cancel Date** field is an optional field on the Second Order Header Screen in Enter, Change & Ship Orders (MENU OEMAIN). When this field is filled in, it indicates that the order should be canceled if the items cannot be shipped by this date. In other words, the items are of no use to this customer after the cancel date. Without the Workflow Management module, the only way to monitor orders with cancel dates is to run the Cancel Date Report (MENU OEREPT). The GN106 - Order Cancel Date alert automates monitoring orders with cancel dates by sending a message to a designated user ID when the cancel date on an order is within a specified number of days of the current date. The message recipient can then expedite purchase or production of the item to avoid losing the order. The control value on the alert allows the user to specify how many days prior to the cancel date they want to be notified about the order. The user can change the number of days prior to the cancel date the message should be sent through Alert Tailoring (MENU MGFILE).

Alert control values are stored in the Alert Control Values File (MGACT). This file contains the following information for each control value:

- Alert ID - The alert for which the control value has been defined.

- Sequence Number - A sequence number that provides a unique access to each of the control values for an alert.

- Line Description - The text that will be used by the Alert Tailoring option as the field prompt for the value.

- Condition Value - A 15 character decimal field containing the user's response to the field prompt (description).

- Data Type - The data type of the value which can be:

    - character

    - numeric (non-decimal)

    - numeric (with decimals)

    - date

- Required - An indicator for whether the value can be zero or blank.

The file would contain the following information for the control value used with GN106:

Alert ID	Seq	Description	Condition Value	Data Type	Required
GN106	01	# of days before	7	INT	Yes

Based on these entries, the alert message warning that an order is nearing its cancel date will be sent seven days prior to the cancel date on the order. When keying a new number of days the user must key a whole number with no decimal places (designated by a Data Type of INT). The user may also leave the number of days before blank or key a zero in the field. If the field is blank or zero, the alert message will be sent on the order's cancel date (e.g., zero days before the cancel date).

Alert Classes

Alert classes can be created through the Alert Class Maintenance option on the Workflow Management File Maintenance Menu (MENU MGFILE). Alert classes allow you to group similar types of alerts. For example, you can create an alert class for all order entry alerts and assign that class to all the alerts that relate to the order entry process.

System Maintenance Menu (MENU MGSYST)

System control data affects the generation and processing of alerts and defines the parameters available to users as they tailor the system to their own use. All of this data is provided with the system and should not be changed or altered without a thorough knowledge of the Workflow Management module and how this data interacts with the application program logic.

The System Maintenance Menu (MENU MGSYST) allows you to create and modify the codes that are used by alerts during processing. These codes are also used when you create messages, create filters, and tailor the alerts on the Workflow Management File Maintenance Menu.

This menu can only be accessed from the Distribution A+ command line. Because these options control how an alert will function, a complete understanding of the purpose and use of each code is required before beginning any maintenance. This section provide a brief overview of the code elements used in alert processing.

Workflow Management uses six types of codes in its processing:

- data codes
- function numbers
- recipient codes
- report codes
- rules
- entities

Data Codes

Data codes are named variables that refer to data elements extracted from the application when the alert is generated. Data codes are used as placeholders for message data, message filters, and criteria for selecting the message recipient. These data elements are stored in a data string and accessed based on the definition of that string in the data code files. Data codes are created through Data Code Maintenance (MENU MGSYST) and saved in the Alert Data Codes Master File (MGNAM).

Data codes are assigned to alerts through Alert Maintenance (MENU MGSYST) and that association is saved in the Alert Data Code File (MGARL) as one record for each data code that a given alert may use.

Function Numbers

Function numbers identify a menu option in Distribution A+. Function numbers are used in messages as placeholders for a hyperlink to an Distribution A+ function that will be included in the alert message

when it is sent. Function numbers provide the ability to add hot links from an alert message directly to an application function. These links work only in alert messages sent via Application Mail.

> NOTE: The hyperlinks generated by function numbers are environment-specific. To access an application function via the hyperlink in a message, the recipient must be logged in to the same environment that generated the message.

Function numbers are defined through Function Number Maintenance (MENU MGSYST) and saved in the Workflow Function File (MGFNC) file and are associated with an alert in the Alert Function File (MGAFN) file through Alert Maintenance (MENU MGSYST).

Recipient Codes

Recipient codes identify the person or persons who will receive an alert message. Recipient codes are:

- assigned to an alert through Alert Maintenance (MENU MGSYST)
- assigned to an alert message through Alert Tailoring (MENU MGFILE)

Recipient codes are used by Workflow Management to determine to whom the final message should be sent. Codes have been created to represent the various common positions and responsibilities throughout a wholesale distribution company. Recipient codes are applied to the recipient selection along with data from the application. The combined information is used to determine the user ID or e-mail address of the message recipient. This method is sufficiently flexible to let the specific detail information from the application determine the message recipient, rather than specifying a single recipient as part of the alert definition. One alert can have multiple possible message recipients, and can select the correct recipient for a given situation based on conditions within the application data.

Report Codes

Report codes identify selected groups of related application data, such as the fields in a customer's ship-to address or the line items on an order. Reports provide a way to insert a group of data elements into an alert message using a single report code. The data elements that comprise the report are in some way related to the alert that they are generated for.

Report codes are:

- created through Report Code Maintenance (MENU MGSYST)
- assigned to an alert through Alert Maintenance (MENU MGSYST)
- assigned to an alert message through Message Maintenance (MENU MGFILE).

Rules

Rules are a special type of data code whose value is derived by the Workflow Alert Processor using a set of predefined conditions and placed in the data string, rather than being taken directly from the

application. Workflow rules provide for alerts that require a more complex process for determining if a message should be sent when an alert is triggered, or when a large number of recipients are involved.

Rules are:

* created through Rule Maintenance (MENU MGSYST)
* assigned to an alert through Alert Maintenance (MENU MGSYST).

Entities

Entities are used with rules. Entities are transactions, documents, control constants, or recipient categories for which a rule operates. Orders, purchase orders, invoices, companies, customers and vendors are all examples of entities. Rules are defined for alerts but apply to these entities.

Entities are:

* created through Entity Maintenance (MENU MGSYST)
* used to create rules through Rule Maintenance (MENU MGSYST)

The Alert Program

The alert program is a specialized program that runs in the Workflow Alert Processor. This program is named MG[Alert Name]; therefore, each alert has its own alert program. For example, MGGN101 is the alert program for alert GN101.

Data is captured from the application database when the alert is generated and is then converted to a character format and stored in a 256-character delimited data string. In many cases, when the alert is generated a numbered placeholder is stored in place of the data. This placeholder is then replaced by the intended data, either by the Alert Program (MG[Alert Id]) or by the Workflow Rules Program.

There is also an additional 256-character wildcard data string that is available for custom data which can be loaded in the Alert Program and used by the Workflow Alert Processor for filters or as replacements in the message.

The alert program runs once for each alert processed. The following parameters are passed to and received from the alert program:

* Pass/Fail flag
* User Pass/Fail flag
* Data string
* Wildcard string

Pass/Fail flag

The Pass/Fail flag provides a way to specify if this alert is processed or not from within the alert program. If this field returns with the value of Yes, then the alert is processed, if it returns with the value of No, the alert is not processed. The logic within the alert program to set the value of this flag varies from alert to alert. Some alerts simply set this flag to Y (Yes) because there is no special condition to bypass the alert. This flag is reserved for system use. For custom logic for alert generation conditions, use the User Pass/Fail flag.

User Pass/Fail flag

The User Pass/Fail flag is provided to allow users to add custom logic to the alert program to determine alert generation conditions. The system blanks out this value at the beginning of the alert program. If this value returns from the alert program with any value other than blanks, the alert will be bypassed and messages will not be generated.

The Data String

The data string is one of the most critical elements of the Workflow Management module. The data string makes much of the functionality of Workflow Management come to life. Features such as data codes as placeholders for data in a message, recipient codes, function numbers that provide hot links to application functions, and reports would not function if it were not for the simple data string.

Example:

One of the data codes for an alert is the hold code description (*HLD-DSC), which is to be stored in the 15th position of the data string. When the alert is generated, the value of this data code in the data string would be "**15**." The alert program for this alert would contain logic to retrieve the value of the Hold Code field in the data string, then retrieve the description of that hold code. This description would then be used to replace the placeholder value "**15**" with the actual hold code description.

The data string is a simple 256-character field that contains data captured from the application when the alert is generated. The data is stored as a string delimited by a special character. The character used as the delimiter is a carat (^). Using the alert data code definitions, Workflow Management is able to store and retrieve the application values within this string and use those values to perform the various workflow functions.

The Wildcard String

The wildcard string is an additional 256-character field set aside to store additional data elements for users who want to add their own custom data codes to an alert. From 0 to 35 wildcard values can be defined for each alert.

You can specify the number of wildcards that can be used with an alert through Alert Maintenance (MENU MGSYST). Options are provided to define the data types of these wildcard values. Data codes to support these values are named *WC01 through *WC35. The data codes that represent these wildcard values can be used as replacement values or filter values in a message, or directly as a recipient code.

> NOTE: Programming modifications will need to be made to create and maintain the contents of the wildcard string.

Workflow Management Interfaces

Workflow Management alerts can be triggered by a wide range of processing events throughout Distribution A+. Additionally, hyperlinks to functions in any module can be inserted in the messages generated by an alert.

Installing Workflow Management adds fields to options in the following Distribution A+ modules:

- Cross Applications
- Inventory Accounting
- Mail Server
- Purchasing
- Sales Analysis

These fields provide the information that Workflow Management needs to create, deliver, and escalate the messages it generates.

Cross Applications

In the Cross Applications module, you can specify the following information for each user:

- the user ID of the individual's manager
- a replacement user ID for when that user is on vacation or traveling
- the escalation user ID, to be used when the user does not respond to an alert in a timely manner
- the alert delivery type (Application Mail or e-mail)

Additionally, Application Mail has been enhanced to support advanced Alert System features. You may acknowledge, defer, delegate, and copy alerts. Messages generated by an alert can contain links to application functions, allowing the recipient to start a task by clicking a hyperlink within the Application Mail message.

Inventory Accounting

You can specify the user ID of the warehouse manager through Warehouse Numbers Maintenance (MENU IAFILE).

Mail Server

With the Mail Server module, alerts can be sent to users via e-mail rather than Distribution A+ Application Mail.

To send an alert message to a registered user via e-mail, the user must have a valid e-mail address in the **User Email Address** field in Register A+ User IDs (MENU XACFIG). On the User Workflow Options Screen, the user can be defined as either an internal or external recipient. Internal recipients can have alerts e-mailed to them if a Y is keyed in the **Copy to Email** field. External recipients will receive alerts via e-mail by default.

To send an alert message to a customer or vendor via e-mail, Distribution A+ uses the e-mail contact information from the customer or vendor record.

Purchasing

You can specify an alert user ID for each buyer through Buyer Maintenance (MENU POFILE).

Sales Analysis

You can specify an alert user ID for each sales rep through Sales Rep Maintenance (MENU SAFILE).

Infor Ming.le

Within Infor Ming.le, Infor ION ActivityDeck is an Infor application that displays the activity stream of tasks, notifications and alerts in Infor ION and prompts users to complete these tasks. These tasks, notifications, and alerts can also be generated by Infor Distribution A+ Workflow Management using the **Send to ION** field in Alert Tailoring (MENU MGFILE) and creating/activating a corresponding Infor ION Workflows with Activation Policies or Event Monitors.

The alert detail is created as usual, and by assigning **Send to ION** as Y, it indicates that when this Distribution A+ event happens, it will trigger publishing of the Distribution A+ custom **SyncAplusWorkflow BOD**, that in turn triggers an ION Activity Deck alert, task, or notification.

The Distribution A+ User ID is the alert recipient based on Recipient Code by storing it as an element of **SyncAplusWorkflow BOD**. This Distribution A+ User ID recipient will be cross-referenced to the **IFS User ID** (assigned through Register A+ User IDs (MENU XACFIG)) when **SyncAplusWorkflow BOD** is published, and can be used in ION Workflow and Alert distribution or notification setup to become ION Task or ION Alert recipient.

To utilize the distribution or notification user in an Infor ION Workflow Activation policy and/or Event Monitor independent of Distribution A+ workflow recipient logic, the **Recipient Code** *ION is used as a generic recipient in Distribution A+Alert Tailoring (MENU MGFILE) detail instances. The **Recipient Code** *ION exists for each of the Distribution A+ Alerts so it can be used when creating new instances of any Distribution A+ Alerts.

When an Distribution A+ Alert created for Infor ION Activity Deck is processed, instead of sending an external or email notification, the **SyncAplusWorkflow BOD** will be published to the Extension Solution Transaction Processor. Within Infor ION, the **SyncAplusWorkflow BOD** will be set up to trigger ION Activity Deck user tasks, ION Alerts or Notifications.

Refer to the Infor Distribution A+ ION Integration Guide Appendix chapters for instructions on the setup and activation of Infor ION Workflows with Activation Policies or Event Monitors.

CHAPTER 2   Workflow Alert Processor

2

Workflow Alert Processor

The Workflow Alert Processor is the heart of the Workflow Management module. It is a looping background process that processes all of the alert requests and generates the messages.

The Workflow Alert Processor is a batch process that receives input for alerts and generates the messages. This engine extracts the necessary data for the alert message and determines:

- which message to send
- to whom it will be sent
- how to send it
- the escalation recipient, if needed.

Messages can be sent via Distribution A+ Application Mail, or e-mail. To send messages via e-mail, you must have the Distribution A+ Mail Server module installed. Within Infor Ming.le, workflow alerts can also be sent to display as tasks, notifications and alerts and also to prompts users to complete these tasks.

You can specify the batch queue that will be used for the Workflow Alert Processor through Workflow System Options Maintenance (MENU MGFILE). You can start and stop the Workflow Alert Processor from the Workflow Management Main Menu (MENU MGMAIN), if needed.

Figure 1 is an illustration of the Workflow Alert Processor showing all of its major processes and sub-processes.

```
┌─────────────────────────────────────────────┐
│            Alert Broker Processing            │
└─────────────────────────────────────────────┘

    ┌───────────────────────────────────────┐
    │          Query Alert Processor         │
    └───────────────────────────────────────┘

    ┌───────────────────────────────────────┐
    │             Alert Processor            │
    └───────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │            Alert Program             │
      └─────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │           Rules Processing           │
      └─────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │           Filter Processing          │
      └─────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │          Recipient Processing        │
      └─────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │        Duplicate Alert Checking      │
      └─────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │        Alert Report Processing       │
      └─────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │        Build Alert Search Files      │
      └─────────────────────────────────────┘

    ┌───────────────────────────────────────┐
    │            Message Processor           │
    └───────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │        Application Main Interface    │
      └─────────────────────────────────────┘

      ┌─────────────────────────────────────┐
      │          Mail Server Interface       │
      └─────────────────────────────────────┘

    ┌───────────────────────────────────────┐
    │          Escalation Processor          │
    └───────────────────────────────────────┘
```
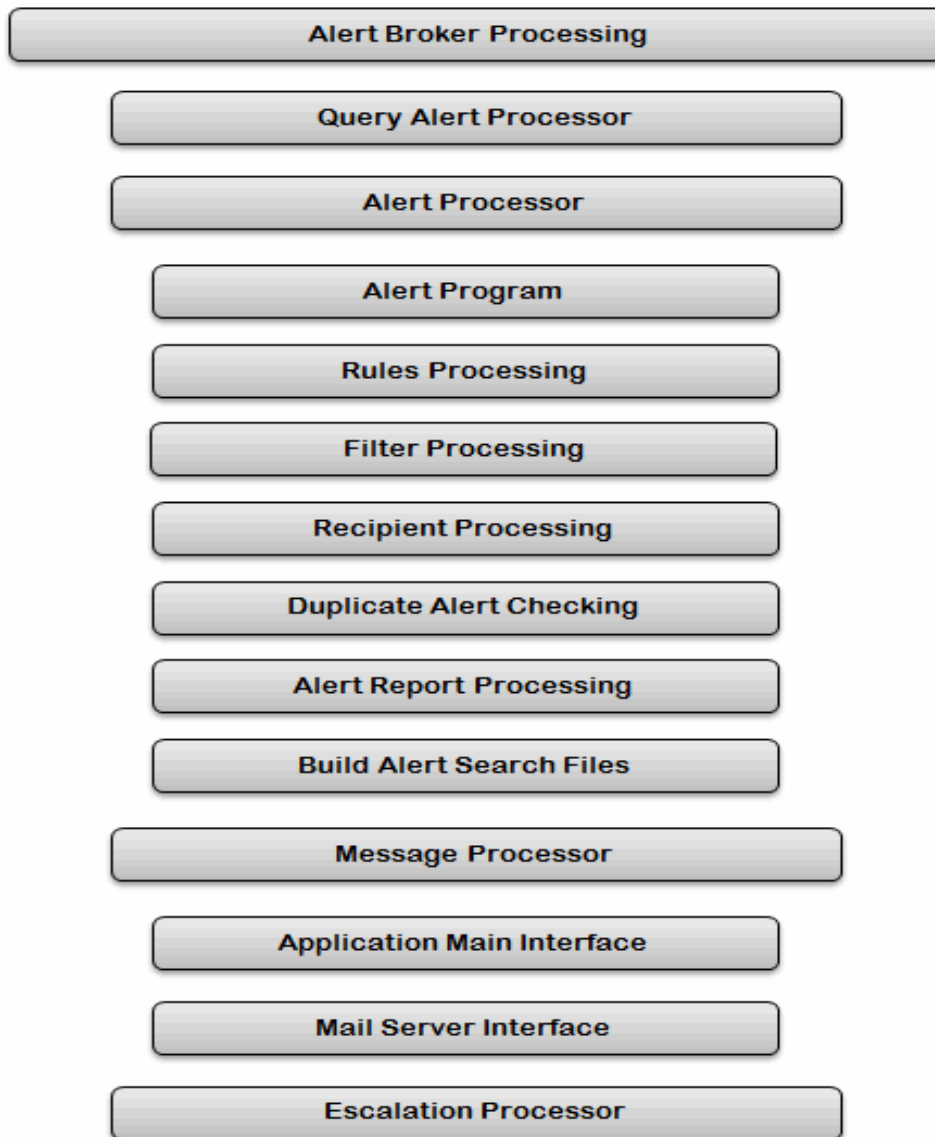
Figure 1 - The Workflow Alert Processor

The Workflow Alert processor is powered by four distinct processes:

- Query Alert Process
  - generates alerts from custom queries
  - can be shut off if you do not want to create queries
- Alert Process
  - performs the majority of alert generation and processing
  - determines who will receive an alert message
  - determines what messages will be sent
  - determines the send time for each message
- Message Process

- constructs messages based on values defined in Message Maintenance (MENU MGFILE)
- determines whether messages will be sent as they occur or consolidated

- Escalation Process
  - detects messages ready for escalation and sends them to an escalation recipient
  - can be shut off if you do not want to escalate alert messages

The Workflow Alert Processor is a looping process that continuously repeats these four major processes. After it has completed all four processes, the Workflow Alert Processor waits a specified number of minutes specified in the **Process new Alerts every XXX minutes** field on the Workflow System Options Screen in Workflow System Options (MENU MGFILE) before starting the cycle again.

If your business will experience a large number of alerts, use a small number in the **Process new Alerts every XXX minutes** field. Conversely, if your business will experience a small number of alerts, use a larger number in this field. This will optimize the speed and function of the Workflow Alert Processor.

When sending messages that have been defined to be sent at specific times, the Workflow Alert Processor considers the users time zones. Users in time zones other than the Workflow Alert Processor's system time zone will receive these messages based on their local time.

Before running the Query Alert Process, the Workflow Alert Processor captures the date and time and saves it into a program variable. Each step will then only process data that was due to be processed on or before the captured process time. This prevents any one step from running for an excessive length of time if alerts are constantly being generated.

NOTE: Immediate messages are sent the next time the Workflow Alert Processor begins its processing cycle. If you set the number of minutes in the **Process new Alerts every XXX minutes** field to too large a number, this may defeat the purpose of specifying immediate delivery for a message.

Processes and Flows

Alert Broker Program

The Alert Broker program is the outermost controlling program. It runs a continuous loop, running all of the major processes. Because Workflow Management is a cross environment module, some of the processes need to be called multiple times during each cycle of the broker, once for each active environment.

Query Alert Processor

The Query Alert Processor program processes user queries and turns their results into alerts. Query alerts are user defined queries, created following the query alert model provided in the appendix chapter for query alerts. For Distribution A+, the data output of these queries is a physical file that is placed in the library specified in the Workflow Management system options.

The Query Alert Processor finds the query output and extracts the data to generate pending alerts in the Pending Alert File. After the data is processed, the query file is removed.

Alert Processor

The Alert Processor program takes the pending alerts contained in the Pending Alert File and runs a series of programs to generate message send requests to the Message Request File for the alerts. During this process, programs are run to determine:

- if the alert should send a message
- who the message recipient(s) should be
- which message(s) should be sent
- when the message(s) should be sent
- whether the message(s) should be flagged for later escalation.

This is the only process in the Workflow Alert Processor that has access to application files.

The Alert Processor includes the following sub-processes:

Alert Program

The Alert Program is the first program that the Alert Processor runs. The Alert Program is a special program that is written for each and every alert, with a program name of MG[Alert ID], and performs processing that is specific to the individual alert. It retrieves data elements that the alert requires but which could not be retrieved efficiently when the alert was generated. This program may also perform some more complicated logic to determine if a message needs to be generated for the alert request. If any customization is required for an alert, the custom logic should be placed in the Alert Program.

Rules Processing

The job of the Rules Processing program is to place any rule-based data code values into the data string. Rule-based data codes are a special type of data code where the value of the data code is derived from a rule and may come from different levels of entities (such as the order, ship-to address, or customer). This program interrogates the data codes associated with the alert, looking for rules-based data codes. If it finds any, the program then searches through the entity hierarchy from the most specific to the most general until a value is found. If no values are found, the rule default is used.

Filter Processing

The Filter Processing program is the first program to be called for each alert detail record for the alert being processed. This program uses the data codes within the data string to determine if the message associated with this alert detail meets the criteria for being sent. The program receives a flag that indicates if the filter requirements have been met. If the filter requirements are not met, the flag is set to No and the message is bypassed.

Recipient Processing

The Recipient Processing program is also called for each alert detail record for the alert being processed. This program receives the Recipient Code and returns the actual user ID and/or e-mail address that the message is to be sent to.

Duplicate Alert Checking

The Duplicate Alert Check program uses the search files and the data string from the pending alert to check whether this alert has already been sent. If it finds that the alert has already been sent and the alert does not allow duplicates, no message is generated.

Alert Report Processing

Reports are a way to include more complex data or groups of data in a message. The Alert Report Processing program process generates the report data and places it in a holding file. The report data will be merged into the message later by the Message Processor.

Build Alert Search Files

The Build Alert Search Files program builds the Alert Search File from the Message Request File. The purpose of the Alert Search File is to provide an efficient way to check for duplicate alerts or find a specific alert. Selected key data elements from the data string are used to build this file. These data elements can be used to filter out duplicates and to efficiently find alerts for a given entity.

Message Processor

The Message Processor is the main message formatting and data merge program, and processes records in a pending status. The main input to this process is the Message Request File. Using this file and the defined message templates along with the captured data elements, the Message Processor forms the final message. This program generates both regular and consolidated messages.

The Message Processor includes the following sub-processes:

Application Mail Interface

Application Mail is used to deliver messages generated by alerts to registered Distribution A+ users. The Application Mail Interface program takes the message formed by the Message Processor and prepares it for display by the Application Mail program. It turns function references into a form that the Application Mail will then present as hyper-links to provide access into an application function from the message.

Mail Server Interface

Messages to external recipients are delivered to an e-mail by the Mail Server module. The Mail Server Interface program takes the messages formed by the Message Processor and puts them in a form that

the Mail-Server module can use. Once the message data is placed in the files where the Mail Server expects to find it, a record is created in the Mail Server Header File. The Mail Server module then uses this record to find the message and relay it to the e-mail server.

Infor Ming.le Interface

When an Distribution A+ alert is created with the **Send to ION** field set to Y, an Distribution A+ business event or database change will fire and trigger the publishing of the Infor A+ custom SyncAplusWorkflow BOD. In Infor ION, the SyncAplusWorkflow BOD will be analyzed by the Infor ION Workflow and Event Monitor engine; and, if conditions are met, appropriate tasks, alerts or notifications will be created.

Escalation Processor

The Escalation Processor program's main input is also the Message Request File. This program processes records in a Sent status in that file which are flagged to be escalated. The original message is referenced and sent to the escalation user. At the same time, a determination is made as to whether the message will be escalated again at a later time. A messages is escalated only if the original recipient has not acknowledged it within a specified period of time. Messages sent via e-mail cannot be escalated.

Data Flow

Figure 2 is an illustration of the Workflow Alert and Workflow Alert Processor data flow. Each of the files shown in Figure 2 is described in the following paragraphs.

Pending Alert File

When alerts are encountered, records are written to the Pending Alert File (MGPND). New records are written with a Pending (P) status. Data from the application is stored in the data string in a character format. These records also store the alert ID, the environment ID of the environment that generated the alert, and date and time information. The Pending Alert File is keyed by a unique, nine-digit, Pending Alert Tracking Number. There is one Pending Alert File record for each alert generated.

Records are also placed in the Pending Alert File by the Query Alert Processor. The Query Alert Processor processes any query files conforming to the specifications provided that have been placed in the Distribution A+ library specified in the Workflow Management system options.

Message Request File

When the Workflow Alert Processor processes alerts, it generates records in the Message Request File (MGMRQ). The alert originated in the Message Request File file is processed and merged with data and instructions found in the Alert Header File and Alert Detail File.

By the time the Message Request File records are generated, the message to be sent, along with the recipient, time and date to send, and escalation, has been determined and stored in these records. The

data code string has been passed along and updated by the Workflow Alert Processor processes. If any custom information is included in the alert, the wild card data string, would have been loaded as well.

Processing a single Pending Alert File record can generate many Message Request File records. The number of Message Request File records generated depends on the number of messages and recipients defined for the alert. Each Message Request File record is keyed by a unique, nine-digit, Message Request Tracking Number. The Alert Tracking Number from the Pending Alert File record that generated this Message Request File record will be passed to the Message Request File record as well. This provides a path back to the alert that generated the message request.
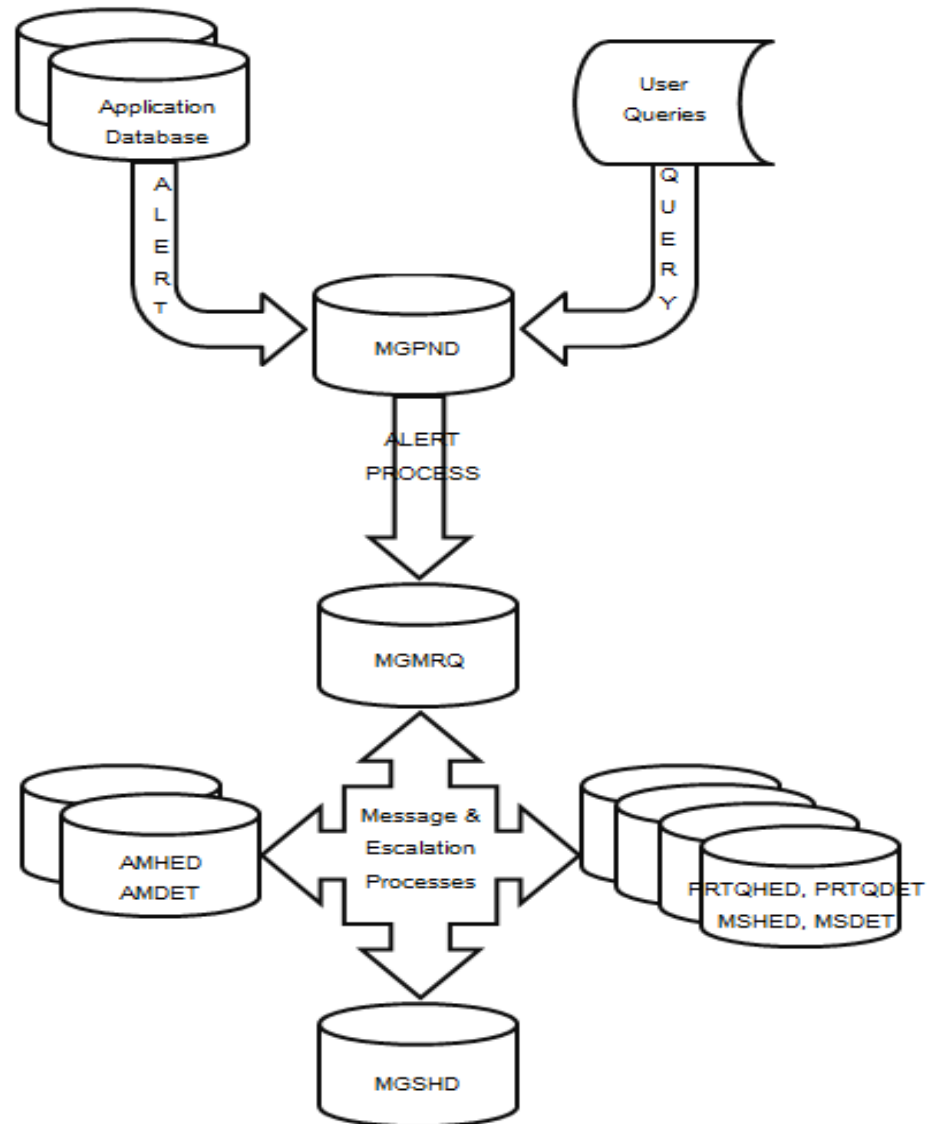
Figure 2 - The Workflow Alert and Workflow Alert Processor Data Flow

When records are first generated for new alerts, the records have a status of P (Pending). Pending records are processed by the Message Processor. All pending records with a message request date and

time on or before the time the process is run will be selected for processing. Messages are generated and these Message Request File records are updated. If the message will be sent to an internal user, via Application Mail, then the record status will updated to S (Sent). If the message is to be sent to an external recipient via the Mail-Server module and e-mail, the record status will be updated to C (Complete). In either case, if a message is generated, the Sent Message Tracking Number field in the Message Request File record is updated with the number from the message that was generated.

Escalation processing will process all Message Request File records with a status of S where the **Escalate** flag is a Y and the escalation time and date is on or before the time the escalation process is run. When a message is escalated, the original Message Request File record is updated to a status of C and a new record is generated with a status of S.

There are a number of additional tracking number fields in the Message Request File record that hold the tracking numbers of previous generation on Message Request File records. The Original Message Request Tracking Number contains the tracking number of the original Message Request File record that was generated when the alert was first processed. All subsequent records created due to escalations or delegations of this same message will contain this number as a pointer back to the original record.   The Parent Message Request Tracking Number contains the tracking number of the record immediately preceding this one it in the escalation, delegation hierarchy.

Sent Message Header File

When messages are generated for the first time or an existing message is escalated, a record is added to the Sent Message Header File (MGSHD).   This file serves as a control record that points to the message that was generated. This file is keyed by a unique nine-digit identifier, the Sent Message Tracking Number. This number is also placed in the Message Request File record or records for which the message is being generated.

There is a field in the Sent Message Header File that contains the unique identifier of the message that was generated. If the message was sent to an internal recipient, this number will be the Application Mail message identifier. If this message was sent to an external recipient, this number will be the Mail Server tracking number.

Application Mail Header File and Application Mail Detail File

When a message is sent to an internal recipient, the message is placed in Application Mail Header File (AMHED) and the Application Mail Detail File (AMDET). For each message there will be one header record and multiple detail records, with one detail record for each line in the message detail. When a message sent to a user is escalated or delegated, a new header record is created in the Application Mail Header File for the new user. The original detail records are referenced by that new header, which points the Application Mail program to the message detail records in the Application Mail Detail File.

Access back to the alert or alerts that generated the message is possible through the use of the Sent Message Header File record.

Mail Server Header File, Mail Server Detail File, Mail Server Print File

Messages to external recipients must be sent to the Mail Server module for processing and delivery to an ISP by placing the message in the Mail Server Print File. Once the message is placed into the file, a record is added to the Mail Server Header File (MSHED) and Mail Server Detail File (MSDET). The Mail Server module then processes the message as an attachment to be sent as part of an e-mail document.

Starting the Workflow Alert Processor

The Workflow Alert Processor must be started in order for alerts to be processed. All pending alerts will be processed in the order they were received and pending messages will be generated.You can start the Workflow Alert Processor using the Start Workflow Alert Processor option on the Workflow Main Menu (MENU MGMAIN).

Additionally, the first time each day that the Workflow Alert Processor is started, a purge of the Alert Message Queue is automatically run. Messages that are marked as completed are removed. Messages that are older than the **Number of days to keep: Alert Requests** field of Workflow System Options (MENU MGFILE) will also be purged. The **Last Purge Date** field is updated with today's date in the Cross Application Control File when the Workflow Alert Processor is started and is used for the calculation of days needed for the comparison to remove records. For this reason, the Workflow Alert Processor should be stopped and started daily.

Messages are marked as completed in various ways:

- Messages sent with Email are marked as complete. No further transactions are allowed.
- Messages that are acknowledged are marked as complete.
- When a message is deferred, a new pending message is created and the original message is marked as complete.
- When a message is automatically escalated by the **Escalate** field being set to Y in Alert Tailoring (MENU MGFILE), the original message is marked as complete.

Start Workflow Alert Processor

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Start Workflow Alert Processor Screen	Used to confirm that you want to start the processor.

Title	Purpose
Start Workflow Alert Processor Confirmation Screen	Confirms that the processor was started.

Start Workflow Alert Processor Screen

```
          START WORKFLOW ALERT PROCESSOR



     This option will start the Workflow Alert Processor so that
     Workflow requests can be processed.




                    Press ENTER to Continue




                                              F3=Cancel
```
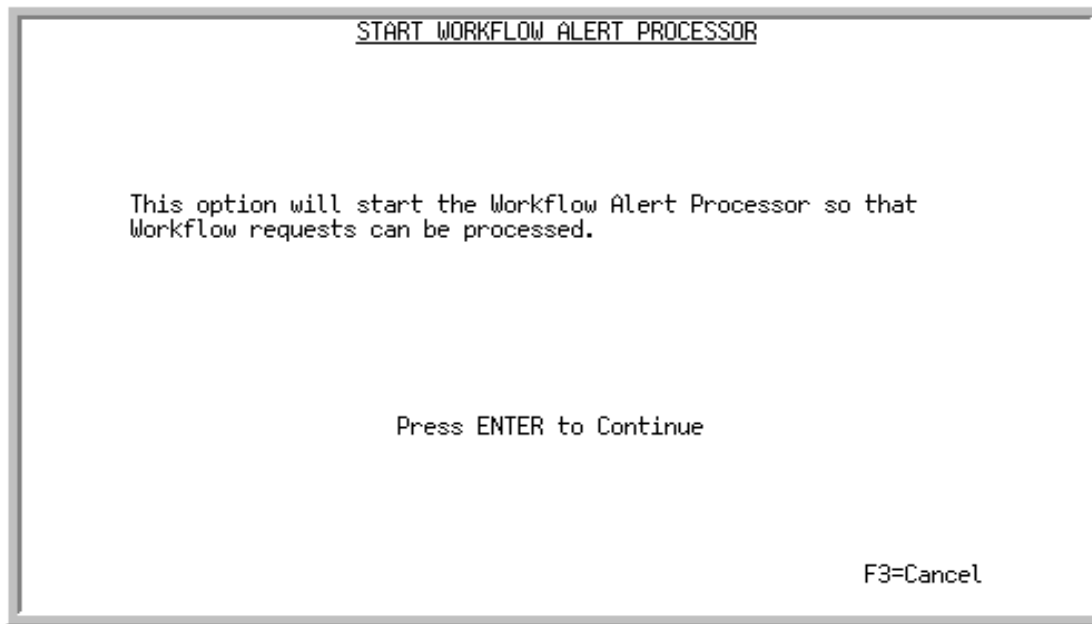
This screen appears after you select option 1 - Start Workflow Alert Processor from the Workflow Main Menu (MENU MGMAIN). Use this screen to start the Workflow Alert Processor.

Start Workflow Alert Processor Screen Fields and Function Keys

Field/Function Key	Description
F3=Cancel	Press the F3=CANCEL function key to cancel this option and return to the Workflow Main Menu
Enter	Press the ENTER key to continue and start the Workflow Alert Processor. If no errors are detected, the Start Workflow Alert Processor Confirmation Screen (p. 3-4) will appear.

Start Workflow Alert Processor Confirmation Screen

This screen appears when you press ENTER on the Start Workflow Alert Processor Screen (p. 3-3). This screen displays a confirmation message verifying that the Workflow Alert Processor has been started.

Start Workflow Alert Processor Confirmation Screen Fields and Function Keys

Field/Function Key	Description
Enter	Press the ENTER key to continue. You will be returned to the Workflow Main Menu (MENU MGMAIN).

Stopping the Workflow Alert Processor

4

You can stop the Workflow Alert Processor using the Stop Workflow Alert Processor option on the Workflow Main Menu (MENU WMGMAIN). While the processor is stopped, alert requests will be prevented from being processed. Requests will not be processed until the Workflow Alert Processor is re-started through Start Workflow Alert Processor (MENU MGMAIN).

Stop Workflow Alert Processor

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Stop Workflow Alert Processor Screen	Used to confirm that you want to stop the processor.
Stop Workflow Alert Processor Confirmation Screen	Confirms that the processor was stopped.

Stop Workflow Alert Processor Screen

```
                STOP WORKFLOW ALERT PROCESSOR


        This option will prevent any Workflow requests from
        being processed by the Workflow Alert Processor.

        These requests will not be processed until the Workflow
        Alert Processor is restarted.

        Workflow jobs currently executing should be allowed to
        complete normally.



                    Press ENTER to Continue



                                            F3=Cancel
```
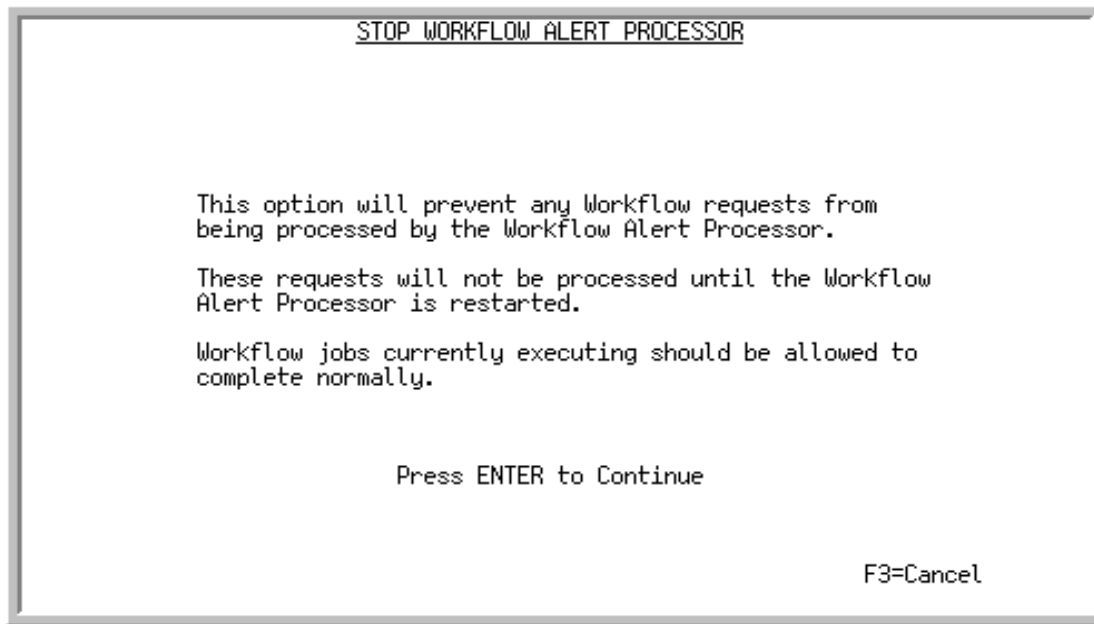
This screen appears after you select option 2 - Stop Workflow Alert Processor from the Work Main Menu (MENU MGMAIN). Use this screen to stop the Workflow Alert Processor.

Stop Workflow Alert Processor Screen Fields and Function Keys

Field/Function Key	Description
F3=Cancel	Press the F3=CANCEL function key to cancel this option and return to the Workflow Main Menu.
Enter	Press the ENTER key to continue and stop the Workflow Alert Processor. If no errors are detected, the Stop Workflow Alert Processor Confirmation Screen (p. 4-3) will appear.

Stop Workflow Alert Processor Confirmation Screen

```
              STOP WORKFLOW ALERT PROCESSOR



        The Workflow Alert Processor has been stopped.




                  Press ENTER to continue
```

This screen appears when you press ENTER on the Stop Workflow Alert Processor Screen (p. 4-2). This screen displays a confirmation message verifying that the Workflow Alert Processor has been stopped.

Stop Workflow Alert Processor Confirmation Screen Fields and Function Keys

Field/Function Key	Description
Enter	Press the ENTER key to continue. You will be returned to the Workflow Main Menu (MENU MGMAIN).

Inquiring into Alerts   5

You can review alert information using the Alert Inquiry option on the Workflow Main Menu (MENU MGMAIN). You can display information about alerts such as the

- subject of an alert message
- recipient of the alert message
- date and time the alert message was sent
- status of the alert message
- the text of the alert message
- history of the alert message

Alert Inquiry

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Workflow Alert Message Inquiry Selection Screen	Used to limit your inquiry by message type.
Workflow Alert Message Inquiry Message Requests Screen	Use to tailor the inquiry with selection criteria specific to message requests.
Workflow Alert Message Inquiry Sent Mail Messages Screen	Use to tailor the inquiry with selection criteria specific to sent messages.
Additional Message Search Criteria Screen	Used to further limit your inquiry, using, for example, date, message ID, or recipient.
Additional Message Search Criteria Maintenance Screen	Used to further limit you inquiry, using, for example data code, operation, and value.

Title	Purpose
Workflow Alert Message Requests Screen Workflow Alert Sent Messages Screen	Lists message requests or sent messages.
Workflow Alert Message Detail Screen	Displays detailed information about a selected message or message request.
Workflow Alert Message History Inquiry Screen	Displays all activity performed for the selected message.

Workflow Alert Message Inquiry Selection Screen

```
                 WORKFLOW ALERT MESSAGE INQUIRY

     Environment: D5 v08.02.03 All Modules
     Message Requests: Y (Y,N)   OR   Sent Mail Messages:  N  (Y,N)
--------------------------------------------------------------------------








                                              F3=Exit
```

Workflow Alert Message Inquiry Message Requests Screen

```
                 WORKFLOW ALERT MESSAGE INQUIRY

     Environment: D5 v08.02.03 All Modules
     Message Requests: Y (Y,N)   OR   Sent Mail Messages:  N  (Y,N)
--------------------------------------------------------------------------
                      Message Search Criteria

 Pending Message Requests: Y (Y,N)  or  Processed Message Requests: N (Y,N)
--------------------------------------------------------------------------

     Requested Send Dates: From: .......    To: .......

     Alert ID?      ......
     Message ID?    ......
 Recipient:
     User ID?       ..........
        Include External Mail: N   (Y,N)
 or  Email Address:   ..................................................
.......................................................................
     Additional Search Criteria:  N    (Y,N)


                                         F3=Exit     F12=Return
```

Workflow Alert Message Inquiry Sent Mail Messages Screen

```
              WORKFLOW ALERT MESSAGE INQUIRY

      Environment: D5 v08.02.03 All Modules
      Message Requests: N (Y,N)   OR   Sent Mail Messages:  Y  (Y,N)
-------------------------------------------------------------------------
                     Message Search Criteria

All Sent Messages: Y (Y,N)  Open Messages: N (Y,N)  Completed Messages: N (Y,N)
-------------------------------------------------------------------------

              Send Dates: From: .......    To: .......

      Alert ID?      ......
      Message ID?    ......
      Recipient:
      User ID?       ........
            Include External Mail: N   (Y,N)
   or  Email Address:   ..................................................
...........................................................................

      Additional Search Criteria:  N    (Y,N)


                                        F3=Exit     F12=Return
```

The Workflow Alert Message Inquiry Selection Screen (p. 5-3) screen appears after you select option 10 - Alert Inquiry on Workflow Main Menu (MENU MGMAIN). Use this screen to limit the inquiry by a specific message type.

The Workflow Alert Message Inquiry Message Requests Screen (p. 5-3) appears after you specify **Message Requests** Y and press ENTER on the Workflow Alert Message Inquiry Selection Screen (p. 5-3). Use this screen to enter limiting criteria for the alert inquiry.

The Workflow Alert Message Inquiry Sent Mail Messages Screen (p. 5-4) appears after you specify **Sent Mail Messages** Y and press ENTER on the Workflow Alert Message Inquiry Selection Screen (p. 5-3). Use this screen to enter limiting criteria for the alert inquiry.

Workflow Alert Message Inquiry Selection Screen, Workflow Alert Message Inquiry Message Requests Screen, and Workflow Alert Message Inquiry Sent Mail Messages Screen Fields and Function Keys

Field/Function Key	Description
Environment	The file environment designator and description which determines where this message originates.
	Display

Workflow Alert Message Inquiry Selection Screen, Workflow Alert Message Inquiry Message Requests Screen, and Workflow Alert Message Inquiry Sent Mail Messages Screen Fields and Function Keys

Field/Function Key	Description
(Message Type)	Use this field to specify the type of message to limit the inquiry by.
	Key Y in the **Message Requests** field if you want to review alert message requests. If you key Y in this field, you must key N in the **Sent Mail Messages** field.
	Key N in this field if you do not want to review alert message requests.
	Key Y in the **Sent Mail Messages** field if you want to review sent mail messages. If you key Y in this field, you must key N in the **Message Requests** field.
	Key N in this field if you do not want to review sent mail messages.
	(2 @ A 1) Required
Message Search Criteria (Message Requests)	Use this field to limit the inquiry by message status. The status fields that appear vary based on the message type you specified on the Workflow Alert Message Inquiry Selection Screen (p. 5-3).
	If you keyed Y in the **Message Requests** field, the following fields will appear:
	• **Pending Message Requests**
	• **Processed Message Requests**
	Key Y in the **Pending Message Requests** field to display message requests with a status of pending only. If you key Y in this field, you must key N in the **Processed Message Requests** field.
	Key N in this field if you do not want to display message requests with a status of pending only.
	Key Y in the **Processed Message Requests** field to display message requests with a status of processed only. If you key Y in this field, you must key N in the **Pending Message Requests** field.
	Key N in this field if you do not want to display message requests with a status of processed only.
	(2 @ A 1) Required

Workflow Alert Message Inquiry Selection Screen, Workflow Alert Message Inquiry Message Requests Screen, and Workflow Alert Message Inquiry Sent Mail Messages Screen Fields and Function Keys

Field/Function Key	Description
Message Search Criteria (Sent Mail Messages)	Use this field to limit the inquiry by message status. The status fields that appear vary based on the message type you specified on the Workflow Alert Message Inquiry Selection Screen (p. 5-3).
	If you keyed Y in the **Sent Mail Messages** field, the following fields will appear:
	• **All Sent Messages**
	• **Open Messages**
	• **Completed Messages**
	Key Y in the **All Sent Messages** field to display all sent messages. If you key Y in this field, you must key N in the **Completed Messages** and **Open Messages** fields.
	Key N in this field if you do not want to display all sent messages.
	Key Y in the **Open Messages** field to display messages with a status of open only. If you key Y in this field, you must key N in the **All Sent Messages** and **Completed Messages** fields.
	Key N in this field if you do not want to display messages with a status of open only.
	Key Y in the **Completed Messages** field to display messages with a status of completed only. If you key Y in this field, you must key N in the **All Sent Messages** and **Open Messages** fields.
	Key N in this field if you do not want to display messages with a status of completed only.
	(3 @ A 1) Required
Requested Send Dates/ Send Dates	This field appears as:
	• **Requested Send Dates** if you keyed Y in the **Message Requests** field
	• **Send Dates** if you keyed Y in the **Sent Mail Messages** field.
	Use this field to specify a range of dates to limit the inquiry by send or requested send date.
	Valid Values: A date keyed in the date format specified for your user ID in the **Default Date Format** field in Register A+ User IDs (MENU XACFIG) or, if that field is blank, the date format specified for the system in the **Default Date Format** field in System Options Maintenance (MENU XAFILE).
	(2 @ N 6,0) Optional

Workflow Alert Message Inquiry Selection Screen, Workflow Alert Message Inquiry Message Requests Screen, and Workflow Alert Message Inquiry Sent Mail Messages Screen Fields and Function Keys

Field/Function Key	Description
Alert ID	Use this field to limit the inquiry by alert ID.
	Key the alert ID to limit the inquiry to messages for just that alert.
	This field is required if:
	• the **Message ID** field will also be used
	• the **Additional Search Criteria** will be Y.
	Valid Values: An alert ID defined through Alert Maintenance (MENU MGSYST) or provided in an alert pack.
	(A 5) Optional/Required
Message ID	Use this field to limit the inquiry by message ID.
	Key the message ID for the specific alert that will further limit the inquiry.
	Valid Values: A message ID defined through Message Maintenance (MENU MGFILE).
	(A 5) Optional
User ID	Use this field to limit the inquiry by a recipient's user ID.
	Key the user ID to limit the inquiry to messages for a specific user.
	Valid Values: A user ID defined through Register A+ User IDs (MENU XACFIG).
	(A 10) Optional
Include External Mail	Use this field to determine if external email will be included on the inquiry review screens.
	Key Y to include messages that were sent as external messages.
	Key N to not include external messages in the inquiry.
	(A 1) Required
Email Address	Use this field to limit the inquiry by a recipient's e-mail address.
	(A 128) Optional
Additional Search Criteria	Use this field if you want to enter further limiting criteria for the inquiry.
	Key Y if you want to enter further limiting criteria for the inquiry.
	NOTE: If you key Y in this field, you must also key a valid alert ID in the **Alert ID** field.
	Key N if you do not want to enter further limiting criteria for the inquiry.
	(A 1) Optional
F3=Exit	Press the F3=EXIT function key to exit this option and return to MENU MGMAIN.

Workflow Alert Message Inquiry Selection Screen, Workflow Alert Message Inquiry Message Requests Screen, and Workflow Alert Message Inquiry Sent Mail Messages Screen Fields and Function Keys

Field/Function Key	Description
F12=Return	The F12=RETURN function key only displays on the Workflow Alert Message Inquiry Message Requests Screen (p. 5-3) and the Workflow Alert Message Inquiry Sent Mail Messages Screen (p. 5-4).
	Press the F12=RETURN function key to return to the previous screen without saving your entries. The Workflow Alert Message Inquiry Selection Screen (p. 5-3) will appear.
Enter	*Selection*: Press the ENTER key to save your entries and continue. If you keyed Y in the **Message Requests** field, the Workflow Alert Message Inquiry Message Requests Screen (p. 5-3) will appear. If you keyed Y in the **Sent Mail Messages** field, the Workflow Alert Message Inquiry Sent Mail Messages Screen (p. 5-4) will appear.
	Message Requests: Press the ENTER key to save your entries and continue. The Workflow Alert Message Requests Screen (p. 5-13) will appear.
	Sent Mail Messages: Press the ENTER key to save your entries and continue. The Workflow Alert Sent Messages Screen (p. 5-13) will appear.

Additional Message Search Criteria Screen

```
                    ADDITIONAL MESSAGE SEARCH CRITERIA
Environment        : D5 v08.02.03 All Modules
Sent Mail Messages: GN101
Send Dates         : *ALL


--------------------------------------------------------------------
        Data Code    Description                          Op Value








   Selection: _ .
              F3=Exit     F5=Add     F10=Continue     F12=Return
```

Additional Message Search Criteria Maintenance Screen

```
                    ADDITIONAL MESSAGE SEARCH CRITERIA
Environment        : D5 v08.02.03 All Modules
Sent Mail Messages: GN101
Send Dates         : *ALL


--------------------------------------------------------------------
        Data Code    Description                          Op Value
   1    *COMP-NBR    Company Number                       EQ 2








             Data Code? Operation?  Value
                            EQ
              F3=Exit     F5=Add                     F12=Return
```

The Additional Message Search Criteria Screen appears after you key an alert ID in the **Alert ID** field and key Y in the **Additional Search Criteria** field on the Workflow Alert Message Inquiry Message Requests Screen (p. 5-3) or the Workflow Alert Message Inquiry Sent Mail Messages Screen (p. 5-4).

The Additional Message Search Criteria Maintenance Screen appears after you press F5=ADD or key a **Reference Number** in the **Selection** field and press ENTER on the Additional Message Search Criteria Screen (p. 5-9). Use this screen to define filters for the inquiry.

Use this screen to maintain further limiting criteria for the inquiry. The inquiry will be limited by the list of conditions displayed on this window. If more than one filter exists for limiting the inquiry, all the filters are joined by an AND statement. Once a condition is added to the list, you may update its information or delete it from the list.

Additional Message Search Criteria Screen and Additional Message Search Criteria Maintenance Screen Fields and Function Keys

| Field/Function Key	Description
Environment	The file environment designator and description which determines where this message originates. Display
Sent Mail Messages	This field displays the selected **Alert ID** for which sent mail messages are being displayed. Display
Send Dates	The range of **Send Dates** keyed on the Workflow Alert Message Inquiry Message Requests Screen (p. 5-3) or the Workflow Alert Message Inquiry Sent Mail Messages Screen (p. 5-4). If no range of data was entered, ***ALL** displays.
(Reference Number)	The reference number of the data codes displayed on this screen. This number is 1 through 5 for the data codes that may display. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference an item for change or deletion. Display
Data Code	The data code added to the filter as limiting criteria for the inquiry. Display
Description	The description of the added data code. Display
Op	The operational relationship that must exist between the **Data Code** and the **Value** to limit the inquiry and/or generate a message. Display
Value	The value that the condition code will be compared to when filtering the inquiry. Display

Additional Message Search Criteria Screen and Additional Message Search Criteria Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Selection	The **Selection** field only displays on the Additional Message Search Criteria Screen.
	Key the **reference number** displayed for the data code press ENTER to maintain a filter.
	(N 2,0) Required
Data Code	The **Data Code** field only displays on the Additional Message Search Criteria Maintenance Screen.
	Use this field to specify the data code to add to the filter that will limit the inquiry. The data code will act as a condition in limiting the inquiry.
	Key a data code.
	Valid Values: A data code defined through Data Code Maintenance (MENU MGSYST).
	(A 10) Required
Operation	The **Operation** field only displays on the Additional Message Search Criteria Maintenance Screen.
	Use this field to key the relationship that must exist between the **Data Code** and the **Value** to limit the inquiry by. This is the condition that must have existed (been true) for an alert to generate a message.
	Key:
	• EQ if the condition code must be equal to the value
	• NE if the condition code must be not equal to the value
	• LT if the condition code must be less than the value
	• GT if the condition code must be greater than the value
	• LE if the condition code must be less than or equal to the value
	• GE if the condition code must be greater than or equal to the value
	Default Value: EQ
	Valid Values: EQ, NE, LT, GT, LE, GE
	(A 2) Required
Value	The **Value** field only displays on the Additional Message Search Criteria Maintenance Screen.
	Key the value that the condition code will be compared to when filtering the inquiry.
	(N 25,0) Required
F3=Exit	Press the F3=EXIT function key to exit this option and return to MENU MGMAIN.

Additional Message Search Criteria Screen and Additional Message Search Criteria Maintenance Screen Fields and Function Keys

Field/Function Key	Description
F5=Add	*Criteria*: Press the F5=ADD function key to add a filter to the selection criteria for the inquiry. The Additional Message Search Criteria Maintenance Screen will appear.
	Maintenance: After you have specified a data code, operation, and value on the Additional Message Search Criteria Maintenance Screen, press the F5=ADD function key to add the filter to the selection criteria for the inquiry. The information for the filter will be added to the list and the Additional Message Search Criteria Screen will appear.
	Filters will be applied in the order they display on this screen. For this reason, you should key conditional values in a logical order from most general to most specific.
	Once you add a filter, you cannot change the sequence on this screen. If the filter is added incorrectly, the lines must be deleted and re-created.
F10=Continue	The F10=CONTINUE function key only displays on the Additional Message Search Criteria Screen.
	Press the F10=CONTINUE function key to continue with the inquiry based on the additional search criteria you entered.
F12=Return	*Criteria*: Press the F12=RETURN function key to return to the previous screen without saving your entries. The Workflow Alert Message Inquiry Message Requests Screen (p. 5-3) or theWorkflow Alert Message Inquiry Sent Mail Messages Screen (p. 5-4) will appear.
	Maintenance: Press the F12=RETURN function key to return to the previous screen without saving your entries. The Additional Message Search Criteria Screen will appear.
F24=Delete	The F24=DELETE function key only displays on the Additional Message Search Criteria Maintenance Screen.
	Press the F24=DELETE function key to delete the selected data code.
Enter	*Criteria*: Key a **Reference Number** in the **Selection** field and press the ENTER key to maintain a filter. The Additional Message Search Criteria Maintenance Screen will appear.
	Maintenance: Press the ENTER key to accept the changes keyed. The Additional Message Search Criteria Screen will appear.

Workflow Alert Message Requests Screen

```
               WORKFLOW ALERT MESSAGE REQUESTS

  Environment: D5 v8.03.00 All Modules

   Subject                     Recipient   Err   Date     Time    Status
 1 Order Placed on Hold        APDEMO04          5/01/11 11:02 AM Sent
 2 Order Placed on Hold        APDEMO04          5/01/11 11:34 AM Sent
 3 Order Placed on Hold        APDEMO04          5/01/11 11:41 AM Sent
 4 Order Placed on Hold        APDEMO04          5/01/11 12:09 PM Sent








                                                                    Last
  _____
  Selection: _ .
                            F3=Exit     F11=Alert/Msg ID    F12=Return
```

Workflow Alert Sent Messages Screen

```
               WORKFLOW ALERT SENT MESSAGES

  Environment: D5 v8.03.00 All Modules

   Subject                     Recipient      Date     Time    Status
 1 Purchase Order Due Date Check QPGMR        3/17/11 11:40 AM Sent
 2 Purchase Order Due Date Check QPGMR        3/17/11 11:40 AM Sent
 3 Invoices More Than X Days Old APDEMO02     3/17/11 11:40 AM Sent
 4 Order Placed on Hold          APDEMO53     3/17/11  1:36 PM Sent

 5 Order Placed on Hold          APDEMO08     3/17/11  1:37 PM Sent
 6 Special Order is Created      APDEMO04     4/20/11  6:52 PM Sent
 7 Special Order is Created      APDEMO02     4/20/11  6:52 PM Sent
 8 Purchase Order Due Date Check APDEMO04     4/20/11  6:59 PM Sent

 9 Purchase Order Due Date Check QPGMR        4/20/11  6:59 PM Sent
10 Purchase Order Due Date Check QPGMR        4/20/11  6:59 PM Sent
11 Invoices More Than X Days Old APDEMO02     4/20/11  6:59 PM Sent
12 Purchase Order Due Date Check QPGMR        4/28/11 11:51 AM Sent


                                                                 More...
  _____
  Selection: _ .
                            F3=Exit     F11=Alert/Msg ID    F12=Return
```

The Workflow Alert Message Requests Screen appears after you press ENTER on the Workflow Alert Message Inquiry Message Requests Screen (p. 5-3). The Workflow Alert Sent Messages Screen appears after you press ENTER on the Workflow Alert Message Inquiry Sent Mail Messages Screen (p. 5-4) or after you press F10=CONTINUE on the Additional Message Search Criteria Screen (p. 5-9).

If you selected to limit the inquiry by message requests, the title of this screen displays as Workflow Alert Message Requests and the screen displays message requests. If you selected to limit the inquiry by sent messages, the title of this screen displays as Workflow Alert Sent Messages and the screen displays sent messages.

Workflow Alert Message Requests Screen and Workflow Alert Sent Messages Screen Fields and Function Keys

Field/Function Key	Description
Environment	The file environment designator and description which determines where this message originates. Display
(Reference Number)	The reference number of the message displayed on this screen. This number is **1** through **12** for the messages that may display. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference an item for change or deletion. Display
Subject	The subject line of the sent message. This field will toggle with the **Alert ID** and **Msg ID** fields using the F11=ALERT/MSG ID / F11=SUBJECT function key. Display
Alert	The alert ID that generated this message. This field will toggle with the **Subject** field using the F11=ALERT/MSG ID / F11=SUBJECT function key. Display
Msg ID	The message ID of the alert that was sent in this message. This field will toggle with the **Subject** field using the F11=ALERT/MSG ID / F11=SUBJECT function key. Display
Recipient	The person's User ID that received the message. When the F11=ALERT/MSG ID / F11=SUBJECT function key is pressed, this field value will change to the recipients name from their system sign on. Display
Err	The error number assigned to the message. This field displays 1 when the message is to be escalated and there is no one left to escalate it to. The **Err** column will toggle with the **Alert ID**, **Msg ID**, and **Recipient** fields using the F11=ALERT/MSG ID / F11=SUBJECT function key. Display
Date/Time	The requested send date and time (for message requests) or the date and time the message was sent (for sent messages) Display

Workflow Alert Message Requests Screen and Workflow Alert Sent Messages Screen Fields and Function Keys

Field/Function Key	Description
Status	Displays the current status of the message. Valid values that may display are: • **Acknowledged** • **Deferred** • **Delegated** • **Escalated** • **Sent** Display
Selection	Key the **Reference Number** displayed to the left of the alert message you want to review in detail in the **Selection** field and press ENTER. (N 2,0) Required
F3=Exit	Press the F3=EXIT function key to exit this option and return to MENU MGMAIN.
F11=Alert/Msg ID / F11=Subject	Press the F11=ALERT/MSG ID / F11=SUBJECT function key to toggle between displaying the **Alert ID**, **Msg ID**, and **Recipient Name** fields or the **Subject**, **Recipient ID**, and **Err** fields.
F12=Return	Press the F12=RETURN function key to return to the previous screen without saving your entries. The Workflow Alert Message Inquiry Selection Screen (p. 5-3) will appear.
Enter	Press the ENTER key after keying a **Reference Number** in the **Selection** field to display a specific alert message's detail information. The Workflow Alert Message Detail Screen (p. 5-16) will appear.

Workflow Alert Message Detail Screen

```
                  WORKFLOW ALERT MESSAGE DETAIL
From      : *ALERT
To        : A+ Available
Received  : 04/20/11 06:59 PM
Last Activity: Sent
Subject   : Invoices More Than X Days Old
--------------------------------------------------------------------
TO: Mays Department Store
    1 180

We have noticed that the following invoices have fallen into a severly
overdue status. We request immediate payment of these invoices to prevent
them from being turned over to a collections agency.


Invoice Number 00010931 Invoice Date 02/21/10 Invoice Balance
          9.42



                                                            More...
                      F3=Exit     F5=Message History     F12=Return
```

This screen appears after selecting a message on the Workflow Alert Message Requests Screen (p. 5-13) and pressing ENTER.

All the fields on this screen are display only and cannot be changed.

> NOTE: Data that appears as a hyperlink within the text of the alert message will not function by a mouse click on this screen. It is the control information captured by the program during the creation of the alert and is provided for informational purposes only.

Workflow Alert Message Detail Screen Fields and Function Keys

Field/Function Key	Description
From	This field displays *ALERT if the message was generated from an alert or the name of the user that sent a message.
To	The name of the recipient for the message.
Received	The date and time when the message was received.

Workflow Alert Message Detail Screen Fields and Function Keys

Field/Function Key	Description
Last Activity	The value of the last activity for this message. • **Acknowledged** • **Deferred** • **Delegated** • **Escalated** • **Sent**
Subject	The subject of the alert message that was sent.
(Screen Body)	The body of the screen is the text of the alert message. Each message will be unique based on the message that was created for the specific alert. The resolved data code, report code, and function code placeholders will display the values, reports, or application function applicable to the message. Data that appears as a hyperlink within the text of the alert message is actually the control field information that generated the alert and therefore is not a true hyperlink. It may be the company, order and generation number of a sales order or it may be the warehouse, vendor, company and buyer for a requested special order. Regardless of the alert control fields used, the last parameter of the string will be 0001, 0002, or 0003 and is the function sequence pointer that identifies which of the allowed 3 functions per line this control string refers to. These function sequence pointers are displayed here for information, but are used programmatically to help with accurate parameter passing when the user is actually clicking on the true hyperlink in the message in the AMail Inquiry (MENU MGMAIN).
F3=Exit	Press the F3=EXIT function key to exit this option and return to MENU MGMAIN.
F5=Message History	If an activity displays in the **Last Activity** field, press the F5=MESSAGE HISTORY function key to display history information associated with the alert message. The Workflow Alert Message History Inquiry Screen (p. 5-18) will appear.
F12=Return	Press the F12=RETURN function key to return to the previous screen without saving your entries. The Workflow Alert Message Requests Screen (p. 5-13) will appear.

Workflow Alert Message History Inquiry Screen

```
                    WORKFLOW ALERT MESSAGE HISTORY INQUIRY
Environment: D5 v8.03.00 All Modules
Alert ID: GN110 Purchase Order Due Date Check      Message ID: G1090

Status   Message Owner           Recipient                   Date     Time
Delegat  Programmer and Batch User A+ APDEMO User ID        6/14/11  2:03 PM




















                                                                      Last
                                                     _____
                                                      F3=Exit    F12=Return
```

This screen appears after you press F5=MESSAGE HISTORY on the Workflow Alert Message Detail Screen (p. 5-16). All activities performed by all users display for the selected message.

Workflow Alert Message History Inquiry Screen Fields and Function Keys

Field/Function Key	Description
Environment	The file environment designator and description which determines where this message originates.
Alert ID	The **Alert ID** and description that generated this message.
Message ID	The **Message ID** of the **Alert ID** that was sent to the user.
Status	The activity performed on the message through Application Mail or by the Workflow Alert Processor. Values may be: • **Acknowledged** • **Deferred** • **Delegated** • **Escalated** • **Sent**
Message Owner	The owner of the message when the activity was performed.
Recipient	The name of the person who the message was delegated or escalated to.

Workflow Alert Message History Inquiry Screen Fields and Function Keys

Field/Function Key	Description
Date/Time	The date and time of the message activity.
F3=Exit	Press the F3=Exit function key to exit this option and return to MENU MGMAIN.
F12=Return	Press the F12=Return function key to return to the previous screen without saving your entries. The Workflow Alert Message Detail Screen (p. 5-16) will appear.

Defining Workflow System Options   6

Workflow System Options allow you to specify the system-wide settings for Workflow Management and to activate Workflow Management in specific environments. You can define your system options for Workflow using the Workflow System Options Maintenance option on the Workflow File Maintenance Menu (MENU MGFILE).

NOTE: To maintain Workflow Management system options, you must stop the Workflow Alert Processor through Stop Workflow Alert Processor (MENU MGMAIN).

Workflow System Options Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Workflow System Options Screen	Used to specify your Workflow system settings.
Environment Activation Screen	Used to activate Workflow in an environment.

Workflow System Options Screen

```
                        WORKFLOW SYSTEM OPTIONS

Alert Administrator?      APDEMO....   APLUS Demo User - used by
Lost Messages Delivered: I            (I=Immediate, N=Normal)

Job Queue for Alert Processor: QINTER....
Start Alert Processor when A+ is started: Y (Y,N)
Process new Alerts every ..5 minutes.
Include Query Alerts Processing: Y (Y,N) Include Escalation Processing: Y (Y,N)
Query Alert Library: ALERTS....

Number of minutes after the hour to send hourly messages: 15

Selected Send Times:
First:  .9 : 00  A (A=AM, P=PM)  Second: 10 : 00  A      Third: 11 : 00  A
Fourth: 1.. : 00  P.             Fifth:  2. : 00  P.     Sixth: 3. : 00  P.

Next Tracking Numbers:                    Number of days to keep:
Alert Requests:     ..........1.          Alert Requests:      ...7.
Message Requests:   ..........1.          Message Requests:    .10.
Sent Messages:      ..........1.

                                                          F3=Exit
```

This screen appears after you select option 1 - Workflow System Options Maintenance from the Workflow Management File Maintenance Menu (MENU MGFILE).

Use this screen to specify how Workflow Management will function.

Workflow System Options Screen Fields and Function Keys

Field/Function Key	Description
Alert Administrator	Key the user ID of the user who will be the alert administrator. Undeliverable messages will be sent to this user. Undeliverable messages include: • messages for which the system cannot determine the recipient (due to incomplete information) • messages beyond the escalation period for which no escalation recipient has been defined (the **Escalate to User ID** field on the User Workflow Options Screen in Register User IDs (MENU XACFIG) is blank) *Valid Values:* A user ID defined through Register A+ User IDs (MENU XACFIG) (A 10) Required

Workflow System Options Screen Fields and Function Keys

Field/Function Key	Description
Lost Messages Delivered	Use this field to specify how you want undeliverable messages to be delivered to the alert administrator. Key Y if you want undeliverable messages to be sent immediately. Key N if you want undeliverable messages to be sent by the normal message delivery priority. The message will be sent to the alert administrator at the time specified for the alert message in the **Send Interval** field on the Alert Detail Screen in Alert Tailoring (MENU MGFILE). *Default Value:* I (A 1) Required
Job Queue for Alert Processor	Use this field to specify the job queue that will be used for the Workflow Alert Processor. It is recommended that you create a job queue that will be used only for the Workflow Alert Processor. Otherwise, you may experience delays in alert processing because the Workflow Alert Processor is waiting behind other jobs in the queue. Key the job queue name. *Valid Values:* Any job queue set up on the AS/400. (A 10)Required
Start Alert Processor when A+ is started	Key Y if you want the Workflow Alert Processor to start when Distribution A+ is started. Key N if you do not want the Workflow Alert Processor to start when Distribution A+ is started. If you stop the Workflow Alert Processor (e.g., for the dedicated portion of Day-End), you will have to restart it manually through Start Workflow Alert Processor (MENU MGMAIN). *Default Value:* Y (A1) Required
Process new Alerts every XXX minutes	Use this field to specify how many minutes the Workflow Alert Processor will wait between processing cycles. Key the number of minutes. *Default Value:* 5 *Valid Values:* 1-999 (N 3,0) Required

Workflow System Options Screen Fields and Function Keys

Field/Function Key	Description
Include Query Alerts Processing	You may build queries with the System i query tool that will trigger an alert. These queries will search System i files for data to output into an output file stored in a query alert library. The Workflow Alert Processor looks into the query alert library for this data. If there is data, an alert is generated with a message containing the data. The queries you build must follow a specific form.
	Key Y if you want to process query alerts. If you key Y in this field, you must specify a query alert library in the **Query Alert Library** field.
	Key N if you do not want to process query alerts.
	(A 1) Required
Include Escalation Processing	Use this field to specify whether you want to use escalation processing. Escalation processing is a Workflow Management feature designed to ensure that alert messages are acknowledged in a timely manner.
	With escalation processing, if a recipient does not acknowledge an alert message in the time specified in the **Escalation Factor** field on the Alert Detail Screen in Alert Tailoring (MENU MGFILE), the message will be forwarded to the escalation recipient specified for that user in the **Escalate to User ID** field on the User Workflow Management Options Screen in Register A+ User IDs (MENU XACFIG). Escalation processing applies only to messages delivered via Application Mail. If a message is sent to an e-mail address, escalation will cease.
	Key Y if you want escalation processing to occur.
	Key N if you do not want escalation processing to occur. Messages that are not acknowledged by the recipient will not be escalated to another recipient.
	Default Value: Y
	(A 1) Required
Query Alert Library	This field is required if you key Y in the **Include Query Alerts Processing** field, otherwise, leave this field blank.
	Key the name of the System i library where query alert data will be stored.
	(A 10) Required/Blank
Number of minutes after the hour to send hourly alerts	Use this field to specify the number of minutes after the hour that you want hourly messages to be sent. Hourly messages are those messages that have an H keyed in the **Send Interval** field on the Alert Detail Screen in Alert Tailoring (MENU MGFILE). For example, if you want hourly messages to be sent at fifteen minutes past the hour, key 15. Hourly messages will be sent at 8:15, 9:15, 10:15, and so on.
	Key the number of minutes.
	Default Value: 00
	Valid Values: 00-59
	(N 2,0) Required

Workflow System Options Screen Fields and Function Keys

Field/Function Key	Description
Selected Send Times	The **First** field is required, the remaining fields are optional.
	Use these fields to specify the times that the Workflow Alert Processor will send messages.
	The Workflow Alert Processor takes the recipient's time zone into account when determining when to send a message. If you specify message send times, the message will be sent when it is the selected time in the recipient's time zone.
	For example, the Workflow Alert Processor's system time zone is Central Standard Time (CST). A message that is defined to be sent at 10:00 a.m. is generated for two recipients. Recipient A's time zone is Eastern Standard Time (EST), which is one hour earlier than CST. Recipient B's time zone is Pacific Standard Time (PST), which is two hours later than CST. The Workflow Alert Processor will send the message to Recipient A at 9:00 a.m. CST and to Recipient B at 12:00 p.m. CST. Recipient A will receive the message at 10:00 a.m. EST. Recipient B will receive the message at 10:00 a.m. PST.
	For each send time, key the hour, minutes, and A for am or P for pm.
	Valid Values: 1-12 for the hour, 00-59 for the minutes.
	Default Value: There are no default send times. The letter A defaults for the AM/PM qualifier.
	(6 @ N 2,0: N 2,0/ A 1) Required/Optional
Next Tracking Numbers: Alert Requests	If you want to start the alert request tracking number at a specific value, key the number you want to use. The next alert request will be assigned that tracking number. Subsequent alert request tracking numbers will be incremented by 1.
	NOTE: You should not change this value once the Workflow Alert Processor has run.
	Default Value: The sum of the last alert request number plus 1.
	(N 11,0) Optional
Next Tracking Numbers: Message Requests	If you want to start the message request tracking number at a specific value, key the number you want to use. The next message request will be assigned that tracking number. Subsequent message request tracking numbers will be incremented by 1.
	NOTE: You should not change this value once the Workflow Alert Processor has run.
	Default Value: The sum of the last message request tracking number plus 1.
	(N 11,0) Optional

Workflow System Options Screen Fields and Function Keys

Field/Function Key	Description
Next Tracking Numbers: Sent Messages	If you want to start the sent message tracking number at a specific value, key the number you want to use. The next sent message will be assigned that tracking number. Subsequent sent message tracking numbers will be incremented by 1. NOTE: You should not change this value once the Workflow Alert Processor has run. *Default Value:* The sum of the last sent message tracking number plus 1. (N 11,0) Optional
Number of days to keep: Alert Requests	Key the number of days you want alert requests to be kept. Requests older than the number days specified here will be purged by Distribution A+ the first time the Workflow Alert Processor is started each day. *Valid Values:* 1 through 120 *Default Value:* 7 (N 3,0) Required
Number of day to keep: Message Requests	Key the number of days you want message requests to be kept. Requests older than the number days specified here will be purged by Distribution A+ the first time the Workflow Alert Processor is started each day. *Valid Values:* 1 through 120 *Default Value:* 10 (N 3,0) Required
F3=Exit	Press the F3=EXIT function key to exit from this option and return to MENU MGFILE.
Enter	Press the ENTER key to save your entries and continue. The Environment Activation Screen (p. 6-7) will appear.

Environment Activation Screen

```
                    ENVIRONMENT ACTIVATION


        Sel  Env  Description                   Status

         1   D5   v08.02.02 All Modules         ACTIVE
         2   D6   v8.02.02 FIFO                 ACTIVE
         3   D7   v8.02.02 LIFO                 ACTIVE
         4   NW   8.02.02 NEW INSTALL           INACTIVE
         5   SF   v8.02.02 Storefront 1.5.3     INACTIVE





                                                             Last
       _____

    Select: _.


                        F2=Change Status     F10=End     F12=Return
```

This screen appears after you press ENTER on the Workflow System Options Screen (p. 6-2). Use this screen to activate Workflow Management in specific environments.

The status column displays the status of Workflow Management in the environment, either **ACTIVE** or **INACTIVE**. To change the status of an environment, key the selection number of the environment in the Select field and press the F2=CHANGE STATUS function key.

Alerts will be triggered only for environments in which Workflow Management is active.

Environment Activation Screen Fields and Function Keys

Field/Function Key	Description
Sel	The **Reference Number** for the environments that are registered in this base ID.
Env	The designator code for the registered environments in this base ID.
Description	The description for this environment keyed when the environment was created.
Status	The status column displays the status of Workflow Management in the environment, either **ACTIVE** or **INACTIVE**.
Select	Key the **Reference Number** of the environment and press the F2=CHANGE STATUS function key to change the status of Workflow Management in the selected environment. (N 2,0) Optional

Environment Activation Screen Fields and Function Keys

Field/Function Key	Description
F2=Change Status	Press the F2=CHANGE STATUS key after you enter a **Reference Number** in the **Select** field to change the status of Workflow Management in the selected environment.
F10=End	Press the F10=END function key to save your entries and continue. MENU MGFILE will appear.
F12=Return	Press the F12=RETURN function key to return to the Workflow System Options Screen (p. 6-2) without saving your entries.

Workflow System Options Listing

You can print a listing of your Workflow system options settings using the Workflow System Options Listing option on the Workflow File Maintenance Menu (MENU MGFILE). This option does not have screens. When you select the option, the Report Options Screen will appear and then your listing will print. Refer to the Cross Applications User Guide for a description of the Report Options Screen.

Workflow System Options Listing

```
MG805 06/20/11 10.46.43              WORKFLOW SYSTEM OPTIONS LISTING                   AM/APDEMO    PAGE    1
--------------------------------------------------------------------------------------------------------------
              Alert Administrator                      :  QPGMR      Programmer and Batch User
              Lost Messages Delivered                  :  IMMEDIATE
              Alert Processor Job Queue                :  QINTER
              Start Alert Processor When A+ is Started  :  YES
              Process New Alerts Every                 :     5 Minutes.
              Include Query Alerts Processing?         :  YES
              Query Alert Library                      :  ALERTS
              Include Escalation Processing?           :  YES
              Number of Minutes After the Hour
                         to Send Hourly Messages       :  5
              Selected Send Times            First  :  9:00 AM
                                             Second :       AM
                                             Third  :       AM
                                             Fourth :       AM
                                             Fifth  :       AM
                                             Sixth  :  9:00 AM
              Number of Days to Keep Alert Requests    :    7
              Number of Days to Keep Message Requests  :   10
              Next Alert Tracking Number               :  000000001
              Next Message Request Tracking Number     :  000000001
              Next Sent Message Tracking Number        :  000000001
                     Environment        Active
                     -----------        ------
                         CB              NO
                         D1              NO
                         D2              NO
                         D5              YES
                         D6              NO
                         D7              NO
```

This listing lists your Workflow system settings. All of the information on this listing is maintained through Workflow System Options Maintenance (MENU MGFILE). Refer to "Workflow System Options Screen Fields and Function Keys" on page 6-2 for details about the data on this listing.

Maintaining Alert Messages   **7**

You can customize your alert messages using the Message Maintenance Option on the Workflow File Maintenance Menu (MENU MGFILE). You can key the text of a message, including a non-repeating header and footer line. Within the text you can insert value, report, and function codes as placeholders that will be filled in with the value, report, or application function when the message is sent. You can create multiple messages for each alert.

Message Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Message Maintenance Selection Screen	Used to specify the ID of the message you want to maintain.
Message ID Search Window	Use to review and select a message for further processing.
Message Maintenance Screen	Used to maintain the message body.

Message Maintenance Selection Screen

```
                    MESSAGE MAINTENANCE SELECTION


          Function:    _     (A,C)
          Alert?       ......
          Message ID? ......
    Copy Message ID? ......




                                                    F3=Exit
```

This screen appears after you select option 2 - Message Maintenance from the Workflow Management File Maintenance Menu (MENU MGFILE).

Use this screen to specify the alert and message ID that you want to maintain. You can also specify an existing message ID to copy when creating a new message.

Message Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Function	Key A to add an alert message.
	Key C to change an existing alert message.
	(A 1) Required
Alert	Key the ID of the alert for which you want to add or maintain a message.
	Valid Values: An alert defined through Alert Maintenance (MENU MGSYST).
	(A 5) Required
Message ID	Key the ID of the message you want to add or maintain.
	Valid Values: If you keyed C in the **Function** field, this must be the message ID of a message that was added previously with this option.
	(A 5) Required

Message Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Copy Message ID	When adding a new message, use this field to copy the information from an existing message to the new message. Key the message ID of the message you want to copy information from. *Valid Values:* A message previously defined with this option. (A 5) Optional
F3=Exit	Press F3=EXIT to exit from this option and return to MENU MGFILE.
Enter	Press ENTER to confirm your entries and continue. The Message Maintenance Screen (p. 7-6) will appear.

Message ID Search Window

```
  Msg ID Msg Detail
1 G1001  [*Head]The following orders have been
2 G1002  [*Head]The following EDI orders have




                                             Last
 _____     _____
Sel: _               Msg ID: .....    F12=Return
```

This pop-up window screen appears after you key a question mark in the **Message ID** or the **Copy Message ID** field on the Message Maintenance Selection Screen (p. 7-2) and press ENTER. Use this pop-up window screen to review and select a message ID for further processing.

Message ID Search Window

Field/Function Key	Description
(Reference Number)	The reference number of the alerts displayed on this screen. This number is 1 through 7 for the alerts that may display. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference an alert for processing. Display
Msg ID	The ID of the alert previously created. Display
Msg Detail	The description assigned to the alert. Display
Sel	Key the **Reference Number** of the message to selected for further processing. (N 1,0) Optional
Msg ID	Key the message ID in the Message limits field to position the list of messages to the first message that matches this criteria. (A 5) Optional

Message ID Search Window

Field/Function Key	Description
F12=Return	Press the F12=RETURN function key to end the search and return to the previous screen.

Message Maintenance Screen

```
    Message Maintenance                    For Alert: GN105   Message: G1040
[*Head]The following requisition(s) require approval from buyer [*BUYER-ID]:...
[*Head\].........................................................................

Requisition Inquiry [*FUNCT=0422,Req/PO-Inquiry]................................
Enter/Change Requisitions Link [*FUNCT=0416,Enter-or-Change-Requisitions].......
................................................................................
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................................................................................
F4=Data Codes    F5=Save    F6=Functions    F9=Reports    F10=Save and Exit
F12=Return   F13=Begin Header   F14=End Header   F15=Begin Footer   F16=End Footer
```
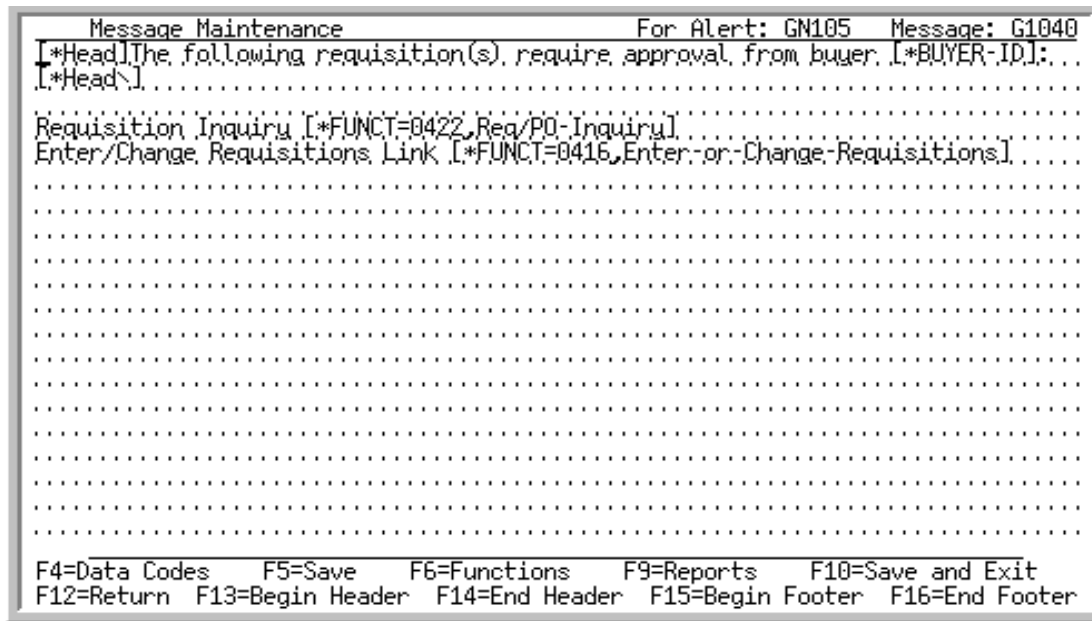
This screen appears after you press ENTER on the Message Maintenance Selection Screen (p. 7-2). Use this screen to add or maintain the text of the alert message. The message can contain a header, body text, data codes and a footer.

If you are adding a message and the **Copy Message ID** field on the Message Maintenance Selection Screen (p. 7-2) is blank, this screen will be filled with blank lines.If you selected to change or copy a message, this screen will display the text of that message.

Message Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Text Editor - Header	Use the header to introduce the message. The header line must be the first line of the message. Only one header line per message is allowed. If you are consolidating messages, the header line will appear only once on the consolidated message.
	Key the static text and data codes, if necessary, for the message header between the [*Head] and [*Head\] markers.
	(A Unlimited) Required
Text Editor - Body Text	Use the text editor body area to assemble or change the alert message. The body of the message is any lines of text that are not marked as header or footer lines.
	Key the static text and data codes, if necessary, for the message body text.
	(A Unlimited) Required

Message Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Text Editor - Data Codes	Use the data codes, report codes, and function numbers to reference actual data in your message.
	These codes are placeholders in the message where values, reports, and links to application functions will be inserted when the message is created by the Workflow Alert Processor.
	Data codes in a message will be replaced with the actual values that they represent.
	Function numbers in a message will be replaced by a hyperlink when the message is created. This link will provide access to the application function (such as an order inquiry) that the function number represents. The hyperlinks generated by function numbers are environment-specific. To access an application function via the hyperlink in a message, the recipient must be logged in to the same environment that generated the message.
	Report codes must be inserted on an empty line. Report codes will be replaced with the generated report (group of data elements) that the report code represents.
	To insert a code into the message, put the cursor on a blank space where you want the data or hyperlink to appear when the message is generated and then press the appropriate function key.
	(A Unlimited) Required
Text Editor - Footer	Use the footer to close the message.
	The footer line must be the last line of the message. Only one footer line per message is allowed.
	Key the static text and data codes, if necessary, for the message header between the [*Foot] and [*Foot\] markers.
	(A Unlimited) Required
F4=Data Codes	Press F4=DATA CODES to insert a data code defined through Data Code Maintenance (MENU MGSYST) into the alert message at the cursor position. The Data Codes pop-up window will appear. This window lists all of the defined data codes from which you can select the data code to add to your message. To reposition the list to a specific data code, key the data code in the **Dta Cd** field and press ENTER.
F5=Save	Press F5=SAVE to save your entries. The screen will refresh and your changes to the alert message will be saved.

Message Maintenance Screen Fields and Function Keys

Field/Function Key	Description
F6=Functions	Press F6=FUNCTIONS to insert a function number defined through Function Number Maintenance (MENU MGSYST) into the alert message at the cursor position. The Function Number pop-up window will appear. This window lists all of the defined function numbers from which you can select the function number to add to your message. To reposition the list to a specific function number, key the function number in the **Function** field and press ENTER.
F9=Reports	Press F9=REPORTS to insert a report code defined through Report Code Maintenance (MENU MGSYST) into the alert message at the cursor position. The Report Code pop-up window will appear. This window lists all of the defined report codes from which you can select the report code to add to your message. To reposition the list to a specific report code, key the report code in the **Report** field and press ENTER. NOTE: Reports will not be generated if the CHAPTER 8: *Tailoring Your Alerts*, Alert Detail Screen (p. 8-12) is set up with a Y in the **Consolidate** field.
F10=Save and Exit	Press F10=SAVE AND EXIT to save your entries and exit this screen. The Message Maintenance Selection Screen (p. 7-2) will appear.
F12=Return	Press F12=RETURN to return to the previous screen without saving your entries. The Message Maintenance Selection Screen (p. 7-2) will appear.
F13=Begin Header	Press F13=BEGIN HEADER to mark the beginning of the header line of the message. [*Head] will appear in the text editor at the cursor position. If the message has a header, the header line must be the first line of the message. If you press F13=BEGIN HEADER to begin the header line, you must press the F14=END HEADER function key at the end of the header line or remove [*Head] from the message.
F14=End Header	Press F14=END HEADER to mark the end of the header line of the message. [*Head\] will appear in the text editor at the cursor position.
F15=Begin Footer	Press F15=BEGIN FOOTER to mark the beginning of the footer line of the message. [*Foot] will appear in the text editor at the cursor position. If the message has a footer, the footer line must be the last line of the message. If you press F15=BEGIN FOOTER to begin the footer line, you must press the F16=END FOOTER function key at the end of the footer line or remove [*Foot] from the message.
F16=End Footer	Press F16=END FOOTER to mark the end of the footer line of the message. [*Foot\] will appear in the text editor at the cursor position.

Tailoring Your Alerts   8

You can use the Alert Tailoring option on the Workflow File Maintenance Menu (MENU MGFILE) to set the specific properties of alerts. You can

* assign an alert to an alert class

* activate an alert

* assign messages to an alert and specify recipient, send interval, settings, and escalation for each message

* maintain the values for an alert and the filters for the alert messages

* select specific alerts to be sent to Infor ION Activity Deck

Alert Tailoring

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Alert Start Screen	Used to specify the ID of the alert you want to tailor.
Alert Search Window	Use to review and select an alert for further processing.
Alert Detail List Screen	Lists defined alert messages.
Alert Control Value List Screen Alert Control Value Maintenance Screen	Lists the control values defined for the alert. Used to select a control value and make required changes.
Alert Detail Screen	Used to define how the message will work with the alert.
Alert Detail Filtering Screen Alert Detail Filtering Maintenance Screen	Lists defined filters. Used to select a filter and maintain the filter for the alert message ID.

Alert Start Screen

```
                        ALERT START


                Alert?    _ . . . .
                                                   F3=Exit
```
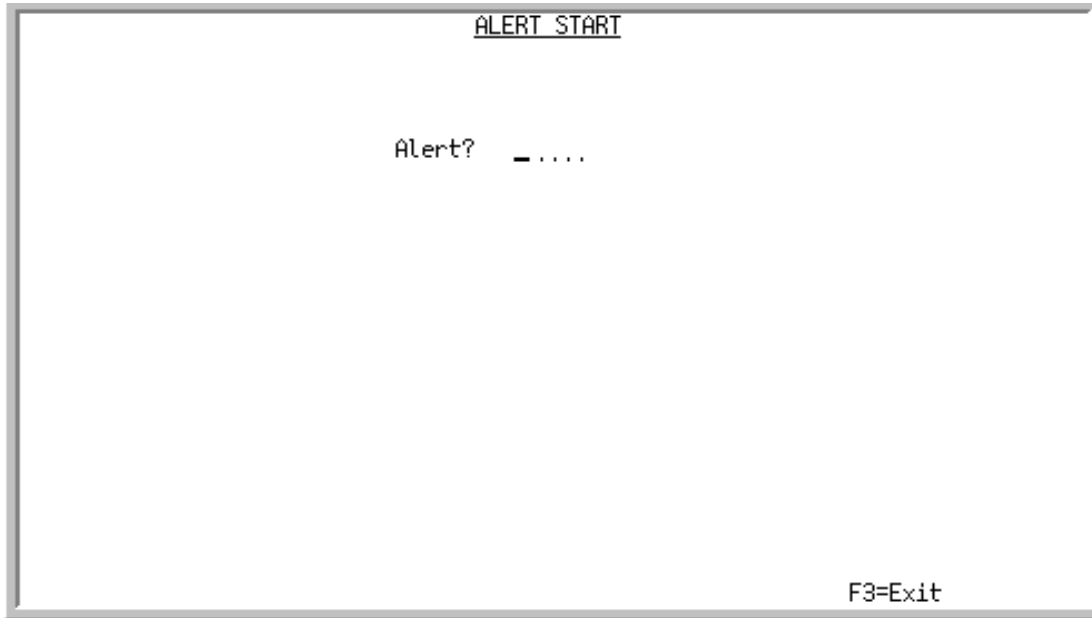
This screen appears after selecting option 3 - Alert Tailoring on Workflow File Maintenance Menu (MENU MGFILE). Use this screen to specify the ID of the alert you want to tailor.

Alert Start Screen Fields and Function Keys

Field/Function Key	Description
Alert	Key the ID of the alert you want to tailor.
	Valid Values: An alert defined through Alert Maintenance (MENU MGSYST).
	(A 5) Required
F3=Exit	Press the F3=EXIT function key to exit from this option and return to MENU MGFILE.
Enter	Press the ENTER key to save your entries and continue. The Alert Detail List Screen (p. 8-5) will appear.

Alert Search Window

```
┌──────────────────────────────────────┐
│  Alert Description              Act    │
│ 1 GN101 Order Placed on Hold      N    │
│ 2 GN102 Order/Item Placed on Backorder N │
│ 3 GN103 Special Order is Created  N    │
│ 4 GN104 Large Variance on Invoice N    │
│ 5 GN105 PO Approval Required      N    │
│ 6 GN106 Order Cancel Date Check   N    │
│ 7 GN108 Offline Order Entry Errors N   │
│                                More... │
│ Sel: _        Alert: ......   F12=Return │
└──────────────────────────────────────┘
```

This pop-up window screen appears after you key a question mark in the **Alert** field on the Alert Start Screen (p. 8-2)and press ENTER. Use this pop-up window screen to review and select an alert for further processing.

Alert Search Window

Field/Function Key	Description
(Reference Number)	The reference number of the alerts displayed on this screen. This number is 1 through 7 for the alerts that may display. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference an alert for processing. Display
Alert	The ID of the alert previously created. Display
Description	The description assigned to the alert. Display
Act	This field indicates that the alert is active or not. A Y indicates the alert ia active and an N indicates the alert is inactive. Display
Sel	Key the **Reference Number** of the alert to selected for further processing. (N 1,0) Optional

Alert Search Window

Field/Function Key	Description
Alert	Key the Alert ID in the Alert limits field to position the list of alerts to the first alert that matches this criteria. (A 5) Optional
F12=Return	Press the F12=RETURN function key to end the search and return to the previous screen.

Alert Detail List Screen

```
All                        ALERT DETAIL LIST                      Active
Alert:   GN101   Order Placed on Hold
                            Send        Det              /-- Last Change --\
Sel   Msg ID   Recipient    Interval    Sts   Esc  Created by  User ID     Date
  1   G1001    *CRD-MGR     Selected     N     N
  2   G1001    *AR-REP      Selected     N     Y
  3   G1001    *WH-MGR      Selected     N     N
  4   G1001    *SALES-MGR   Selected     N     N

  5   G1002    *USER        Immediate    N     N
  6   G1002    *USER        Immediate    N     N
  7   G1001    *REP-NUM1    Selected     N     N
  8            *CRD-MGR     Immediate    N     N

  9            *AR-REP      Immediate    N     N
 10            *SALES-MGR   Immediate    N     N
 11            *ION         Immediate    Y     N               APDEMO      2/03/14
                                                                               Last
       _____
                         -------------------------------------------------
       Select:   _ .     |  Alert Class:                                 |
                         |  Alert Status: Y   (Y,N)          F10=Update   |
                         -------------------------------------------------
                  F4=Filters     F5=Add      F6=Send to ION     F12=Return
```

This screen appears after you press ENTER on the Alert Start Screen (p. 8-2).

Use this screen to

- assign the alert to an alert class
- activate the specified alert
- maintain the properties of an alert message
- add a new message to the alert
- maintain any alert control values defined for the alert.

A list of message IDs associated with the alert displays on this screen from which you can select a message to maintain. The information that displays on this screen is controlled by the F4=FILTERS function key. You can assign a new message to an alert by pressing the F5=ADD function key.

Alert Detail List Screen Field and Function Keys

Field/Function Key	Description
Alert	The ID and description of the alert selected.
	Display
Sel	The reference number of the messages displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a message for change.
	Display

Alert Detail List Screen Field and Function Keys

Field/Function Key	Description
Msg ID	The message ID for a unique message for this alert. Display
Recipient	The designated recipient code for the message ID. Display
Send Interval	The send interval represents when this alert message will be sent. Valid values are **Hourly**, **Immediate**, **Minutes**, **Selected**. Display
Det Sts	A **Y** indicates that the message is set to **Active** status on the Alert Detail Screen (p. 8-12) and a **N** indicates the message is presently not active. Display
Esc	Indicates that the message is set up to be escalated if necessary. Display
Created By	The ID of the user who created the message. Display
Last Change User ID and Date	The user ID of the user and date of the last change to this message. Display
Select	To maintain a message displayed on this screen, key the number displayed in the **Sel** field for the specific message ID and press ENTER. To add or change the alert class or activate the alert, leave this field blank. (N 2,0) Optional
Alert Class	Key the alert class to which you want the specified alert to belong and press F10=UPDATE to save your change. *Valid Values:* An alert class defined through Alert Class Maintenance (MENU MGFILE). (A 2) Optional
Alert Status	Use this field to activate or deactivate an alert. Key **Y** to activate the alert. When the conditions of the alert are met, Distribution A+ will generate and send messages. Key **N** to deactivate the alert. Messages will not be generated and sent by Distribution A+ when the conditions of the alert are met. After you have made your entry, press the F10=UPDATE function key to save your change. (A 1) Required

Alert Detail List Screen Field and Function Keys

Field/Function Key	Description
F2=Alert Values	The F2=ALERT VALUES function key displays only if there are one or more alert control values assigned to this alert.
	Press this key to display the alert control values for the alert. You can then change the value assigned to one or more of the control values. The Alert Control Value List Screen (p. 8-8) will appear.
F4=Filters/F4=Detail	The F4=FILTERS / F4=DETAIL function key displays only if there are one or more filters assigned to this alert.
	Press the F4=FILTERS / F4=DETAIL function key to toggle between displaying the **Filters** column or the **Send Interval**, **Det Sts**, **Esc**, **Created by**, and **Last Change** columns.
F5=Add	Press the F5=ADD function key to add a message to the alert. The Alert Detail Screen (p. 8-12) will appear.
F6=Send to ION / F6=All	Press the F6=SEND TO ION function key to toggle the display to only show alerts that are defined with **Send to ION** set to Y. Press the F6=ALL key to show all alerts.
F10=Update	Press the F10=UPDATE function key after you have changed the status of this alert in the **Alert Status** field or specified an alert class in the **Alert Class** field to save your changes and remain on this screen.
F12=Return	Press the F12=RETURN function key to return to the Alert Start Screen (p. 8-2) without saving your entries.
Enter	Press the ENTER key after keying a selection number in the **Select** field to continue. The Alert Detail Screen (p. 8-12) will appear.
	If you have made an entry in the **Alert Class** field or the **Alert Status** field, pressing ENTER will save those entries.

Alert Control Value List Screen

```
                        ALERT CONTROL VALUE
 Alert:  GN104  Large Variance on Invoice

    Description                 Condition Value  Data Type  Rqd  Last Chg
 1  Include WH Transfers        N                Date        N

                                                                   Last
 _____

   Select: _




                                                          F12=Return
```

Alert Control Value Maintenance Screen

```
                        ALERT CONTROL VALUE
 Alert:  GN104  Large Variance on Invoice

    Description                 Condition Value  Data Type  Rqd  Last Chg
 1  Include WH Transfers        N                Date        N

                                                                   Last
 _____

        Description              Condition Value   Data Type   Required
        Include WH Transfers     N.............    Date        N

                                        F10=Update      F12=Return
```

The Alert Control Value List Screen appears after you press the F2=ALERT VALUES function key on the Alert Detail List Screen (p. 8-5). and displays the alert control values defined for this alert, with the current value for each control value. Use this screen to change the value for an alert control value.

The Alert Control Value Maintenance Screen appears after you select a control value and press ENTER on the Alert Control Value List Screen. Use this screen to change the entry in the **Condition Value** field for the alert control value.

Control values provide the capability to set parameters for when the alert will be triggered. For example, alert GN106 notifies you whenever an open order is within a specified number of days of the order cancel date. Rather than specify a number of days (e.g., 5) in the program that generates the alert, the system provides a dynamic alert control value. You can then set this value for the number of days you want used to trigger the alert.

> NOTE: You cannot change any of the information on this screen except the Condition Value.

Alert Control Value List Screen and Alert Control Value Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Alert	The ID and description of the alert selected. Display
(Reference Number)	To change the value for an alert control value displayed on this screen, key the number displayed in this field for the control value and press ENTER. Display
Description	This field displays a description of the control value. Display
Condition Value	This field displays the current value for the alert control value. This is the value that will be used when testing the condition to determine if an alert will be triggered. For example, alert GN106 is triggered and generates messages when an open order is within a specified number of days of its cancel date. The number of days is currently set to 7 (the entry in the **Condition Value** field is 7). If an open order is eight or more days away from its cancel date, the alert will not be triggered. If an open order is seven or fewer days from its cancel date, the alert will be triggered and one or more messages will be sent. Display
Data Type	The data type of the control value. The data type can be: • character • numeric (non-decimal) • numeric (with decimals) • date Display

Alert Control Value List Screen and Alert Control Value Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Rqd	This field indicates whether the **Condition Value** field can be zero or blank. A **Y** in this field indicates that you cannot leave the **Condition Value** field blank, and if you are keying a number, you must key a number greater than zero. An **N** in this field indicates that you can key a zero in the **Condition Value** field or leave the field blank. Display
Last Chg	This field displays the last date on which the **Condition Value** for this alert control value was changed. Display
Select	The **Select** field only displays on the Alert Control Value List Screen. To change the **Condition Value** for an alert control value, key the **Reference Number** of the alert control value in this field and press ENTER. (N 1,0) Optional
Description	The **Description** field only displays on the Alert Control Value Maintenance Screen. This field displays the description of the alert control value. Display
Condition Value	The **Condition Value** field only displays on the Alert Control Value Maintenance Screen. Use this field to enter a new value for the alert control value. This is the value that will be used when testing the condition to determine if an alert will be triggered. Key the new value and press the F10 function key. *Valid Values:* An entry that meets the conditions shown in the **Data Type** and **Required** fields. (A 15) Optional
Data Type	The **Data Type** field only displays on the Alert Control Value Maintenance Screen. This field indicates what type of data you can enter in the Condition Value field. The data type can be: • character • numeric (non-decimal) • numeric (with decimals) • date Display

Alert Control Value List Screen and Alert Control Value Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Required	The **Required** field only displays on the Alert Control Value Maintenance Screen.
	This field indicates whether the **Condition Value** field can be zero or blank.
	A Y in this field indicates that you cannot leave the **Condition Value** field blank, and if you are keying a number, you must key a number greater than zero.
	An N in this field indicates that you can key a zero in the **Condition Value** field or leave the field blank.
	Display
F10=Update	The F10=UPDATE function key only displays on the Alert Control Value Maintenance Screen.
	After you make an entry in the **Condition Value** field, press F10=UPDATE to save your change.
F12=Return	*List*: Press F12=RETURN to return to the Alert Detail List Screen (p. 8-5).
	Maintenance: Press F12=RETURN to return to the Alert Control Value List Screen (p. 8-8)
Enter	*List*: Key a selection number in the **Select** field and press ENTER to change the **Condition Value** for an alert control value. The Alert Control Value Maintenance Screen will appear.

Alert Detail Screen

```
                          ALERT DETAIL                              CHANGE
                                               Settings
  Alert:  GN101  Order Placed on Hold         Active:      N   (Y,N)
                                               Consolidate: Y
  Alert Sequence:    1      * System Defined * Interrupt:   N
                                               Allow Dups:  N
  Message ID: G1001                            Send to ION: N

  Recipient:  *CRD-MGR


  Send Interval: S   (I=Immediate, M=Minutes, H=Hourly, S=Selected)

         Place an 'X' by all that apply:
              X 09:00 AM      .. 00:00 AM
              .. 00:00 AM     .. 00:00 AM
              .. 00:00 AM     .. 00:00 AM

  Escalate: N  (Y,N)
         Escalation Interval: H    (H=Hours, M=Minutes, D=Days, W=Weeks)
         Escalation Factor:   ...


                                               F6=Filters    F12=Return
```

This screen appears after you press the F5=ADD function key or after you key a selection number in the **Select** field and press ENTER on the Alert Detail List Screen (p. 8-5).

Use this screen to define how the message will work with the alert.

Alert Detail Screen Fields and Function Keys

Field/Function Key	Description
Alert	The ID and description of the alert selected. Display
Active	Key Y in this field to activate the message for this alert. Key N in this field to disable the message for this alert. *Default Value:* N (A 1) Required

Alert Detail Screen Fields and Function Keys

Field/Function Key	Description
Consolidate	Key Y in this field if you want this message to be consolidated with like messages. For example, if you selected to send the message hourly, you can have all the messages with this alert ID and alert sequence and the same recipient consolidated before they are sent. Key N in this field if you do not want messages to be consolidated. NOTE: This value must be set to N when using the Reports feature on the Message Maintenance Screen (p. 7-6) in CHAPTER 7: *Maintaining Alert Messages* for this Alert ID. *Default Value:* N (A 1) Required
Alert Sequence	This field displays the sequence number assigned to the message. Display
Interrupt	Key Y in this field if you want this message to interrupt the recipient in Distribution A+. Key N in this field if you do not want this message to interrupt the recipient in Distribution A+. *Default Value:* N (A 1) Required
Allow Dups	Key Y in this field if you want to allow duplicates of this message to be sent. Duplicate checking will not be done for this message. Key N in this field if you do not want duplicates of this message to be sent. Duplicate checking will occur. *Default Value:* N (A 1) Required
Message ID	Key the message ID. NOTE: Alerts that are identified as * System Defined * do not allow this field to be changed when maintaining an alert that is shipped as part of the Workflow Management module. *Default Value:* The message ID selected on the Alert Detail List Screen (p. 8-5), if you keyed a selection number in the **Select** field and pressed ENTER. Otherwise, this field is blank. *Valid Values:* A message ID created through Message Maintenance (MENU MGFILE) for this alert. (A 5) Required

Alert Detail Screen Fields and Function Keys

Field/Function Key	Description
Send to ION	Key Y in this field if you want this message to be sent to Infor ION and Ming.le. Key N in this field if you do not want this message to Infor ION and Ming.le. *Default Value:* N *Valid Values:* If Y, the I**nterrupt**, **Consolidate**, and **Escalate** flags must be N and the **Message ID** must be blank. (A 1) Required
Recipient	Key the ID of the recipient. If you key recipient ID *USER or *EMAIL, you must specify the user ID in the **User ID** field or the e-mail address in the **E-mail Addr** field. If you key recipient *ION, the **Send to ION** flag must also be Y. NOTE: Alerts that are identified as * System Defined * do not allow this field to be changed when maintaining an alert that is shipped as part of the Workflow Management module. *Valid Values:* A recipient code defined through Recipient Code Maintenance (MENU MGSYST). (A 10) Required
User ID	This field is available only if you keyed *USER in the **Recipient** field. Use this field to specify the user ID of the person you want to receive the alert message. Key the user ID of the recipient. *Valid Values:* A user ID created through Register A+ User IDs (MENU XACFIG) (A 10) Required
E-mail Addr	This field is available only if you keyed *EMAIL in the **Recipient** field. This field and the **Distribution Group** field cannot both contain a value. Use this field to specify the e-mail address of the person you want to receive the alert message. Key the e-mail address of the recipient. (A 122) Required/Optional
Distribution Group	This field is available only if you keyed *EMAIL in the **Recipient** field. This field and the **E-mail Addr** field cannot both contain a value. Use this field to specify the distribution group you want to receive the alert message. Key the distribution group ID of the recipients. (A 5) Required/Optional

Alert Detail Screen Fields and Function Keys

Field/Function Key	Description
Send Interval	Use this field to specify when this message will be sent.

Key I if you want this message to be sent as soon as the conditions for the alert are met. The message will be sent the first time after the alert is triggered that the Workflow Alert Processor is active.

Key M if you want this message to be sent once every specified number of minutes. Messages for this alert ID will be held and sent every number of minutes specified in the **Place an 'X' by all that apply** section of this field. After you key M in this field and press ENTER, the **Place an 'X' by all that apply** section of this field will be updated to display intervals in minutes.

Key H if you want this message to be sent once every hour. Messages for the alert ID will be held and sent every hour at the time specified in the **Number of minutes after the hour to send hourly messages** field on the Workflow System Options Screen in Workflow System Options Maintenance (MENU MGFILE).

Key S if you want this message to be sent at specific times. If you key S, you must choose the times that you want in the **Place an 'X' by all that apply** section of this field. The times that appear here are those defined in the **Selected Send Times** field on the Workflow System Options Screen in Workflow System Options Maintenance (MENU MGFILE). Each recipient will receive the message at the times you select in the recipient's local time zone. For example, if you select to send the message at 9:00 a.m., recipients in New York will receive the message at 9:00 Eastern Standard Time (EST), and recipients in California will receive the message at 9:00 a.m. Pacific Standard Time (PST).

NOTE: If this field is S and ALL times indicated with an 'X' in the **Place an 'X' by all that apply** section of this field are invalid (with times equal to zero), then the send interval for this alert would be treated as an immediate send (as if you keyed I in this field). However, if at least one time marked with an 'X' is valid, then the send interval for this alert will wait until the valid time is met.

Default Value: S

(A 1) Required

Alert Detail Screen Fields and Function Keys

Field/Function Key	Description
Escalate	Use this field to specify whether this message should be escalated. Messages will only be escalated for users with an I (Internal) in the **Alert Delivery Type** field on the User Workflow Management Options Screen in Register A+ User IDs (MENU XACFIG). If you select to escalate the message and the recipient does not acknowledge the message through Application Mail in the time specified in the **Escalation Factor** field, the message will be forwarded to the escalation recipient specified for that user in the **Escalate to User ID** field on the User Workflow Management Options Screen. If a message is sent to an e-mail address, escalation will cease. Key Y in this field if you want this message to be escalated. Key N in this field if you do not want this message to be escalated. *Default Value:* N (A 1) Required
Escalation Interval	This field is available only if you keyed a Y in the **Escalate** field. Use this field to select the unit of time for the escalation time interval. Key M if you want the message escalated after a specified number of minutes. Key H if you want the message escalated after a specified number of hours. Key D if you want the message escalated after a specified number of days. Key W if you want the message escalated after a specified number of weeks. *Default Value:* H (A 1) Required
Escalation Factor	This field is available only if you keyed a Y in the **Escalate** field. Use this field to specify the number of the minutes, hours, days, or weeks, after which the message will be escalated. For example, if you keyed D in the **Escalation Interval** field and you key 3 in this field, the message will be sent to the escalation recipient if the initial recipient has not responded to the message after three days. Key the number of minutes, hours, days, or weeks. *Default Value:* 0 (N 2,0) Required
F6=Filters	Press the F6=FILTERS function key to add filters to the specified message. The Alert Detail Filtering Screen (p. 8-18) will appear.
F12=Return	Press the F12=RETURN key to return to the Alert Detail List Screen (p. 8-5) without saving your entries.
Enter	Press the ENTER key to save your entries and continue. The Alert Detail List Screen (p. 8-5) will appear.

Alert Detail Filtering Screen

```
                        ALERT DETAIL FILTERING
   Alert:   GN105  PO Approval Required        Message ID: G1040
   Alert Sequence: 001                         Recipient:  *BUYER

   Filter        Data Code   Operation Condition Value      Chg Date
     1           *APRV-AUT      EQ      Y                    6/04/01
     2   AND     *PO-APRVL      EQ                           6/04/01
     3   AND     *PO-HLDCD      EQ                           6/04/01




                                                               Last
   _____

      Select: _



                      F5=Add              F12=Return
```

Alert Detail Filtering Maintenance Screen

```
                        ALERT DETAIL FILTERING
   Alert:   GN105  PO Approval Required        Message ID: G1040
   Alert Sequence: 001                         Recipient:  *BUYER

   Filter        Data Code   Operation Condition Value      Chg Date
     1           *APRV-AUT      EQ      Y                    6/04/01
     2   AND     *PO-APRVL      EQ                           6/04/01
     3   AND     *PO-HLDCD      EQ                           6/04/01




                                                               Last
   _____
                         (EQ,NE,LT,GT,LE,GE)
      Filter     Data Code?     Operation    Condition Value
        2        *PO-APRVL.        EQ         ........................
                               F10=Update    F12=Return    F24=Delete
```

The Alert Detail Filtering Screen appears after you press the F6=FILTERS function key on the Alert Detail Screen (p. 8-12). Use this screen to maintain filters for the message ID specified on the Alert Detail Screen (p. 8-12).

The Alert Detail Filtering Maintenance Screen appears after you press the F5=ADD function key or key a **Filter** number in the **Select** field and press ENTER on the Alert Detail Filtering Screen.

Use this screen to add a filter or maintain the details of a filter. If more than one filter exists for a message, all the filters are joined by an AND statement. All of the conditions must be true for this message to be generated. If one of the conditions in the list is untrue, no message will be generated.

Alert Detail Filter Screen and Alert Detail Filter Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Alert	The ID and description of the alert selected. Display
Alert Sequence	The sequence number assigned to the message. Display
Message ID	The message ID for a unique message for this alert. Display
Recipient	The designated recipient code for the message ID. Display
Filter	The unique filter number assigned to each filter condition. Display
Data Code	The data code selected for each step of the filter condition. Display
Operation	The operation code that will be performed on the selected data code. Display
Condition Value	The text or numeric value that will be used to establish the filter condition. Display
Chg Date	This date reflects the last change recorded to the filter condition. Display
Select	The **Select** field only displays on the Alert Detail Filtering Screen. Key the number in the **Filter** field for the filter you wish to maintain and press ENTER. (N 2,0) Required
Filter	The **Filter** field only displays on the Alert Detail Filtering Maintenance Screen. The filter number selected to be maintained. Display

Alert Detail Filter Screen and Alert Detail Filter Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Data Code	The **Data Code** field only displays on the Alert Detail Filtering Maintenance Screen.
	Use this field to key the data code on which you want to filter.
	Valid Values: A data code defined through Data Code Maintenance (MENU MGSYST) and assigned to this alert through Alert Maintenance (MENU MGSYST).
	(A 10) Required
Operation	The **Operation** field only displays on the Alert Detail Filtering Maintenance Screen.
	Use this field to key the relationship that must exist between the **Data Code** and the **Condition Value**. This is the condition that must exist (be true) for the alert to generate this message.
	Key:
	• EQ if the data code must be equal to the value
	• NE if the data code must be not equal to the value
	• LT if the data code must be less than the value
	• GT if the data code must be greater than the value
	• LE if the data code must be less than or equal to the value
	• GE if the data code must be greater than or equal to the value
	(A 2) Required
Condition Value	The **Condition Value** field only displays on the Alert Detail Filtering Maintenance Screen.
	Key the value to which the data code will be compared to determine whether to generate the alert message or not. Filters will be applied in the order they display on this screen. For this reason, you should key conditional values in a logical order from most general to most specific.
	Once you enter a filter, you cannot edit or change the sequence on this screen. If the conditional value is keyed incorrectly, the lines must be deleted and re-created.
	(A 25) Required
F5=Add	*Filter*: Press the F5=ADD function key to add a new filter condition. TheAlert Detail Filtering Maintenance Screen will appear.
	Maintenance: The F5=ADD function key appears only if you selected to add a filter on the Alert Detail Filtering Screen. After you have specified a data code, operation, and condition value, press the F5=ADD function key to add the filter. The information for the filter will be added to the list and the Alert Detail Filtering Screen appears.

Alert Detail Filter Screen and Alert Detail Filter Maintenance Screen Fields and Function Keys

Field/Function Key	Description
F10=Update	The F10=UPDATE function key only appears on the Alert Detail Filtering Maintenance Screen. If you changed the **Data Code**, **Operation**, or **Condition Value**, press F10=UPDATE to update the filter with the changed information.
F12=Return	*Filter*: From the Alert Detail Filtering Screen, press F12=RETURN to return to the Alert Detail Screen (p. 8-12). *Maintenance*: From the Alert Detail Filtering Maintenance Screen, press F12=RETURN to return to the Alert Detail Filtering Screen without saving your entries.
F24=Delete	The F24=DELETE function key only appears on the Alert Detail Filtering Maintenance Screen. The F24=DELETE function key appears only after you key a filter number in the **Select** field and press ENTER. Press F24=DELETE to delete the selected filter.
Enter	From the Alert Detail Filtering Screen, press ENTER after keying a selection number in the **Select** field to change the selected filter's information. The Alert Detail Filtering Maintenance Screen (p. 8-18) will appear.

Making Rule Assignments   **9**

You can assign values to rule entities using the Workflow Rule Assignments Maintenance option on the Workflow File Maintenance Menu (MENU MGFILE). These values are used by the Workflow Alert Processor to assign the proper value to the rule data code during alert processing.

A Workflow Management rule is a special type of data code whose value is derived by the Workflow Alert Processor using a set of predefined conditions and placed in the data string, rather than being taken directly from the application. Workflow Management rules are defined through Rule Maintenance (MENU MGSYST).

Rules are defined for alerts, but apply to entities. Entities are transactions, documents, control constants, or recipient categories for which a rule operates. Orders, purchase orders, customers, and vendors are all examples of entities. Entities are used to create rules, and to determine when the rule applies.

The Workflow Rule Assignments option (MENU MGFILE) allows you to assign values to rule entities. These values are used by the Workflow Alert Processor to assign the proper value to the rule data code during alert processing.

After you key an entity ID in the **Entity** field and press ENTER on the Entity Selection Screen (p. 9-3) in Workflow Rule Assignments (MENU MGFILE), additional data entry fields will appear. The fields that appear depend upon the values entered in the **Parameters** field for this entity on the Entity Maintenance Screen in Entity Maintenance (MENU MGSYST).

Use these fields to specify parameters for a rule that are different from the system defaults.

Workflow Rule Assignments Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Entity Selection Screen	Used to select the entity to which you want to assign a rule.
Entity Search Window	Use to search for an entity code.
Entity Selection Additional Fields Screen	Used to enter additional information for the selected entity.
Rule Assignment Selection List Screen	Used to select the rule that you want to maintain.
Rule Assignments Selection Screen	Used to select a rule and change its value for the entity.
Rule Assignments Screen	Used to enter a value for the rule for the entity and set of parameters.

Entity Selection Screen

```
                        ENTITY SELECTION

        Entity?  _.........
 ------------------------------------------------------------------------




                                              F3=Exit    F4=List
```

The Entity Selection Screen appears after you select option 4 - Workflow Rule Assignments Maintenance from the Workflow File Maintenance Menu (MENU MGFILE). Use this screen to select an entity to assign a rule to.

Entity Selection Screen Fields and Function Keys

Field/Function Key	Description
Entity	Key the ID of the entity that you want to assign a rule to and press ENTER.
	Valid Values: An entity defined through Entity Maintenance (MENU MGSYST).
	(A 10) Required
F3=Exit	The F3=EXIT function key only displays on the Entity Selection Screen.
	Press this key to exit from this option and return to MENU MGFILE.
F4=List	Key an entity in the **Entity** field and press the F4=LIST function key to display a list of rules previously assigned to the entity through this option. The Rule Assignment Selection List Screen (p. 9-9) will appear.
Enter	Press the ENTER key after keying an entity ID in the **Entity** field. The Entity Selection Additional Fields Screen (p. 9-6) will appear.

Entity Search Window

```
┌──────────────────────────────────────────┐
│  Entity      Description                   │
│ 1 *CUSTOMER  Customer Number               │
│ 2 *ORDER     Order Number                  │
│ 3 *PO        Purchase Order                │
│ 4 *SHIP-TO   Customer Ship-To              │
│ 5 *VENDOR    Vendor Number                 │
│                                            │
│                                            │
│                                            │
│                                            │
│                                   Last     │
│  ─────────────────────────                 │
│ Sel: _      Entity: ..........   F12=Return│
└──────────────────────────────────────────┘
```
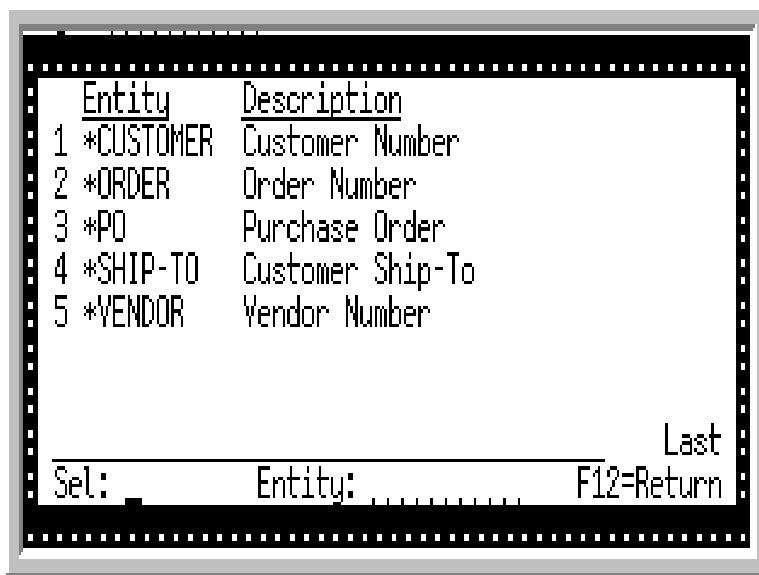
This window appears after you key a question mark in the **Entity** field and press ENTER on the Entity Selection Screen (p. 9-3). Use this window to review the existing **Entity** codes and to select an entity to assign a rule to.

Entity Search Window Fields and Function Keys

Field/Function Key	Description
(Reference Number)	The reference number of the **Entity** code displayed on this screen. This number is 1 through 7 for the **Entity** codes that may display. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference an entity code for change. Display
Entity	The code assigned when the **Entity** code was created. Refer to CHAPTER 15: *Maintaining Entities* for information regarding creating nd maintaining entities.
Description	The description for the specific entity code.
Sel	Use this field to select an **Entity** code to be maintained. Key the reference number that corresponds to the entity code to be selected and press ENTER. (N 1,0) Optional

Entity Search Window Fields and Function Keys

Field/Function Key	Description
Entity	Key the ID of the entity that you want to assign a rule to and press ENTER. *Valid Values:* An entity defined through Entity Maintenance (MENU MGSYST). (A 10) Required
F12=Return	Press the F12=RETURN function key to cancel the selection. The Entity Selection Screen (p. 9-3) displays.
Enter	Press the ENTER key after keying an entity ID in the **Entity** field. The Entity Selection Additional Fields Screen (p. 9-6) will appear.

Entity Selection Additional Fields Screen

The Entity Selection Additional Fields Screen appears after you key an **Entity** code and press ENTER on the Entity Selection Screen (p. 9-3). Use this screen to enter additional information for the entity you selected.

Entity Selection Additional Fields Screen Fields and Function Keys

Field/Function Key	Description
Entity	The entity code and description to which additional information will be added.
	Display

Entity Selection Additional Fields Screen Fields and Function Keys

Field/Function Key	Description
(Additional Entity Information)	After you key an entity ID in the **Entity** field and press ENTER, one or more additional fields will appear. Which fields appear depends on the entity that you selected. These additional fields are used to uniquely identify the selected entity.
	Use these fields to specify parameters for a rule that are different from the system defaults.
	If you key *CUSTOMER in the **Entity** field and press ENTER, the following fields will appear:
	• **Company**
	• **Customer**
	If you key *ORDER in the **Entity** field and press ENTER, the following fields will appear:
	• **Company**
	• **Order No**
	• **Order Gen**
	If you key *PO in the **Entity** field and press ENTER, the following fields will appear:
	• **Company**
	• **PO Number**
	If you key *SHIP-TO in the **Entity** field and press ENTER, the following fields will appear:
	• **Company**
	• **Customer**
	• **Ship-to**
	If you key *VENDOR in the **Entity** field and press ENTER, the following fields will appear:
	• **Vendor**
	Required
Company	Key the number of the company you want this rule to apply to.
	Valid Values: Any company number defined through Company Name Maintenance (MENU XAFILE).
	(N 2,0) Required

Entity Selection Additional Fields Screen Fields and Function Keys

Field/Function Key	Description
Customer	Key the number of the customer you want this rule to apply to. (N 10,0) Required
Order No	Key the number of the order you want this rule to apply to. (A 5) Required
Order Gen	Key the generation number of the order you want this rule to apply to. (N 2,0) Optional
PO Number	Key the number of the purchase order you want this rule to apply to. (A 6) Required
Ship-to	Key the number of the ship-to you want this rule to apply to. (A 7) Required
Vendor	Key the number of the vendor you want this rule to apply to. (A 6) Required
F12=Return	Press the F12=RETURN function key to return to the Entity Selection Screen (p. 9-3) without saving your entries.
Enter	Press the ENTER key to save your entries and continue. The Rule Assignments Selection Screen (p. 9-11) will appear

Rule Assignment Selection List Screen

```
                        RULE ASSIGNMENT SELECTION
   Entity: *CUSTOMER   Customer Number


Sel Rule ID  Alert ID  Parameters
  1 *NTFYBO    GN102  01,0000000100









                                                                    Last
     _____
     Select: _ .
                                         F2=Value        F12=Return
```

This screen appears after you press the F4=LIST function key on the Entity Selection Screen (p. 9-3). Use this screen to select a rule assignment to maintain.

Rule Assignment Selection List Screen Fields and Function Keys

Field/Function Key	Description
Entity	The entity code and description to which additional information will be added. Display
Sel	The reference number of the **Entity** code displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a rule assignment for change. Display
Rule ID	This column displays the list of rule IDs defined through Rule Maintenance (MENU MGSYST) that are available to this entity. Based on your selection with the F2=VALUE / F2=PARAMETERS function key, the rule ID or rule description will display. Display
Alert ID	This column displays the alerts that this rule is defined for. Display

Rule Assignment Selection List Screen Fields and Function Keys

Field/Function Key	Description
Value	This column displays the override value for the rule for this entity and alert. This column toggles with the F2=VALUE / F2=PARAMETERS function key to display the **Parameters** field. Display
Parameters	This column displays the values keyed for the additional entity information parameters that are unique for each different entity code for the rule for this entity and alert. This column toggles with the F2=VALUE / F2=PARAMETERS function key to display the **Values** field. Display
Select	Key the reference number displayed in the **Sel** field of the rule assignment you want to maintain and press ENTER. (N 2,0) Required
F2=Value / F2=Parameters	Press the F2=VALUE / F2=PARAMETERS function key to toggle between displaying the rule value or the additional entity information parameter values.
F12=Return	Press the F12=RETURN key to return to the Entity Selection Screen (p. 9-3).
Enter	Key a selection number in the **Select** field and press the ENTER key to save your entries and continue. The Rule Assignments Screen (p. 9-13) will appear.

Rule Assignments Selection Screen

```
                         RULE ASSIGNMENTS
 Entity: *CUSTOMER   Customer Number
 Company: 01    Customer: 0000000100

 Sel  Rule ID    Alert Value
  1   *NTFINVOVR GN115 Y
  2   *NTFYBO    GN102 Y
  3   *SNDNOTSHP GN114 Y
  4   *SNDORDCNF GN112 Y

  5   *SNDSHPCNF GN113 Y




                                                              Last
     _____
     Select: _ .
                         F2=Assigned for Entity       F12=Return
```

This screen appears after you press ENTER on the Entity Selection Additional Fields Screen (p. 9-6).

Use this screen to select a rule and change its value for this entity. All of the rules available to the entity are displayed on this screen. The **Value** field contains the value that will be used if this entity in the hierarchy is used to assign the rule value to the data code

.

Rule Assignments Selection Screen Fields and Function Keys

Field/Function Key	Description
Entity	The entity code and description to which additional information will be added.
	Display
(Additional Entity Information)	The Additional Entity Information field values to which rules will be assigned.
	Display
Sel	This field displays the reference number for the rule.
	Key this number in the **Select** field and press ENTER to select a rule.
	Display
Rule ID	This column displays the list of rule IDs defined through Rule Maintenance (MENU MGSYST) that are available to this entity.
	Based on your selection with the F2=FULL RULE / F2=RULE ID / F2=ASSIGNED FOR ENTITY function key, the rule ID or rule description will display.
	Display

Rule Assignments Selection Screen Fields and Function Keys

Field/Function Key	Description
Alert	This column displays the alerts that this rule is defined for. Display
Value	This column displays the value for the rule for this entity and alert. Display
Assigned for Entity	This column indicates that the default rule values will be used for this entity or that there is an override at the entity code level. Display
Select	Key the reference number displayed in the **Sel** field for the rule assignment you want to maintain and press ENTER. (A 1) Required
F2=Rule/ F2=Rule ID/ F2=Assigned for Entity	Press the F2=FULL RULE / F2=RULE ID / F2=ASSIGNED FOR ENTITY key to toggle between a display of the rule description or the rule ID. Press F2=FULL RULE to display the complete rule subject. Press F2=RULE ID to display the **Rule ID**, **Alert**, and **Value** columns. Press F2=ASSIGNED FOR ENTITY to toggle the **Value** column with the **Assigned for Entity** column.
F12=Return	Press the F12=RETURN key to return to the Entity Selection Screen (p. 9-3) without saving your entries.
Enter	Key a reference number in the **Select** field and press the ENTER key to save your entries and continue. The Rule Assignments Screen (p. 9-13) will appear.

Rule Assignments Screen

```
                        RULE ASSIGNMENTS
Entity: *CUSTOMER    Customer Number
Company: 01     Customer: 0000000100

Rule ID: *SNDNOTSHP       Alert ID: GN114

Rule Description:
This rule detemines if the selected entity value will be included in the alert f
or orders not shipped by the requested ship date. Example: an 'N' will prevent t
he specified entity value from receiving messages for the alert.


Rule Subject:
Send Order Not Shipped Confirmation Y/N

Value:
Y................................................................................
.................................................



                                                              F12=Return
```

This screen appears after you press ENTER on the Rule Assignments Selection Screen (p. 9-11) or the Rule Assignment Selection List Screen (p. 9-9). Use this screen to enter a value for the rule for this entity and set of parameters.

Rule Assignments Screen Fields and Function Keys

Field/Function Key	Description
Entity	The entity code and description to which additional information will be added. Display
(Additional Entity Information)	The Additional Entity Information field values to which rules will be assigned. Display
Rule ID	The selected rule IDs for this entity. Display
Alert ID	The selected alerts ID for this entity. Display
Rule Description	This field describes what the rule is and how it is expected to work. Display
Rule Subject	The rule subject is the short version of the rule description. Display

Rule Assignments Screen Fields and Function Keys

Field/Function Key	Description
Value	Use this field to enter a value for the rule.
	Key the default value for this rule with this entity.
	(A 128) Required
F12=Return	Press the F12=RETURN function key to return to the Rule Assignments Selection Screen (p. 9-11) without saving your entries.
Enter	Press the ENTER key to save your entries and continue. The Rule Assignments Selection Screen (p. 9-11) will appear.

Maintaining Alert Classes

You can use the Alert Classes Maintenance option to maintain alert classes. An alert class is a two-character code that you can create and assign to alerts to group alerts with common properties.

Alert classes are assigned to an alert through Alert Tailoring (MENU MGFILE).

Alert Classes Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Alert Class Maintenance Selection Screen	Used to specify the alert class you want to maintain.
Alert Class Maintenance Screen	Used to provide a description for the alert class.

Alert Class Maintenance Selection Screen

```
       ALERT CLASS MAINTENANCE SELECTION


            Function:    _   (A,C)

            Alert Class: ...













                                                    F3=Exit
```

This screen appears after you select option 5 - Alert Classes Maintenance from the Workflow File Maintenance Menu (MENU MGFILE).

Use this screen to specify the alert class you want to maintain.

Alert Class Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Function	Key A to add an alert class.
	Key C to change an alert class.
	(A 1) Required
Alert Class	Key the alert class you want to add or maintain. If you keyed a C in the **Function** field, your entry in this field must be an alert class that was defined previously through this option.
	(A 2) Required
F3=Exit	Press the F3=Exit function key to exit from this option and return to MENU MGFILE.
Enter	Press the ENTER key to save your entries and continue. The Alert Class Maintenance Screen (p. 10-3) will appear.

Alert Class Maintenance Screen

```
            ALERT CLASS MAINTENANCE                    Change




          Alert Class: IN

          Description: Inventory Control.............










                                              F12=Return
```
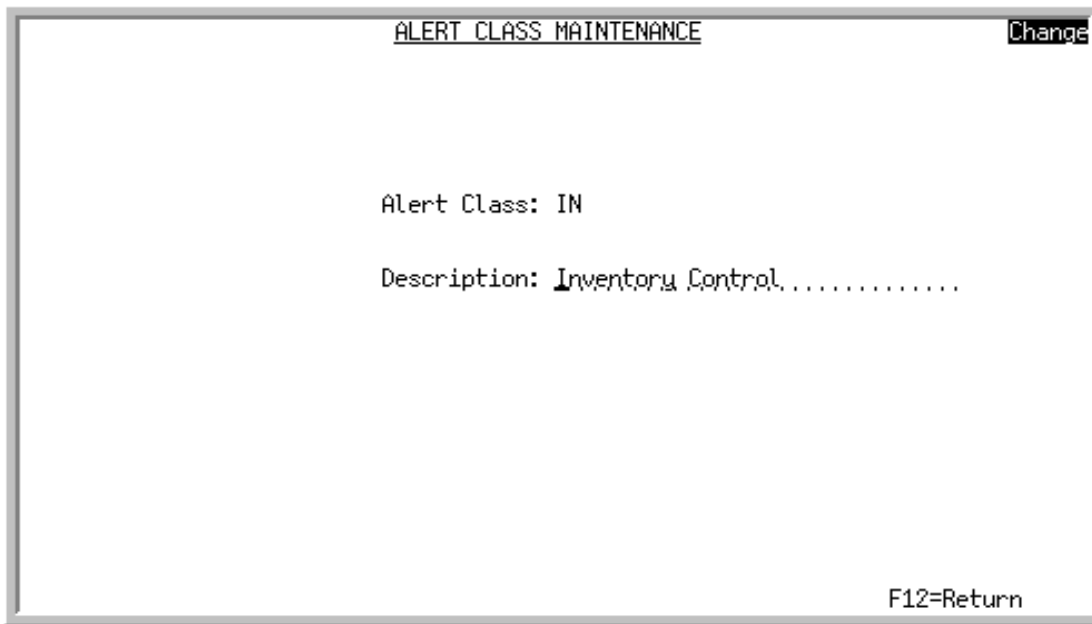
This screen appears after you press ENTER on the Alert Class Maintenance Screen (p. 10-3).

Use this screen to add or change a description for the alert class.

Alert Class Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Alert Class	The alert class you want to add or maintain selected on the Alert Class Maintenance Selection Screen (p. 10-2). Display
Description	Key a description for the alert class. (A 30) Required
F12=Return	Press the F12=RETURN function key to return to the Alert Class Maintenance Selection Screen (p. 10-2) without saving your entries.
Enter	Press the ENTER key to save your entries and continue. The Alert Class Maintenance Selection Screen (p. 10-2) will appear.

Alert Classes Listing

You can print a listing of your alert classes using the Alert Classes Listing option on the Workflow File Maintenance Menu (MENU MGFILE). This option does not have screens. When you select the option, the Report Options Screen will appear and then your listing will print. Refer to the Cross Applications User Guide for a description of the Report Options Screen.

Alert Class Listing

```
MG811 06/20/11  10.56.26              ALERT CLASS LISTING                 AM/APDEMO    PAGE    1
                             Alert Class        Description
..................................................................................................
                                 AR            Accounts Receivable
                                 IN            Inventory Control
                                 OE            Order Processing
                                 PO            Purchasing
```

All of the information on this listing is maintained through Alert Class Maintenance (MENU MGFILE). Refer to "Alert Classes Maintenance" on page 10-1 for details about the data on this listing.

Data codes are named variables that refer to data elements extracted from the application when the alert is generated. Data codes are used as placeholders for message data, message filters, and criteria for selecting the message recipient. These data elements are stored in a data string and accessed based on the definition of that string in the data code files. Data codes are created through Data Code Maintenance (MENU MGSYST) and saved in the Alert Data Codes Master File (MGNAM).

Important

This option should normally be used only by Infor, an authorized business partner, a programmer, or a specially trained user.

Because this option controls how an alert will function, a complete understanding of the purpose and use of data codes is required before beginning any maintenance. Before making any changes in this option, refer to the "Data Codes" on page 1-11 for an in-depth explanation of data codes.

Data codes are assigned to alerts through Alert Maintenance (MENU MGSYST) and that association is saved in the Alert Data Code File (MGARL) as one record for each data code that a given alert may use.

When defining an alert, one of the first tasks is to identify the application data elements that could be used to assist in the reporting and processing of the alert. For example, in the case of the Order on Hold alert, the hold code is a key element in identifying the alert, as are the order number, the company number, and the customer number. These data elements point to the source of the alert and to the business entity that will be affected by its occurrence. There are additional data elements that could be used in the body of the message to help define (explain) the situation that generated the alert, or in selecting the message or messages to be sent.

Once the data elements for an alert have been identified, any new data codes must be added to the Alert Data Codes Master File. The following information must be added for each new data code:

- data code name (up to 10 characters) that must begin with an asterisk (*)
- the data code description
- the data type of the data element (e.g., character, date)

Additionally, each data code used by a given alert is added to the Alert Data Code File. For each data code associated with a particular alert, this file contains a record that includes:

- the alert ID
- the data code name
- a unique contiguous sequence number from one to the total number of data elements defined for the alert

The sequence number specifies the position within the data string in which the data element represented by the data code is stored. The data string is a 256-character field containing a delimited list of data elements. The data elements that make up this string are defined by the data codes for the alert. This data string gets loaded with data from the application when the alert is generated. It is stored in the Message Pending File (MGPND) and is then passed to the Message Request File (MGMRQ).

Alert ID	Data Code	Seq. #
ALT01	*COMP-NBR	01
ALT01	*ORD-NUM	02
ALT01	*ORD-GEN	03
ALT01	*ORD-VAL	04

Variable Name	Description	Value
OHCONO	Company number	01
OHORNO	Order number	25859
OHORGN	Order Generation	00
OHORVL	Order value	1,563.79

These values are then loaded into the data string, with the following result:

01^25895^00^1563.79

Using Data Codes in Messages

Data codes can be used in message maintenance to substitute data from the application into the message when the message is sent. The message maintenance process provides an easy method for inserting these data codes as placeholders in the message. Later, when the message is formed, these placeholders are replaced with the data in the data string. This is possible because the placeholder is the data code that points to the data in the data string.

The following message template has been defined through Message Maintenance (MENU MGFILE):

The order [*COMP-NBR]-[*ORD-NUM]/[*ORD-GEN] with a total value of [*ORD-VAL] has just been received.

Merging the contents of the data string created above with this message template creates the following message:

The order 01-25895/00 with a total value of 1563.75 has just been received.

Using Data Codes in Filters

Filters allow you to use data from the application to determine if all the conditions required to send an alert message have been met. If the conditions have been met, filters can also be used to determine which message to send, and to which recipient.

Data codes are used in filters to represent the data elements from the application that must meet a certain condition before a message is sent. The conditions set in filters are always joined by an AND condition; that is, all of the conditions must be true before a message will be sent.

Data Code	Operation	Condition Value
*COMP-NBR	*EQ	01
*ORD-VAL	*GE	1000.00

All of the conditions are joined by an AND. Therefore, to meet the conditions set by these filters, an order must be for company 01 and must have a total order value greater than or equal to $1000.

When these filters are applied to the data string above, the message associated with this filter will be sent.

Other Uses of Data Codes

• Data codes are used for a variety of other features and functions throughout Workflow Management such as:

• recipient selection

• function execution

• report processing

• workflow rules (an advanced feature)

Data codes created through this option are

• assigned to alerts through Alert Maintenance (MENU MGSYST)

• added to messages through Message Maintenance (MENU MGFILE)

• used to define filters for a message through Alert Tailoring (MENU MGFILE)

Data Code Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Data Code Maintenance Selection Screen	Used to specify the data code you want to maintain.
Data Code List Screen	Use to select a data code to maintain. Refer to "Data Code List Screen" on page 17-12 for a description of this screen.
Data Code Maintenance Screen	Used to provide a description and data type for the data code.

Data Code Maintenance Selection Screen

```
          DATA CODE MAINTENANCE SELECTION



        Function:  _           (A,C,D)

        Data Code? . . . . . . . . . .









                                            F3=Exit
```

This window appears after you select option 1 - Data Code Maintenance from the Workflow System Maintenance Menu (MENU MGSYST).

Use this window to specify the data code that you want to maintain.

Data Code Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Function	Key A to add a data code.
	Key C to modify a data code.
	Key D to delete a data code.

> **Important**
>
> If you delete a data code, alerts may not function properly and the Workflow Alert Processor may no longer generate messages correctly.

(A 1) Required

Data Code Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Data Code	Key the name of the data code you want to add or maintain. *Valid Values:* If you keyed C or D in the **Function** field, a data code defined previously through this option or received from Infor. (A 10) Required
F3=Exit	Press the F3=EXIT function key to exit from this option and return to MENU MGSYST.
Enter	Press the ENTER key to save your entries and continue. The Data Code Maintenance Screen (p. 11-7) will appear.

Data Code Maintenance Screen

```
                    DATA CODE MAINTENANCE                        Change


            Data Code:    *AGE-DATE


            Description: Invoice Aging Date............


            Data Type:    D.   C=Character
                               I=Numeric-No Decimal
                               N=Numeric-With Decimal(s)
                               D=Date






                                                       F12=Return
```

This screen appears after you press ENTER on the Data Code Maintenance Selection Screen (p. 11-5). Use this screen to provide a description and data type for the data code.

Data Code Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Data Code	The name of the data code you want to add or maintain and selected on the Data Code Maintenance Selection Screen (p. 11-5). Display
Description	Key the description for the data code. (A 30) Required

Data Code Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Data Type	Use this field to specify what type of data this data code represents. When the Workflow Alert Processor replaces the data code with data from the application, it uses the data type to determine how to format the data. The data type may be: • C for a character data type. Character data consists of numbers, letters, and special characters. • I for a numeric (no decimal) data type. Numeric (no decimal) data consists of whole numbers with no decimal places. • N for a numeric (with decimal) data type. Numeric (with decimal) data consists of decimal numbers. • D for a date data type. Date data contains dates. • Key C if this data type represents character data. • Key I if this data type represents numeric data with no decimal places. • Key N if this data type represents numeric data with decimal places. • Key D if this data type represents a date. *Default Value:* C (A 1) Required
F12=Return	Press the F12=RETURN function key to return to the Data Code Maintenance Selection Screen (p. 11-5) without saving your entries.
F24=Delete	The F24=DELETE function key appears only if you selected to delete the data code. Press the F24=DELETE function key to delete the data code. You will be prompted to press this key again to confirm the deletion. Press F24=DELETE again and the Data Code Maintenance Selection Screen (p. 11-5) will appear.
Enter	Press the ENTER key to save your entries and continue. The Data Code Maintenance Selection Screen (p. 11-5) will appear.

Function numbers identify a menu option in Distribution A+. Function numbers are used in messages as placeholders for a hyperlink to a Distribution A+ function that will be included in the alert message when it is sent. You can create and maintain function numbers using the Function Number Maintenance option on the Workflow System Maintenance Menu (MENU MGSYST); they are and saved in the Workflow Function File (MGFNC) file and are associated with an alert in the Alert Function File (MGAFN) file through Alert Maintenance (MENU MGSYST).

Important

This option should normally be used only by Infor, an authorized business partner, a programmer, or a specially trained user.

Because this option controls how an alert will function, a complete understanding of the purpose and use of function numbers is required before beginning any maintenance. Before making any changes in this option, refer to the Workflow Management Technical Overview for an in-depth explanation of function numbers.

Function numbers identify a menu option in Distribution A+. Function numbers are used in messages as placeholders for a hyperlink to an Distribution A+ function that will be included in the alert message when it is sent. Function numbers provide the ability to add hot links from an alert message directly to an application function. These links work only in alert messages sent via Application Mail.

> NOTE: The hyperlinks generated by function numbers are environment-specific. To access an application function via the hyperlink in a message, the recipient must be logged in to the same environment that generated the message.

For a function number to provide access to the application, specific values in the form of data codes need to be defined for the alert. These values contain the information needed to access the correct option and record when the application function is selected. For example, if an alert message is sent to inform the credit manager that an order has been placed on hold, in addition to providing access to the Order Inquiry program, the hyperlink must include the company number, order number and order generation number to access the correct order when the link is fired.

List of Function Numbers

The following table lists the function numbers defined in Workflow Management. These function codes are available for use as soon as the module has been installed.

Function Number	Description	Data Code Parameters
0211	Item Inquiry	*COMP-NBR, *WHS-NUM, *ITM-NUM
0251	Customer Inquiry	*COMP-NBR, *CUST-NUM
0314	Release Blanket Orders	*COMP-NBR, *ORD-NUM
0372	Release Held Orders	*COMP-NBR, *ORD-NUM, *ORD-GEN
0386	Order Inquiry	*COMP-NBR, *ORD-NUM, *ORD-GEN
0416	Enter/Change Requisitions	*COMP-NBR, *PO-NUM
0418	Maintain Special Orders	*WHS-NUM, *VEND-NUM, *COMP-NUM, *BUYER-ID
0422	Req/PO Inquiry	*COMP-NBR, *VEND-NUM
0426	Vendor Performance Inquiry	*VEND-NUM, *ITM-NUM
0467	Vendor/Item Maintenance	*VEND-NUM, *ITM-NUM, *WHS-NUM
0704	Customer Collections Inquiry	*COMP-NBR, *AR-REP, *RVW-DATE
0726	Maintain WO Special Orders	*COMP-NBR, *WHS-NUM, *ITM-NUM, *CUST-NUM
0838	Special Order Auto Requisition Creation	*COMP-NBR, *WHS-NUM, *VEND-NUM, *SO-TYP
0892	Invoice Number Inquiry	*INVC-NUM

Function numbers defined through this option are

- assigned to an alert through Alert Maintenance (MENU MGSYST)
- added to a message through Message Maintenance (MENU MGFILE)

Function Number Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Function Number Maintenance Selection Screen	Used to specify the function number you want to maintain.
Function Number List Screen	Use to select a function code to maintain. Refer to "Function Number List Screen" on page 17-19 for a description of this screen.
Function Number Maintenance Selection Screen	Used to provide a description and parameter data string for the function number.

Function Number Maintenance Selection Screen

```
FUNCTION NUMBER MAINTENANCE SELECTION



             Function:        _      (A,C,D)


             Function Number?  .....












                                             F3=Exit
```

This screen appears after you select option 2 - Function Number Maintenance from the Workflow System Maintenance Menu (MENU MGSYST).

Use this screen to specify the function number you want to maintain.

Function Number Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Function	Key A to add a function number.
	Key C to modify a function number.
	Key D to delete a function number.
	Important
	If you delete a function number, the hyperlink that appears in the alert message will not function properly.
	(A 1) Required
Function Number	Key the function number you want to maintain.
	Valid Values: If you keyed C or D in the **Function** field, a function number defined previously through this option or received from Infor.
	(A 4) Required

Function Number Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
F3=Exit	Press the F3=EXIT function key to exit from this option and return to MENU MGSYST.
Enter	Press the ENTER key to save your entries and continue. The Function Number Maintenance Screen (p. 12-6) will appear.

Function Number Maintenance Screen

```
                    FUNCTION NUMBER MAINTENANCE                    Change


       Function Number: 0416

       Description:     Enter or Change Requisitions............

       Parameters:      *COMP-NBR,*REQ-NUM..............................









                                                              F12=Return
```

This screen appears after you press ENTER on the Function Number Maintenance Selection Screen (p. 12-4).

Use this screen to provide a description and parameter data string for the function number you are adding or maintaining.

Function Number Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Function Number	The function number selected to be maintained on the Function Number Maintenance Selection Screen (p. 12-4). Display
Description	Key a description for the function number. (A 40) Required
Parameters	Use this field to specify the parameter data string. The parameter data string is a delimited string of the data codes needed to access the menu option. Key the parameter data string. *Valid Values:* A data code defined through Data Code Maintenance (MENU MGSYST) or received from Infor. (A 50) Optional
F12=Return	Press the F12=RETURN function key to return to the Function Number Maintenance Selection Screen (p. 12-4) without saving your entries.

Function Number Maintenance Screen Fields and Function Keys

Field/Function Key	Description
F24=Delete	The F24=DELETE function key appears only if you selected to delete the function number.
	Press the F24=DELETE function key to delete the function number. You will be prompted to press the F24=DELETE key again to confirm the deletion. Press F24=DELETE again and the Function Number Maintenance Selection Screen (p. 12-4) will appear.
Enter	Press the ENTER key to save your entries and continue. The Function Number Maintenance Selection Screen (p. 12-4) will appear.

Maintaining Recipient Codes

Recipient codes identify the person or persons that will receive a message. You can create and maintain recipient codes using the Recipient Code Maintenance option on the Workflow System Maintenance Menu (MENU MGSYST). Recipient codes are:

* assigned to an alert through Alert Maintenance (MENU MGSYST)
* assigned to an alert message through Alert Tailoring (MENU MGFILE).

Important

This option should normally be used only by Infor, an authorized business partner, a programmer, or a specially trained user.

Because this option controls how an alert will function, a complete understanding of the purpose and use of recipient codes is required before beginning any maintenance. Before making any changes in this option, refer to the Workflow Management Technical Overview for an in-depth explanation of recipient codes.

Recipient codes are used by Workflow Management to determine to whom the final message should be sent. Codes have been created to represent the various common positions and responsibilities throughout a wholesale distribution company.

Recipient codes are created through Recipient Code Maintenance (MENU MGSYST) and saved in the Recipient Codes File (MGRCP). Recipient codes are associated with an alert in the Alert Recipient Code File (MGRCD).

Recipient codes are applied to the recipient selection along with data from the application. The combined information is used to determine the user ID or e-mail address of the message recipient. This method is sufficiently flexible to let the specific detail information from the application determine the message recipient, rather than specifying a single recipient as part of the alert definition. One alert can have multiple possible message recipients, and can select the correct recipient for a given situation based on conditions within the application data.

The following examples illustrate how recipient codes are used.

Example: Recipient Codes 1

The recipient code of *REP-NUM1 refers to the primary sale representative for the customer or order. When an alert message is generated for an alert detail that has this recipient code, the following conditions must be true for the recipient code to work correctly:

- The alert is being triggered due to a customer order or customer condition.

- The alert has the data code *REP-NUM1 defined as one of its data codes.

- Each of the sales representatives defined to the application must have a user ID assigned to them. User IDs are assigned through the normal sales rep maintenance.

Given these conditions, the following logic is used to determine the actual message recipient:

1. The company number and sales rep number are extracted from the data string.

2. The company number and sales rep number are used to access the Sales Rep Master File and retrieve the user ID for this sales rep.

3. The sales rep's user ID is then used to access the record for that sales rep in the Workflow User File (MGUSR).

4. If there is a temporary alert recipient assigned to receive alerts for the sales rep, the Workflow User File record for the temporary alert recipient's user ID is retrieved and the delivery type is determined by the contents of that record. Otherwise, the delivery type is determined by the sales rep's Workflow User File record.

5. If the alert delivery type is Internal, an alert message is generated in Application Mail. If the alert delivery type is External, then an alert message is forwarded to the Mail Server application and sent via e-mail.

Example: Recipient Codes 2

A slightly more complicated situation is one in which the message is to be sent to the recipient code of *SALES-MGR (Sales Manager). In this case, the conditions listed in Example 1 must still be true, but an additional step is included in the process. After the Workflow User File (MGUSR) record for the primary sales rep is retrieved (step 3), the manager's user ID from this file is used to access the manager's Workflow User File record. Once that record is retrieved, the process continues with step 4; however, the checks for a temporary alert recipient and the delivery type are done on the manager's Workflow User File record, not the record for the sales rep.

List of Recipient Codes

The following table lists the recipient codes currently defined in Workflow Management. These recipient codes are available for use as soon as the module has been installed.

The first column in the table contains the recipient code. The second column contains the names of the data codes that are used by the recipient selection logic program to determine the user ID or e-mail address. These data codes are stored in a comma-delimited string and are used to access the data from the data string. Data from the data string is used to access the necessary file where either the user ID or e-mail address is stored. The third column lists the name of the file or order control record that contains the user ID or e-mail address. The fourth column lists the name of the subordinate recipient code that is used for accessing a manager-level recipient code. This subordinate user ID is accessed first and the

manager user ID in their record is then used to find and access the manager's Workflow User File record, as described in Recipient Codes Example 2.

Recipient Code	Data Code String	Infor A+ File Name and Record Type	Subordinate Recipient
*AR-REP	*COMP-NBR, *AR-REP	ORCTL – AR Call Reps	
*BUYER	*BUYER-ID	ORCTL – Buyers	
*CRD-MGR	*COMP-NBR, *AR-REP	ORCTL – AR Call Reps	*AR-REP
*CUSTOMER	*COMP-NBR, *CUST-NUM		
*EMAIL			
*ION			
*MANAGER	*ORG-USR		*ORIG-USR
*ORIG-USR	*ORG-USR		
*PUR-MGR	*BUYER-ID	ORCTL – Buyers	*BUYER
*QRY-RCPT	*QRY-RCPT		
*REP-NUM1	*COMP-NBR, *REP-NUM1	ORCTL – Sales Reps	
*REP-NUM2	*COMP-NBR, *REP-NUM2	ORCTL – Sales Reps	
*REP-NUM3	*COMP-NBR, *REP-NUM3	ORCTL – Sales Reps	
*SALES-MGR	*COMP-NBR, *REP-NUM1	ORCTL – Sales Reps	*REP-NUM1
*SHIP-TO	*COMP-NBR, *CUST-NUM, *SHIP-TO#		
*USER			
*VENDOR	*COMP-NBR,*VEND-NUM		
*WH-MGR	*WHS-NUM	ORCTL – WH Names	

Custom recipient codes created through this option are

- assigned to an alert through Alert Maintenance (MENU MGSYST)
- assigned to an alert message through Alert Tailoring (MENU MGFILE)

System defined recipient codes are linked to Distribution A+ users and a few specific fields as follows:

- *AR-REP is the **User ID** assigned to an A/R Call Rep through A/R Call Reps Maintenance (MENU ARFIL2)

- *BUYER is the **User ID** assigned to a Buyer through Buyers Maintenance (MENU POFILE)

- *CRD-MGR is the **Manager User ID** assigned to an Distribution A+ User ID through Register A+ User IDs (MENU XACFIG) when the Distribution A+ User ID is also identified as an A/R Call Rep through A/R Call Reps Maintenance (MENU ARFIL2)

- *MANAGER is the **User ID** assigned to the original user through Register A+ User IDs (MENU XACFIG)

- *PUR-MGR is the **Manager User ID** assigned to an Distribution A+ User ID through Register A+ User IDs (MENU XACFIG) when the Distribution A+ User ID is also identified as a Buyer through Buyers Maintenance (MENU POFILE)

- *REP-NUM1 is the **Alert User ID** assigned to a Salesrep number through Salesreps Maintenance (MENU SAFILE) and assigned to a customer or an order in the Sales Rep 1 field

- *REP-NUM2 is the **Alert User ID** assigned to a Salesrep number through Salesreps Maintenance (MENU SAFILE) and assigned to a customer or an order in the Sales Rep 2 field

- *REP-NUM3 is the **Alert User ID** assigned to a Salesrep number through Salesreps Maintenance (MENU SAFILE) and assigned to a customer or an order in the Sales Rep 3 field

- *SALES-MGR is the **Manager User ID** assigned to an Distribution A+ User ID through Register A+ User IDs (MENU XACFIG) when the Distribution A+ User ID is also identified as Salesrep number through Salesreps Maintenance (MENU SAFILE

- *WH-MGR is the Warehouse Manage User ID field assigned to a warehouse through Warehouse Numbers Maintenance (MENU IAFILE)

Recipient Code Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Recipient Code Maintenance Selection Screen	Used to specify the recipient code you want to maintain.
Recipient Code List Screen	Use to select a recipient code to maintain. Refer to "Recipient Code List Screen" on page 17-24 for a description of this screen.
Recipient Code Maintenance Screen	Used to provide a description, key string, and type for the recipient code.

Recipient Code Maintenance Selection Screen

```
        RECIPIENT CODE MAINTENANCE SELECTION



        Function:       _           (A,C,D)

        Recipient Code? ...........










                                              F3=Exit
```

This screen appears after you select option 3 - Recipient Code Maintenance from the Workflow System Maintenance Menu (MENU MGSYST).

Use this screen to specify the recipient code you want to maintain.

Recipient Code Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Function	Key A to add a recipient code.
	Key C to modify a recipient code.
	Key D to delete a recipient code.
	Important
	If you delete a recipient code, alerts may not function properly and the Workflow Alert Processor may no longer generate messages correctly.
	(A 1) Required

Recipient Code Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Recipient Code	Key the recipient code you want to add or maintain. *Valid Values:* If you keyed C or D in the **Function** field, a recipient code defined previously through this option or received from Infor. (A 10) Required
F3=Exit	Press the F3=EXIT function key to exit from this option and return to MENU MGSYST.
Enter	Press the ENTER function key to save your entries and continue. The Recipient Code Maintenance Screen (p. 13-7) will appear.

Recipient Code Maintenance Screen

```
                    RECIPIENT CODE MAINTENANCE                  Change


    Recipient Code: *AR-REP


    Description:    A/R Call Rep.................


    Key String:    .*COMP-NBR,*AR-REP.............................


    Recipient Type: I.    (I=Internal, E=External)






                                                       F12=Return
```

This screen appears after you press ENTER on the Recipient Code Maintenance Selection Screen (p. 13-5).

Use this screen to provide the description, key string, and type for the specified recipient code.

Recipient Code Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Recipient Code	The recipient code selected to be maintained. Display
Description	Key a description for the recipient code. (A 30) Required
Key String	Use this field to specify the key string that will be used to identify this recipient. The key string is a delimited string of data codes. The Workflow Alert Processor uses the values for these data codes to identify the recipient. Key the key string for the recipient code. *Valid Values:* Data codes defined through Data Code Maintenance (MENU MGSYST) or received from Infor. (A 50) Required

Recipient Code Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Recipient Type	Use this field to specify whether this recipient is an internal or external recipient.
	Internal recipients are registered Distribution A+ users and receive alert messages via Application Mail.
	External recipients, such as vendors or customers, are not registered Distribution A+ users. Alert messages to external recipients are delivered via e-mail.
	NOTE: You must have the Mail Server module installed to deliver alert messages to external recipients.
	Key I if this recipient code is for an internal recipient.
	Key E if this recipient code is for an external recipient.
	Default Value: I
	(A 1) Required
F12=Return	Press the F12=RETURN function key to return to the Recipient Code Maintenance Selection Screen (p. 13-5) without saving your entries.
F24=Delete	The F24=DELETE function key appears only if you selected to delete the recipient code.
	Press the F24=DELETE function key to delete the recipient code. You will be prompted to press this key again to confirm the deletion. Press F24=DELETE again and the Recipient Code Maintenance Selection Screen (p. 13-5) will appear.
Enter	Press the ENTER key to save your entries and continue. The Recipient Code Maintenance Selection Screen (p. 13-5) will appear.

Maintaining Report Codes   14

Report codes identify Workflow Management reports, which are used when large amounts of application data need to be included in an alert message. Report codes are used in messages as placeholders for information that will be included in the alert message when it is sent. For example, a report code can represent an order detail listing that will be included as part of a message related to a customer order. You can create and maintain report codes using the Report Code Maintenance option on the Workflow System Maintenance Menu (MGSYST).

Important

This option should normally be used only by Infor, an authorized business partner, a programmer, or a specially trained user.

Because this option controls how an alert will function, a complete understanding of the purpose and use of report codes is required before beginning any maintenance. Before making any changes in this option, refer to the Workflow Management Technical Overview for an in-depth explanation of report codes.

When an alert requires a report, you must first write a report program to generate the report data. You can then define a report code through Report Code Maintenance (MENU MGSYST). Reports are saved in the Alert Report Detail File (MGRPT) and are associated with an alert in the Alert Report Code File (MGARP).

When creating a message for an alert, you can select one or more report codes. When the message is generated, the report code which is part of the message definition is replaced by the actual report contents (i.e., the data elements from the application).

Example:

You have defined a report code of SHPADR which represents the data in the customer's ship-to-address and inserted that report code in an order confirmation message. When you view the text of the message through Message Maintenance (MENU MGFILE), the message will appear as:

Thank you for placing your order. Your order [*ORD-NUM] will be shipped on [*ORD-DAT] to the following address

[*REPORT=SHPADR]

When the actual message is created for a customer, the value [*REPORT=SHPADR] will be replaced with the ship-to address of the order that is being referenced.

Report Master File

The Alert Report Master File defines the reports to be used by Workflow Management messages. This file contains the following information for each report:

Report ID - The report code. This is the identifier that names the report to the alert. When you insert a report into a message, the report ID takes the place of the report in the message template file.

Description - The description of the report.

Program Name - The name of the RPG or Progress report program that will run to generate the data for the report. The output from this program will be used to replace the report code when the final message is formed.

Parameters - The data code names of the values needed at message generation time to produce the report output. These are the actual parameters passed to the report program to produce the report.

The Report Master File would contain the following information for the SHPADR report code:

Report ID	Description	Program Name	Parameters
SHPADR	Order Ship-to Address	MGR001	*COMP-NBR,*ORD-NUM,*ORD-GEN

Alert Report File

When you are creating an alert message, you can only include report codes that have been assigned to that alert. Report codes are assigned to alerts through Alert Maintenance (MENU MGSYST). Additionally, all of the data codes passed as parameters to the report program must be defined for a given alert before the report can be used by that alert.

The Alert Report File defines which reports belong to which alerts. This is the file that is referenced in Message Maintenance (MENU MGFILE) to limit the reports that can be selected for an alert message. For each report assigned to an alert, the Alert Report File contains the alert ID, the report ID, and a sequence number for the report. The file would contain the following information for the SHPADR report code used with alert GN112:

Alert ID	Sequence	Report ID
GN112	001	SHPADR

When a message is being created for an alert, the message generation logic identifies a report reference. It then calls the Report Processing program and passes to it the alert ID, report ID and the alert data string. The Report Processing program then uses the information in the Alert Reports File with the parameters and report program name from the Report Master File to process all reports for the alert. The report parameters are used to pull the values needed to create the report from the alert data string.

Report codes created through this option are

- assigned to an alert through Alert Maintenance (MENU MGSYST)

- assigned to an alert message through Message Maintenance (MENU MGFILE).

Reports will not be generated for alerts that are set up to send consolidated messages in Alert Tailoring (MENU MGFILE).

Report Code Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Report Code Maintenance Selection Screen	Used to specify the report code you want to maintain.
Recipient Code List Screen	Use to select a report code to maintain. Refer to "Report Code List Screen" on page 17-34 for a description of this screen.
Report Code Maintenance Screen	Used to provide a description, report program name and parameters for the report code.

Report Code Maintenance Selection Screen

```
           REPORT CODE MAINTENANCE SELECTION


           Function:     _              (A,C,D)

           Report Code? . . . . . . . . . . .







                                                    F3=Exit
```

This screen appears after you select option 4 - Report Code Maintenance from the Workflow System Maintenance Menu (MENU MGSYST).

Use this window to specify the report code you want to maintain.

Report Code Maintenance Selection Screen Field and Function Keys

Field/Function Key	Description
Function	Key A to add a report code.
	Key C to modify a report code.
	Key D to delete a report code.
	Important
	If you delete a report code, the desired fields will not appear in the alert message.
	(A 1) Required
Report Code	Key the report code you want to add or maintain.
	If you keyed C or D in the **Function** field, a report code that already exists in the system.
	(A 10) Required

Maintaining Report Codes

Report Code Maintenance Selection Screen Field and Function Keys

Field/Function Key	Description
F3=Exit	Press the F3=EXIT function key to exit from this option and return to MENU MGSYST.
Enter	Press the ENTER key to save your entries and continue. The Report Code Maintenance Screen (p. 14-6) will appear.

Report Code Maintenance Screen

```
                        REPORT CODE MAINTENANCE                      Change


          Report Code:    ORDDET

          Description:    Order Detail Report...........

          Report Program: MGR002..

          Parameters:     *COMP-NBR,*ORD-NUM,*ORD-GEN......................




                                                                 F12=Return
```

This screen appears after you press ENTER on the Report Code Maintenance Selection Screen (p. 14-4).

Use this screen to provide the description, report program name, and parameters for the report code.

Report Code Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Report Code	The report code selected to be maintained. Display
Description	Key a description for the report code. (A30) Required
Report Program	Key the name of the program that will generate the report. (A 8) Required
Parameters	Use this field to define the parameters for this report code. The parameters are a delimited string of the data codes needed by the report program to generate the information that you want included in the alert message. Key the parameter data string. *Valid Values:* Data codes defined through Data Code Maintenance (MENU MGSYST) or received from Infor. (A 50) Required
F12=Return	Press the F12=RETURN function key to return to the Report Code Maintenance Screen (p. 14-6) without saving your entries.

Report Code Maintenance Screen Fields and Function Keys

Field/Function Key	Description
F24=Delete	The F24=DELETE function key appears only if you selected to delete the report code.
	Press the F24=DELETE function key to delete the report code. You will be prompted to press this key again to confirm the deletion. Press F24=DELETE again and the Report Code Maintenance Selection Screen (p. 14-4) will appear.
Enter	Press the ENTER key to save your entries and continue. The Report Code Maintenance Selection Screen (p. 14-4) will appear.

CHAPTER 15   Maintaining Entities

Entities are used to identify parties (such as a vendor or customer), documents (such as a Purchase Order or an Invoice, or control sets (such as a company default value or a system default value) that could be used to assign values for a Workflow Management rule.You can create and maintain entities using the Entity Maintenance option on the Workflow System Maintenance Menu (MENU MGSYST).

Important

This option should normally be used only by Infor, an authorized business partner, a programmer, or a specially trained user.

Because this option controls how an alert will function, a complete understanding of the purpose and use of entities is required before beginning any maintenance. Before making any changes in this option, refer to the Workflow Management Technical Overview for an in-depth explanation of entities.

Rules are defined for alerts but apply to these entities.

Example:

You want to create a rule that sends a message to selected customers whenever an order goes on backorder. Some of these customers already get an order confirmation whenever you enter an order for them; others do not.

The two entities that would be used in the rule are customers and orders. You want to send confirmations to specific customers. And customers who don't normally get a confirmation want one for specific orders.

Entities are:

* created through Entity Maintenance (MENU MGSYST)
* used to create rules through Rule Maintenance (MENU MGSYST)

The Entity Master File contains values to define the entity and to assist in processing rules. The file contains the following information for each entity:

- Entity ID - A unique name that identifies the entity. This value must begin with an asterisk (*) and can be up to 10 characters in length.
- Entity Description - A brief description of the entity (e.g., Customer)
- Entity Key String (Parameters) - A comma-delimited string of data codes that reference the fields that make up the key to the file associated with the entity.

In the case of our example, the key to the Customer Master File is the company number and the customer number. The key to the Order Header File is the company number, the order number and the order generation number. These key field data codes are used by the Rules Processing Program in the Workflow Alert Processor. The two entities (customer and order) would be defined as follows.

| Entity ID	Entity Description	Entity Key String
*CUSTOMER	Customer	*COMP-NBR,*CUST-NUM
*ORDER	Customer Order	*COMP-NBR, *ORD-NUM, *ORD-GEN

Defining Entities

Prior to defining a rule, we must define its dependent entities. Entities are transactions, documents, control constants, or recipient categories for which the rule operates. Orders, purchase orders, invoices, companies, customers and vendors are all examples of entities. Rules are defined for alerts but apply to these entities.

Entity Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Entity Maintenance Selection Screen	Used to specify the entity you want to maintain.
Entity List Screen	Use to select an entity code to maintain.
Entity Maintenance Screen	Used to provide a description and parameters for the entity.

Entity Maintenance Selection Screen

```
              ENTITY MAINTENANCE SELECTION



          Function:        _       (A,C,D)

          Entity?               ...........











                                              F3=Exit
```

This screen appears after you select option 5 - Entity Maintenance from the Workflow System Maintenance Menu (MENU MGSYST). Use this screen to select an entity to maintain.

Entity Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Function	Key A to add an entity.
	Key C to change an entity.
	Key D to delete an entity.
	Important
	If you delete a entity, alerts may not function properly and the Workflow Alert Processor may no longer generate messages correctly.
	(A 1) Required
Entity	Key the entity you want to add or maintain.
	Valid Values: If you keyed C or D in the **Function** field, an entity defined previously through this option or received from Infor.
	(A 10) Required

Entity Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
F3=Exit	Press the F3=EXIT key to exit from this option and return to MENU MGSYST.
Enter	Press the ENTER key to confirm your entries and continue. The Entity Maintenance Screen (p. 15-7) will appear.

Entity List Screen

```
                          ENTITY LIST

                 Entity              Description
           1     *CUSTOMER           Customer Number
           2     *ORDER              Order Number
           3     *PO                 Purchase Order
           4     *SHIP-TO            Customer Ship-To

           5     *VENDOR             Vendor Number




                                                              Last
        _____

        Select: ,_

                                                         F12=Return
```

This screen appears after you key a question mark and press ENTER on the Entity Maintenance Selection Screen (p. 15-3). This screen lists all of the entity data codes defined in Workflow Management.

Use this screen to select a data code to assign to the alert.

Entity List Screen Fields and Function Keys

Field/Function Key	Description
(Reference Number)	The reference number of the entity code displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference an entity code for change or deletion. Display
Entity	The available entity codes. Display
Description	The description for the entity codes. Display
Select	Use this field to select a new entity code to be maintained. Key the reference number displayed that corresponds to the data code you want to select and press ENTER. (N 2) Optional

Entity List Screen Fields and Function Keys

Field/Function Key	Description
F12=Return	Press the F12=RETURN function key to return to the Entity Maintenance Selection Screen (p. 15-3) without assigning a data code.
Enter	Press ENTER after you key a reference number in the **Select** field to assign a data code to the alert. The Entity Maintenance Screen (p. 15-7) will appear.

Entity Maintenance Screen

```
                          ENTITY MAINTENANCE                        Change


              Entity:          *CUSTOMER

              Description:     Customer Number...............

              Parameters:     *COMP-NBR,*CUST-NUM..............................










                                                   F12=Return
```

This screen appears after you press ENTER on the Entity Maintenance Selection Screen (p. 15-3). Use this screen to key a description and parameters associated with a specific entity

.

Entity Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Entity	The entity code selected to be maintained.
	Display
Description	Key a description for the entity you are adding or maintaining.
	(A 30) Required
Parameters	Use this field to enter the parameters that uniquely define this entity. The parameters are a delimited string of the data codes that uniquely identify this entity.
	Key the parameter data string. Multiple data codes are separated with a comma.
	Valid Values: Data codes defined through Data Code Maintenance (MENU MGSYST) or received from Infor.
	(A 50) Required
F12=Return	Press the F12=RETURN function key to return to the Entity Maintenance Selection Screen (p. 15-3) without saving your entries.

Entity Maintenance Screen Fields and Function Keys

Field/Function Key	Description
F24=Delete	The F24=DELETE function key appears only if you selected to delete an entity on the Entity Maintenance Selection Screen (p. 15-3). Press the F24=DELETE function key to delete the selected entity. You will be prompted to press this key again to confirm the deletion. Press F24=DELETE again and the Entity Maintenance Selection Screen (p. 15-3) will appear.
Enter	Press the ENTER key to confirm your selections and continue. The Entity Maintenance Selection Screen (p. 15-3) will appear.

Maintaining Rules

16

This option is used to maintain rules. Rules are a special type of data code whose value is derived by the Workflow Alert Processor using a set of predefined conditions and placed in the data string, rather than being taken directly from the application. Alerts can be customized based on rules you define.

Important

This option should normally be used only by Infor, an authorized business partner, a programmer, or a specially trained user.

Because this option controls how an alert will function, a complete understanding of the purpose and use of rules is required before beginning any maintenance. Before making any changes in this option, refer to the Workflow Management Technical Overview for an in-depth explanation of rules.

Rules can also be designed to handle exception processing, such as a customer who wants to be informed only when a specific type of order goes on backorder, and not for the majority of that customer's orders.

Example:

By customer or order:

If your business services a large customer base and you would like to send alert messages to only a small number of them, you can define a rule that will be used to populate a data code. This data code will then be used as a filter to determine if a message is to be sent or not. By using a rule you can set a system default of N for the value. That value can then be overridden based upon the customer or order that the alert represents.

By type of order:

Your distribution company has 1,000 customers. One-quarter of those customers want to receive a message whenever an order goes on backorder, the rest do not want to be informed. You could use a filter that checks the customer number to determine when the message should be sent, but this would require setting up filters for 250 individual customer numbers. Instead, you can set up a single rule that provides the same result.

Rules are created through Rule Maintenance (MENU MGSYST), are saved in the Workflow Rule Definition File (MGRDF) and assigned to an alert through Alert Maintenance (MENU MGSYST). Four other files exist to support the workflow rules processing:

- Workflow Rule Entity Definition (MGRED)
- Workflow Rule Value Defaults (MGRVD)
- Workflow Rule Hierarchy (MGRHI)

Rule Definition

Like much of the data used by the Workflow Management module, rules are defined by either Infor or a qualified programmer who is able to create an alert. There are a number of dependencies and relationships between the rule being defined and the data codes available for an alert. These dependencies need to be fully understood before a rule can be created for an alert. The following discussion uses an example to explain these relationships and dependencies.

Alert GN112, Order Confirmation, is a good example of an alert that includes the possible use of a rule. The purpose of this alert is to send a message, via e-mail, to a customer as soon as the customer's order has been entered. However, only 22,000 out of a total of 40,000 customers want to receive this e-mail message. Of the 18,000 customers who do not want to receive routine order confirmations, 6,000 have requested to receive e-mail confirmation of selected, high-priority orders. These customers want the option of informing the Customer Service Representative (CSR) when they place an order that an order confirmation is required. This set of requirements can be accomplished using Workflow Management rules.

Dependency 1: A rule applies to an entity

The user wants to send confirmations to specific customers. And customers who don't normally get a confirmation want one for specific orders. Therefore, before creating the rule, the programmer must be sure that the necessary entities are defined. Entities are created and maintained using Entity Maintenance (MENU MGSYST).

Once you have identified and defined the entities for a rule, you can define the rule itself through Rule Maintenance (MENU MGSYST). However, at this point, there is another dependency that must be considered.

Dependency 2: A rule ID must be a data code.

When you define a rule, the rule ID must be a data code for the alert that the rule is being defined for. Therefore, you must first create the data code through Data Code Maintenance (MENU MGSYST) and then assign that data code to the alert through Alert Maintenance (MENU MGSYST). Also you must also add the new data code to the program or programs that generate the alert, and assign the data code a value of "blanks" when the alert is fired.

The Workflow Rule Definition File contains the information that defines the rule. The file contains the following information for each rule:

- Rule ID - A defined data code, up to 10 characters long and beginning with an asterisk (*).

- Rule Subject - The text of the field prompt the user will see on the screen in the application. The rule subject can be up to 50 characters long and normally includes the possible valid responses.

- Description - A 256-character description of the need for and use of the rule. This is usually an amplification of the rule subject. The description assists the customer in understanding the rule subject and determining the proper response for their requirements.

Rule ID:	*SNDORDCNF
Rule Subject:	Send Order Confirmation (Y,N)
Description:	When an order is created, should Workflow send an order confirmation message?

Setting Up the Rule Hierarchy

As a part of the rule definition process, the programmer needs to determine the entities that the rule will apply to and the order of importance of these entities (i.e., from more specific to less specific). In this example, the customer is the entity that would receive the message, and we want to decide, customer by customer, whether a message should be sent. Additionally, we need to be able to send a message to a customer for a given order, even if the customer does not normally receive the message. Therefore, we need to be able to override the customer directive on an order by order basis. To accomplish this, we need to define the rule hierarchy. Rule hierarchies are defined in the Workflow Rule Hierarchy File (MGRHI).

The following records in the Workflow Rule Hierarchy File file define the hierarchy that will be followed when the order confirmation rule is processed by the Rule Alert Process.

Rule ID	Sequence	Entity ID
*SNDORDCNF	010	*ORDER
*SNDORDCNF	020	*CUSTOMER

Items in the hierarchy should be entered from the most specific to the most general. In this example, *ORDER is first, followed by *CUSTOMER. This sequence tells the Rule Alert Process to first check if a value is present for *SNDORDCNF for the individual order. If a value is found, it will be placed in the data string in the position reserved for the *SNDORDCNF data code. If there is no value for the order, the Rule Alert Process will then check to see if a value is present for *SNDORDCNF for the customer. If no value is found at either level of the hierarchy, the data code is filled in with the default value for this rule and alert.

Setting Rule Default Values

The default value for a specific rule and alert is entered through the Alert Maintenance option (MENU MGSYST). Through Alert Maintenance you can display a list of all of the rules for an alert, with the

default value for each rule. You can then change the default value for one or more of the rules assigned to the alert.

Rule defaults are stored in the Workflow Rule Default Value File (MGRVD) by alert ID and rule ID. The entry in this file for the *SNDORDCNF rule used with alert GN112 would contain the following information:

Alert ID	Rule ID	Default Value
GN112	*SNDORDCNF	Y

Note that the rule defaults are set for a specific rule and alert ID. This means that before you can set default values for a rule, you must assign the rule to an alert.

Assigning Rules to Alerts

Rule assignments are stored in the Workflow Rule Assignments File (MGRAS). This is the only workflow rule file that will reside within an environment. All of the other rule files discussed previously are cross-environmental, which means that they are defined once no matter how many environments are supported on your system. Because the Workflow Rule Assignments File relates to specific entities from your database, such as customers and vendors, you will have to maintain this file for each of the environments that your system supports.

The data in the Workflow Rule Assignments file allows you to set values for the rule at different levels. When an alert is triggered, this information is used with the rule hierarchy to determine what messages should be sent.

Example:

Entity Type	Entity	Rule ID	Alert ID	Value
*CUSTOMER	01,0000000100	*SNDORDCNF	GN112	N
*CUSTOMER	01,0000000200	*SNDORDCNF	GN112	N
*CUSTOMER	01,0000000400	*SNDORDCNF	GN112	N
*CUSTOMER	01,0000000500	*SNDORDCNF	GN112	N
*ORDER	01,19345,00	*SNDORDCNF	GN112	Y
*ORDER	01,20056,00	*SNDORDCNF	GN112	N

When a user finishes entering an order through Enter, Change & Ship Orders (MENU OEMAIN), that action will trigger the Order Confirmation alert GN112. The Workflow Alert Processor will use the information in the Workflow Rule Assignments File with the system default for the rule (Y) and the

rule hierarchy. Using the hierarchy, the Rule Alert Process checks for a value for the rule at the order level, then at the customer level, and finally at the system default level, with the following results:

- If the order number is 01-19345/00, an order confirmation will be sent, regardless of which customer placed the order (rule default value for the order number is Y).

- If the order number is 01-20056/00, *no* order confirmation will be sent, regardless of which customer this order is for (rule default value for the order number is N).

- If the order number is not 01-19345/00 or 01-20056/00, *and* the customer number is 100, 200, 400, or 500, no order confirmation will be sent (rule default value for those customer numbers is N).

- If the order number is not 01-19345/00 or 01-20056/00, *and* the customer number is 800, an order confirmation will be sent (system default value is Y).

For all of this to work correctly, there is one additional dependency that must be considered:

## Dependency Three: The data code that is a rule must be used as a filter of the alert.

The rule is a data code in the alert. The value of that data code is filled by the rules processing program using the 5 files listed above. This value must then be used in a filter in the alert to determine if the message will be sent.

Rule Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Rules Maintenance Selection Screen	Used to specify the rule you want to maintain.
Rules Maintenance Screen	Used to provide a subject and description for the rule.
Rules Hierarchy Screen	Used to establish a hierarchy of entities for the rule.
Rules Hierarchy Maintenance Screen	Use to maintain entities within the rule hierarchy.

Rules Maintenance Selection Screen

```
                    RULES MAINTENANCE SELECTION


              Function: _        (A,C,D)

              Rule ID?  ..........







                                                           F3=Exit
```
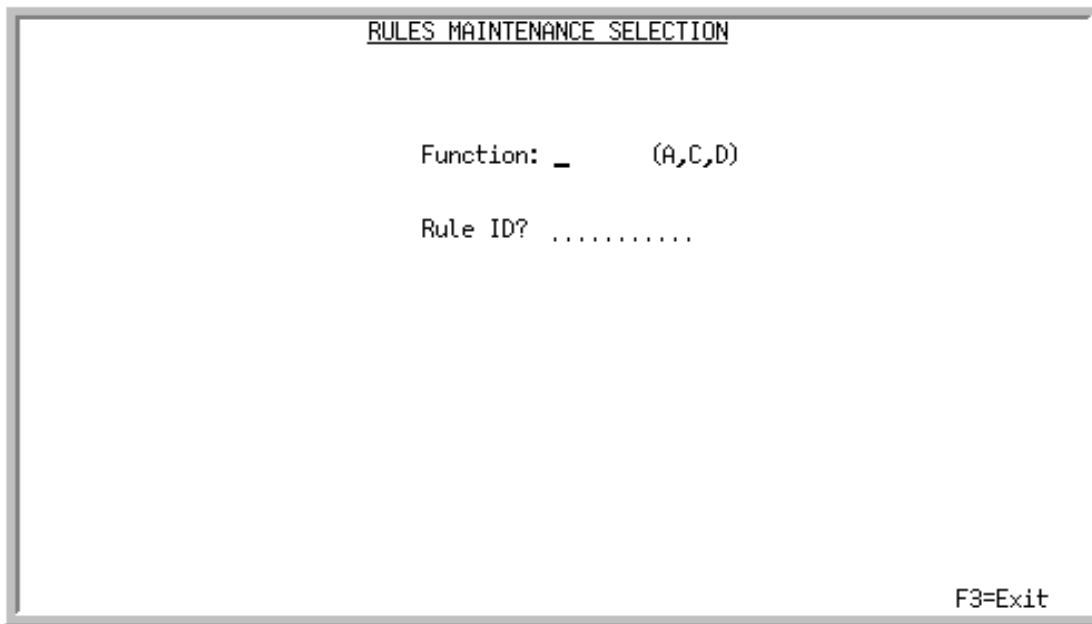
This screen appears after you select option 6 - Rule Maintenance from the Workflow File Maintenance Menu (MENU MGSYST). Use this screen to add, change, or delete a rule.

Rules Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Function	Key A to add rule.
	Key C to change a rule.
	Key D to delete a rule.
	Important
	If you delete an entity, alerts may not function properly and the Workflow Alert Processor may not generate messages correctly.
	(A1 Required)

Rules Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Rule ID	Key the ID of the rule you want to add, maintain, or delete. *Valid Values:* If you keyed an A in the **Function** field, a data code defined through Data Code Maintenance (MENU MGSYST) or received from Infor. If you keyed a C or D in the *Function* field, a rule ID defined previously through this option or received from Infor. (A10) Required
F3=Exit	Press the F3=EXIT function key to cancel this option and return to MENU MGSYST.
Enter	Press the ENTER key to confirm your entries. The Rules Maintenance Screen (p. 16-8) will appear.

Rules Maintenance Screen

```
                          RULES MAINTENANCE                          Change

Rule ID:        *NTFINVOVR

Rule Subject:   Send Invoice Payment Overdue Notification (Y/N)................
...............

Description:    This rule determines if the selected entity value will be include
d in the alert for overdue invoices. Example: an 'N' will prevent this entity va
lue from receiving messages for the specific alert...........................
...............................




                          F2=Hierarchy      F12=Return
```

This screen appears after you press ENTER on the Rules Maintenance Selection Screen (p. 16-6). Use this screen to define a subject and a description for a rule.

Rules Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Rule ID	The ID of the rule selected to be maintained. Display
Rule Subject	Use this field to specify the text of the prompt that the user will see when this rule is invoked, including the valid responses. The text you key in this field is what will appear on the Distribution A+ screen. Key the text you want users to see for this rule. (A 80) Required
Description	Use this field to provide a more detailed explanation of what the rule is used for. Key a description for the rule. (A 256) Required
F2=Hierarchy	Press the F2=HIERARCHY function key to maintain the hierarchy of entities for this rule. The Rules Hierarchy Screen (p. 16-10) will appear.
F12=Return	Press the F12=RETURN function key to return to the Rules Maintenance Selection Screen (p. 16-6) without saving your entries.

Rules Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Enter	Press the ENTER key to confirm your entries and continue. The Rules Maintenance Selection Screen (p. 16-6) will appear.

Rules Hierarchy Screen

```
                         RULES HIERARCHY
     Rule ID:   *NTFINVOVR

                    Sel     Sequence        Entity
                     1        10            *CUSTOMER




                                                                Last
     _____
     Select:  _.



                      F5=Add                 F12=Return
```

Rules Hierarchy Maintenance Screen

```
                         RULES HIERARCHY
     Rule ID:   *NTFINVOVR

                    Sel     Sequence        Entity
                     1        10            *CUSTOMER




                                                                Last
     _____

              Sequence: _10   Entity? *CUSTOMER

                              F10=Update    F12=Return    F24=Delete
```

The Rules Hierarchy Screen appears after you press the F2=HIERARCHY function key on the Rules Maintenance Screen (p. 16-8). Use this screen to establish a hierarchy of entities for a specific rule.

The Rules Hierarchy Maintenance Screen appears after you key a selection number in the **Select** field and press ENTER on the Rules Hierarchy Screen. Use this screen to maintain entities sequence within the rule hierarchy. The Workflow Alert Processor checks entities in the sequence in which they appear on this screen. Therefore, for efficient testing, it is important that you list entities in a logical order,

from the most specific to the least specific. You can reorder entity sequence and add entities to the rule on this screen.

A rule hierarchy allows a rule value to be defined on multiple levels. The entities in each sequence define where the data will be obtained from to generate the rule.

Example:

A rule is set up to determine if an order confirmation message should be sent. The Workflow Alert Processor will check each entity listed on this screen in the specified order for an entry in the **Value** field as defined through Workflow Rule Assignments (MENU MGFILE). If a value is found, that value will be use to populate the rule data code. If a value is not found, the default value will be used. The rule data code is used as a filter value in the alert detail.

Example:

Assume that the screen lists two entities:

Sequence / Entity Type
10 / *ORDER
20 / *CUSTOMER

To insert *SHIP-TO as new entity between these two, you would key 15 in the **Seq** field. After you key *SHIP-TO in the **Entity** field and press F5=ADD, the list will be updated as follows:

Sequence / Entity Type
10 / *ORDER
20 / *SHIP-TO
30/ *CUSTOMER

Rules Hierarchy Screen and Rules Hierarchy Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Rule ID	The rule ID selected for entity assignments. Display
Sel	This field displays the selection number for the entity. Key this number in the **Select** field and press ENTER to select an entity to change or delete. Display
Sequence	This column displays the sequence in which the system will check for the entity. Display

Rules Hierarchy Screen and Rules Hierarchy Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Entity	This column displays the entities associated with this rule. The system will check for these entities in the order shown on this screen. Display
Select	The **Select** field only displays on the Rules Hierarchy Screen. Use this field to select an entity in the hierarchy to change or delete. Key the number displayed in the **Sel** field that corresponds to the sequence and entity type in the hierarchy you want to select and press ENTER. (A 1) Required
Sequence	The **Sequence** field only displays on the Rules Hierarchy Maintenance Screen. Use this field to define the entity's sequence number in the hierarchy. This number determines the order in which the Workflow Alert Processor checks the entities assigned to this rule. To insert a new entity between two existing entities, key a sequence number that is between the sequence numbers of the existing entities. The entities in the list will be resequenced, in order, by 10s. To move an entity up or down in the list, select the entity and change the sequence number to a lower or higher number. Key the sequence number to associate with the entity. (N 3) Required
Entity	The **Entity** field only displays on the Rules Hierarchy Maintenance Screen. This field is required if you are adding a new entity to the hierarchy; otherwise, this field is display-only. Key the name of the entity you want to add to the hierarchy. *Valid Values:* An entity defined through Entity Maintenance (MENU MGSYST) or received from Infor. (A 10) Required/Display
F5=Add	*Hierarchy*: Press the F5=ADD function key to add a sequence to the hierarchy. The Rules Hierarchy Maintenance Screen (p. 16-10) will appear. *Maintenance*: The F5=ADD function key is available only if you pressed the F5=ADD function key on the Rules Hierarchy Screen (p. 16-10) to add an entity. Press the F5=ADD function key to add the entity to the hierarchy.
F10=Update	The F10=UPDATE function key only displays on the Rules Hierarchy Maintenance Screen. Press the F10=UPDATE function key to save your changes to the sequence in the hierarchy.

Rules Hierarchy Screen and Rules Hierarchy Maintenance Screen Fields and Function Keys

Field/Function Key	Description
F12=Return	*Hierarchy*: Press the F12=RETURN function key to return to the Rules Maintenance Screen (p. 16-8) without saving your entries.
	Maintenance: Press the F12=RETURN function key to return to the Rules Hierarchy Screen (p. 16-10) without saving your entries.
F24=Delete	The F24=DELETE function key is available only on the Rules Hierarchy Maintenance Screen.
	Press the F24=DELETE function key to delete the entity from the hierarchy. You will be prompted to press F24=DELETE again to confirm the deletion.
Enter	*Hierarchy*: Press the ENTER key after keying a selection number in the **Select** field to change or delete an entity in the hierarchy. The Rules Hierarchy Maintenance Screen (p. 16-10) will appear.

CHAPTER 17   Maintaining Alerts

<div style="text-align:right">17</div>

An alert is an identified action, condition, or task associated with an Distribution A+ function. The Workflow Management module includes a General Release Pack of pre-defined alerts. These alerts are described in detail in the Appendix section of this manual. You can purchase additional packs of alerts. Additionally, custom alerts can be created for your company by Infor, an authorized business partner, or your MIS staff.

You can create and maintain alerts using the Alert Maintenance option on the Workflow System Maintenance Menu (MENU MGSYST).

WARNING!

This option should normally be used only by Infor, an authorized business partner, a programmer, or a specially trained user.

Because this option controls how an alert will function, a complete understanding of alert processing is required before beginning any maintenance. Before making any changes in this option, refer to the Workflow Management Technical Overview for an in-depth explanation of alert processing.

Important

Each alert has its own alert program that passes the alert parameters (data codes, rules, etc.) to the Workflow Alert Processor. If you make any changes to an alert with this option, you must also modify the corresponding alert program. Otherwise, the alert will no longer function correctly.

Alert Maintenance

The screens and/or reports in this option and a brief description of their purpose are listed in the following table. A complete description of each screen/report is provided in this section.

Title	Purpose
Alert Maintenance Selection Screen	Used to specify the alert you want to maintain.
Alert Maintenance Screen	Used to provide a description, alert program, and number of wildcards for the alert.
Data Code Assignments Screen	Used to assign a data code to the alert or to select a data to maintain.
Data Code Assignments Detail Screen	Used to maintain the data code being assigned to the alert.
Data Code List Screen	Displays a list of defined data codes. Used to select a data code to assign to the alert.
Wildcard Data Types Assignments Screen	Used to assign data types to the wildcards associated with the alert.
Function Number Assignments Screen	Used to maintain the assignment of the function number to the alert.
Function Number Assignments Maintenance Screen	Used to assign a function number to the alert or to select a function number to maintain.
Function Number List Screen	Displays a list of defined function numbers. Used to select a function number to assign to the alert.
Recipient Code Assignments Screen	Used to assign a recipient code to the alert or to select a recipient code to maintain.
Recipient Code Assignments Detail Screen	Used to maintain the recipient code being assigned to the alert.
Recipient Code List Screen	Displays a list of defined recipient codes. Used to select a recipient code to assign to the alert.
Rule Default Assignment Screen	Used to assign a rule to the alert.
Rule Default Assignment Detail Screen	Used to set the default value for the rule for the alert.
Rules List Screen	Displays a list of defined rules. Used to select a rule to assign to the alert.
Report Code Assignments Screen	Used to assign a report code to the alert.
Report Code Assignments Detail Screen	Used to maintain the report code being assigned to the alert.
Report Code List Screen	Displays a list of defined report code. Used to select a report code to assign to the alert.

Alert Maintenance Selection Screen

```
              ALERT MAINTENANCE SELECTION


              Function: _        (A,C)

              Alert?    ......










F4=Alert/Data Code Assign        F5=Wildcard Assign
F6=Alert/Function Number Assign  F9=Alert/Recipient Code Assign
F10=Alert/Default Rule Assign    F11=Alert/Report Code Assign      F3=Exit
```

This window appears after you select the Alert Maintenance option from the Workflow System Maintenance Menu (MENU MGSYST).

Use the window to specify the alert you want to add or maintain.

Alert Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
Function	Key A to add an alert. Key C to modify an alert. (A 1) Required
Alert	Key the alert ID of the alert you want to add or maintain. The function keys at the bottom of this screen will apply to the alert you key here. (A 5) Required
F3=Exit	Press the F3=EXIT function key to exit from this option and return to MENU MGSYST.
F4=Alert/Data Code Assign	Press the F4=ALERT/DATA CODE ASSIGN function key to add a data code to the alert, or to change or delete an existing data code. The Data Code Assignments Screen (p. 17-7) will appear.

Alert Maintenance Selection Screen Fields and Function Keys

Field/Function Key	Description
F5=Wildcard Assign	Press the F5=WILDCARD ASSIGN function key to add a wildcard to the alert, or to change or delete an existing wildcard. The Wildcard Data Types Assignments Screen (p. 17-14) will appear.
F6=Alert/Function Number Assign	Press the F6=ALERT/FUNCTION NUMBER ASSIGN function key to add a function number to the alert, or to change or delete an existing function number. The Function Number Assignments Screen (p. 17-16) will appear.
F9=Alert/Recipient Code Assign	Press the F9=ALERT/RECIPIENT CODE ASSIGN function key to add a recipient code to the alert, or to change or delete an existing recipient code. The Recipient Code Assignments Screen (p. 17-21) will appear.
F10=Alert/Default Rule Assign	Press the F10=ALERT/DEFAULT RULE ASSIGN function key to add a rule to the alert, or to change or delete an existing rule. The Rule Default Assignment Screen (p. 17-26) will appear.
F11=Alert/Report Code Assign	Press the F11=ALERT/REPORT CODE ASSIGN function key to add a report code to the alert, or to change or delete an existing report code. Once you assign a report code is assigned to an alert, you can add a report to an alert message in the **Text Editor** field on the Message Editor Screen in Message Maintenance (MENU MGFILE). The Report Code Assignments Screen (p. 17-31) will appear.
Enter	Press the ENTER key to confirm your entries. The Alert Maintenance Screen (p. 17-5) will appear.

Alert Maintenance Screen

```
              ALERT MAINTENANCE                        Change


        Alert:                GN101

        Description:          Order Placed on Hold..........

        Alert Program:        MGGN101

        Number of Wildcards: _0     (0-35)




                                              F12=Return
```

This screen appears after you press ENTER on the Alert Maintenance Selection Screen (p. 17-3). Use this screen to provide a description for the alert, the name of the alert program, and the number of wildcards that will be available for the alert.

Alert Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Alert	The alert ID of the alert selected to be added or maintained. Display
Description	Key the description for the alert. (A 30) Required
Alert Program	The name of the program assigned to the alert displays in this field. This program controls the processing specific to this alert that will run in the Workflow Alert Processor. If you make changes to the alert (e.g., assign a new data code), you must modify this program. If you are adding an alert, you must use the name in this field as the name of the alert program when you create that program. Display

Alert Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Number of Wildcards	Wildcards allow you to add your own custom data codes to an alert. Wildcard data codes are stored in the wildcard string in the alert program.
	Use this field to specify the number of wildcards that will be available to this alert. You must specify the value of each wildcard in the wildcard string of the alert program. If you change the number of wildcards in this field, you must also change the alert program to be sure that the number of wildcard values is equal to the number of wildcards in this field.
	Additionally, if you increase this number, you must define the data type for each wildcard you added by selecting to change this same alert and pressing the F5 function key on the Alert Maintenance Selection Screen (p. 17-3).
	Default Value: 0
	Valid Values: 0 - 35
	NOTE: If you key a number greater than zero in this field, you will need to make program modifications to create and maintain the contents of the wildcard string for each wildcard.
	(N 2,0) Required
F12=Return	Press the F12=RETURN function key to return to the Alert Maintenance Selection Screen (p. 17-3) without saving your entries.
Enter	Press the ENTER function key to save your entries and continue. The Alert Maintenance Selection Screen (p. 17-3) will appear.

Data Code Assignments Screen

```
                        DATA CODE ASSIGNMENTS
     Alert ID: GN101 Order Placed on Hold
             Data Code   Description                Sch  Seq      Dup  Seq
          1  *COMP-NBR   Company Number              Y   02        Y   02
          2  *ORD-NUM    Order Number                Y   01        Y   01
          3  *ORD-GEN    Order Generated Flag        Y   03        Y   03
          4  *ORD-TYP    Order Type                  N   00        N   00

          5  *CUST-NUM   Customer Number             N   00        N   00
          6  *AR-CUST    A/R Customer Number         N   00        N   00
          7  *CUST-CLS   Customer Class              N   00        N   00
          8  *CUST-SBCL  Customer Sub-Class          N   00        N   00

          9  *REP-NUM1   Sales Rep Number 1          N   00        N   00
         10  *REP-NUM2   Sales Rep Number 2          N   00        N   00
         11  *REP-NUM3   Sales Rep Number 3          N   00        N   00
         12  *HLD-CODE   Hold Code                   N   00        N   00
                                                                  More...


        Select: _ .


                                                   F5=Add    . F12=Return
```

Data Code Assignments Detail Screen

```
                        DATA CODE ASSIGNMENTS
     Alert ID: GN101 Order Placed on Hold
             Data Code   Description                Sch  Seq      Dup  Seq
          1  *COMP-NBR   Company Number              Y   02        Y   02
          2  *ORD-NUM    Order Number                Y   01        Y   01
          3  *ORD-GEN    Order Generated Flag        Y   03        Y   03
          4  *ORD-TYP    Order Type                  N   00        N   00

          5  *CUST-NUM   Customer Number             N   00        N   00
          6  *AR-CUST    A/R Customer Number         N   00        N   00
          7  *CUST-CLS   Customer Class              N   00        N   00
          8  *CUST-SBCL  Customer Sub-Class          N   00        N   00

          9  *REP-NUM1   Sales Rep Number 1          N   00        N   00
         10  *REP-NUM2   Sales Rep Number 2          N   00        N   00
         11  *REP-NUM3   Sales Rep Number 3          N   00        N   00
         12  *HLD-CODE   Hold Code                   N   00        N   00
                                                                  More...

                         Include       Search     Use in     Dup Chk
                         in search     Sequence   Dup Chk    Sequence
     Data Code: *COMP-NBR    Y (Y,N)      02        Y. (Y,N)    02

                             F10=Update    F12=Return    F24=Delete
```

The Data Code Assignments Screen appears after you press the F4=ALERT/DATA CODE ASSIGN function key on the Alert Maintenance Selection Screen (p. 17-3). This screen lists all of the data codes assigned to this alert. Whether or not the data code will be used for searches, its search sequence number, whether or not the data code will be used in duplicate checking, and the duplicate checking sequence number display for each data code in the list.

Use this window to assign a new data code to an alert, or to select the data code you want to modify or delete.

The Data Code Assignments Detail Screen appears after you key a selection number in the **Select** field and press ENTER on the Data Code Assignments Screen (p. 17-7) or the Data Code List Screen (p. 17-12). Use this screen to maintain the details of the data code being assigned to an alert.

Data Code Assignments Screen and Data Code Assignments Detail Screen Field and Function Keys

Field/Function Key	Description
Alert	The alert ID of the alert selected to be added or maintained. Display
(Reference Number)	The reference number of the data codes displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a data code for change or deletion. Display
Data Code	The list of available data codes for the selected alert ID. Display
Description	The description of the data codes for the selected alert ID. Display
Sch	This column represents the **Include in search** Y or N value assigned to this data code for this alert. Display
Seq	If this data code is being included in the search, the sequence number assigned to this data code search hierarchy. Display
Dup	This column represents the **Use in Dup Chk** Y or N value assigned to this data code for this alert. Display
Seq	If this data code is being included in the duplicate message check, the sequence number assigned to this data code check hierarchy. Display
Select	The **Select** field only displays on the Data Code Assignments Screen. Use this field to select the data code you want to change or delete. Key the number displayed to the left of the value in the **Data Code** field that corresponds to the data code you want to select and press ENTER. (N 2.0) Optional

Data Code Assignments Screen and Data Code Assignments Detail Screen Field and Function Keys

Field/Function Key	Description
Include in search	The **Include in search** field only displays on the Data Code Assignments Detail Screen.
	Use this field to specify whether this data code can be used in the Alert Inquiry (MENU MGMAIN) as part of the search criteria.
	Key Y if you want the value the data code represents to be used in the search.
	Key N if you do not want the value the data code represents to be used in the search.
	Default Value: N
	(A 1) Required
Search Sequence	The **Search Sequence** field only displays on the Data Code Assignments Detail Screen.
	Use this field to specify where in the search sequence this data code should be used.
	The Alert Inquiry (MENU MGMAIN) will search using the data codes with a Y in the **Include in search** field, in the sequence you key in this field. To search efficiently, it is recommended that you assign the lowest sequence numbers to the most specific information, and the highest sequence numbers to the most general.
	Key the search sequence number for the data code.
	Default Value: 00
	(N 2,0) Required
Use in Dup Chk	The **Use in Dup Chk** field only displays on the Data Code Assignments Detail Screen.
	Use this field to specify whether Distribution A+ should use the value the data code represents when checking for duplicate messages. If a new alert message for a given alert and alert sequence has the same values for all of the data codes with a Y in this field and the same alert sequence as a message that was sent previously, the new message will not be sent.
	Key Y if you want the value the data code represents to be used when Distribution A+ checks for duplicate messages.
	Key N if you do not want the value the data code represents to be used when Distribution A+ checks for duplicate messages.
	Default Value: N
	(A 1) Required

Data Code Assignments Screen and Data Code Assignments Detail Screen Field and Function Keys

Field/Function Key	Description
Dup Chk Sequence	The **Dup Chk Sequence** field only displays on the Data Code Assignments Detail Screen.
	Use this field to provide the sequence number for duplicate checking. When Distribution A+ checks for duplicate messages, it will check values in the order specified by this sequence code. For example, if you want this data code to be checked second, key 2 in this field.
	Data codes for more unique values (like an order number) should be assigned a lower sequence number than data codes for less unique values (like a company number) which should be assigned a higher sequence number.
	Key the sequence number.
	Default Value: 00
	(N 2,0) Required
F5=Add	*Assignment*: Press the F5=ADD function key to assign a new data code to the alert. The Data Code List Screen (p. 17-12) will appear.
	Detail: The F5=ADD function key appears only if you accessed this screen by keying a selection number in the **Select** field and pressing ENTER on the Data Code List Screen (p. 17-12).
	Press the F5=ADD function key to assign the selected data code to the alert. The Data Code Assignments Screen (p. 17-7) will appear.
F10=Update	The F10=UPDATE function key appears only on the Data Code Assignments Detail Screen.
	Press the F10=UPDATE function key to save your entries and update the data code with your changes.
F12=Return	*Assignment*: Press the F12=RETURN function s key to return to the Alert Maintenance Selection Screen (p. 17-3).
	Detail: Press the F12=RETURN function key to return to the Data Code Assignments Screen without saving your entries.
F24=Delete	The F24=DELETE function key appears only if you accessed this screen by keying a selection number in the **Select** field and pressing ENTER on the Data Code Assignments Screen.
	Press the F24=DELETE function key to delete the data code from the list of those assigned to the alert. You will be prompted to press F24=DELETE a second time to confirm the deletion. The Data Code Assignments Screen (p. 17-7) will appear.
Enter	*Assignment*: Press the ENTER key after you key a selection number in the Select field to maintain a data code. The Data Code Assignments Detail Screen (p. 17-7) will appear.

Data Code List Screen

```
                        DATA CODE LIST

            Data Code          Description
        1   *ADDR1             Address 1
        2   *ADDR2             Address 2
        3   *ADDR3             Address 3
        4   *AGE-DATE          Invoice Aging Date

        5   *AGE-PER           Aging Alert Value Period
        6   *ALTSPORD          Alert Special Order Y/N
        7   *AMT-DUE           Amount Due
        8   *APRV-AUT          Use PO Approval Authorization

        9   *AR-CUST           A/R Customer Number
       10   *AR-REP            A/R Call Rep
       11   *AR-TERM           A/R Terms
       12   *ASSGNEE           Assignee

    _____ More...


    Select: _.

                                             F12=Return
```

This screen appears after you press the F5=ADD function key on the Data Code Assignments Screen (p. 17-7) or when a question mark is keyed in the **Data Code** field on the Data Code Maintenance Selection Screen (p. 11-5). This screen lists all of the data codes defined in Workflow Management.

Use this screen to select a data code to assign to the alert.

Data Code List Screen Fields and Function Keys

Field/Function Key	Description
(Reference Number)	The reference number of the data codes displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a data code for processing. Display
Data Code	The list of available data codes for the selected alert ID. Display
Description	The description of the data codes. Display
Select	Use this field to select a new data code to assign to the alert. Key the reference number displayed to the left of the value in the **Data Code** field that corresponds to the data code you want to select and press ENTER. (N 2,0) Optional

Data Code List Screen Fields and Function Keys

Field/Function Key	Description
F12=Return	Press the F12=RETURN function key to return to the Data Code Assignments Detail Screen (p. 17-7) without assigning a data code.
Enter	Press the ENTER key after you key a selection number in the **Select** field to assign a data code to the alert. The Data Code Assignments Detail Screen (p. 17-7) will appear.

Wildcard Data Types Assignments Screen

```
              WILDCARD DATA TYPES ASSIGNMENTS

   Alert ID: GN101 Order Placed on Hold

      Wildcard  Data Type              Wildcard   Data Type
       *WC01       _                   
       *WC02       ..


   Data Types:
      C=Character, I=Numeric-No Decimal, N=Numeric-With Decimal(s), D=Date

   _____

                                                           F12=Return
```

This screen appears only if there is a number greater than zero in the **Number of Wildcards** field on the Alert Maintenance Screen (p. 17-5) for this alert. This screen appears after you press the F5=WILDCARD ASSIGN function key on the Alert Maintenance Selection Screen (p. 17-3).

Use this screen to assign data types to the wildcards associated with an alert.

Wildcard Data Types Assignments Screen Fields and Function Keys

Field/Function Key	Description
Alert	The alert ID and description of the alert selected.
	Display
Wildcard	The Wildcard fields will display as two columns of available fields with the total fields displayed based on the allowed number of wildcards in the specific alert program. You cannot choose more wildcard variables than the alert program will use.
	Each column displays the number of wildcard fields (*WCnn) based on the value keyed for the **Number of Wildcards** field on the Alert Maintenance Screen (p. 17-5).
	Display

Wildcard Data Types Assignments Screen Fields and Function Keys

Field/Function Key	Description
Data Type	Use this field to specify what type of data this wildcard represents. When the Workflow Alert Processor replaces the wildcard with data from the application, it uses the data type to determine the format the data is in. The data type may be: • C for a character data type. Character data consists of numbers, letters, and special characters. • I for a numeric (no decimal) data type. Numeric (no decimal) data consists of whole numbers with no decimal places. • N for a numeric (with decimal) data type. Numeric (with decimal) data consists of decimal numbers. • D for a date data type. Date data contains dates. Key C if this data type represents character data. Key I if this data type represents numeric data with no decimal places. Key N if this data type represents numeric data with decimal places. Key D if this data type represents a date. *Default Value:* D (A 1) Required
F12=Return	Press the F12=RETURN function key to return to the Alert Maintenance Selection Screen (p. 17-3) without saving your entries.
Enter	Press the ENTER key to save your entries and continue. The Alert Maintenance Selection Screen (p. 17-3) will appear.

Function Number Assignments Screen

```
                     FUNCTION NUMBER ASSIGNMENTS
  Alert ID: GN101 Order Placed on Hold
                  Function
                  Number   Description
              1    386     Open Order Inquiry
              2    251     Customer Inquiry
              3    372     Release Held Orders




                                                              Last
        _____
        Select:  _ .

                                    F5=Add     F12=Return
```

Function Number Assignments Maintenance Screen

```
                     FUNCTION NUMBER ASSIGNMENTS
  Alert ID: GN101 Order Placed on Hold
                  Function
                  Number   Description
              1    386     Open Order Inquiry
              2    251     Customer Inquiry
              3    372     Release Held Orders




                                                              Last
        _____
        Select:  _2   251     Customer Inquiry

                                 F12=Return    F24=Delete
```

The Function Number Assignments Screen appears after you press the F6=ALERT/FUNCTION NUMBER ASSIGN function key on the Alert Maintenance Selection Screen (p. 17-3). This screen lists all of the function numbers assigned to the alert, with the description of each function number.

Use this screen to assign a new function number to the alert, or to select the function number you want to delete.

Maintaining Alerts

The Function Number Assignments Maintenance Screen appears after you select a reference number and press ENTER on the Function Number Assignments Screen.

Function Number Assignments Screen and Function Number Assignments Maintenance Screen Fields and Function Keys

Field/Function Key	Description
Reference Number	The reference number of the function code displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a function code for deletion. Display
Function Number	The **Function Number** of the selected function for this alert. Display
Description	The description of the selected function for this alert. Display
Select	Use this field to select the function number you want to delete. Key the number displayed to the left of the value in the **Function Number** field that corresponds to the function number you want to select. (N 2,0) Required
(Function Number, Description)	These fields only display on the Function Number Assignments Maintenance Screen. The **Function Number** and **Description** of the selected function display to the right of the **Select** field.
F5=Add	The F5=ADD function key only displays on the Function Number Assignments Screen. Press the F5=ADD function key to assign a new function number to the alert. The Function Number List Screen (p. 17-19) will appear.
F12=Return	*Assignments*: Press the F12=RETURN function key to return to the Alert Maintenance Selection Screen (p. 17-3). *Maintenance*: Press the F12=RETURN function key to return to the Function Number Assignments Screen.
F24=Delete	The F24=DELETE function key only displays on the Function Number Assignments Maintenance Screen. Key a selection number in the **Select** field and press the F24=DELETE function key to delete the function number from the list of those assigned to the alert. You will be prompted to press the F24=DELETE function key a second time to confirm the deletion.
Enter	Press the ENTER key after you key a selection number in the **Select** field to display a description of the function number.

Function Number List Screen

```
                    FUNCTION NUMBER LIST
            Function
             Number    Description
          1    211      Item Inquiry
          2    251      Customer Inquiry
          3    314      Release Blanket Orders
          4    372      Release Held Orders

          5    386      Open Order Inquiry
          6    416      Enter or Change Requisitions
          7    418      Maintain Special Orders
          8    422      Req/PO Inquiry

          9    426      Vendor Performance Inquiry
         10    467      Vendor/Item Maintenance
         11    704      Customer Collections Inquiry
         12    726      Maintain WO Special Orders

    _____ More...


        Select: _ .


                                                     F12=Return
```

This screen appears after you press the F5=ADD function key on the Function Number Assignments Screen (p. 17-16). Use this screen to select a function number to assign to an alert.

Function Number List Screen Field and Function Keys

Field/Function Key	Description
Reference Number	The reference number of the function code displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a function code for further processing. Display
Function Number	The **Function Number** of the selected function for this alert. Display
Description	The description of the selected function for this alert. Display
Select	Key the number displayed to the left of the value in the **Function Number** field that corresponds to the function number you want to select and press ENTER. (N 2,0) Optional
F12=Return	Press the F12=RETURN function key to return to the Function Number Assignments Screen (p. 17-16) without assigning a function number.

Function Number List Screen Field and Function Keys

Field/Function Key	Description
Enter	Press the ENTER function key after you key a selection number in the **Select** field to assign the function number to the alert. The Function Number Assignments Screen (p. 17-16) will appear.

Recipient Code Assignments Screen

```
                    RECIPIENT CODE ASSIGNMENTS
Alert: GN101 Order Placed on Hold
                 Recipient Code        Description
            1     *CRD-MGR             Credit Manager
            2     *WH-MGR              Warehouse Manager
            3     *SALES-MGR           Sales Manager
            4     *REP-NUM1            Sales Rep Number 1

            5     *REP-NUM2            Sales Rep Number 2
            6     *REP-NUM3            Sales Rep Number 3
            7     *USER                User ID
            8     *EMAIL               Email Address

            9     *AR-REP              A/R Call Rep




                                                              Last
      _____

        Select: _.


                                           F5=Add     F12=Return
```

Recipient Code Assignments Detail Screen

```
                    RECIPIENT CODE ASSIGNMENTS
Alert: GN101 Order Placed on Hold
                 Recipient Code        Description
            1     *CRD-MGR             Credit Manager
            2     *WH-MGR              Warehouse Manager
            3     *SALES-MGR           Sales Manager
            4     *REP-NUM1            Sales Rep Number 1

            5     *REP-NUM2            Sales Rep Number 2
            6     *REP-NUM3            Sales Rep Number 3
            7     *USER                User ID
            8     *EMAIL               Email Address

            9     *AR-REP              A/R Call Rep




                                                              Last
      _____

       Recipient Code: *CRD-MGR          Recipient Sub Code: _ ..
                        F10=Update     F12=Return     F24=Delete
```

The Recipient Code Assignments Screen appears after you press the F9=ALERT/RECIPIENT CODE ASSIGN
function key on the Alert Maintenance Selection Screen (p. 17-3). This screen lists all of the recipient
codes assigned to this alert. The recipient code name and a description display for each recipient code
in the list.

Use this screen to assign a new recipient code to the alert, or to select the recipient code you want to change or delete.

The Recipient Code Assignments Detail Screen appears after you key a selection number in the **Select** field and press ENTER on the Recipient Code Assignments Screen (p. 17-21) or the Recipient Code List Screen (p. 17-24). Use this screen to maintain the details of the recipient code.

Recipient Code Assignments Screen and Recipient Code Assignments Detail Screen Fields and Function Keys

Field/Function Key	Description
Alert	The alert ID and description of the alert selected. Display
(Reference Number)	The reference number of the function code displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a function code for further processing. Display
Recipient Code	The list of **Recipient Code** assigned to this alert. Display
Description	The description of the selected recipient code for this alert. Display
Select	Use this field to select the recipient code you want to change or delete. Key the number displayed to the left of the value in the **Recipient Code** field that corresponds to the recipient code you want to select and press ENTER. (N 2,0) Optional
Recipient Sub Code	This field is reserved for future use. (A 3) Optional
F5=Add	*Assignment*: Press the F5=ADD function key to assign a recipient code to the selected alert. The Recipient Code List Screen (p. 17-24) will appear. *Detail*: The F5=ADD function key appears only if you accessed this screen by keying a selection number in the **Select** field and pressing ENTER on the Recipient Code List Screen (p. 17-24). Press the F5=ADD key to assign the selected recipient code to the alert. The Recipient Code Assignments Screen will appear.
F10=Update	The F10=UPDATE function key only appears on the Recipient Code Assignments Detail Screen. Press the F10=UPDATE function key to save your entries and update the recipient code.

Recipient Code Assignments Screen and Recipient Code Assignments Detail Screen Fields and Function Keys

Field/Function Key	Description
F12=Return	*Assignment*: Press the F12=RETURN function key to return to the Alert Maintenance Selection Screen (p. 17-3).
	Detail: Press the F12=RETURN function key to return to the Recipient Code Assignments Screen (p. 17-21) without saving your entries.
F24=Delete	The F24=DELETE function key only appears on the Recipient Code Assignments Detail Screen.
	Press the F24=DELETE function key to delete the selected recipient code from the list of those assigned to the alert. You will be prompted to press F24=DELETE a second time to confirm the deletion. The Recipient Code Assignments Screen (p. 17-21) will appear.
Enter	*Assignment*: Press the ENTER key after you key a selection number in the **Select** field to change or delete a recipient code. The Recipient Code Assignments Detail Screen (p. 17-21) will appear.

Recipient Code List Screen

```
                        RECIPIENT CODE LIST

              Recipient Code   Description
          1     *AR-REP         A/R Call Rep
          2     *BUYER          Buyer User ID
          3     *CRD-MGR        Credit Manager
          4     *CUSTOMER       Customer

          5     *EMAIL          Email Address
          6     *MANAGER        Manager User ID
          7     *ORIG-USR       Original User ID
          8     *PUR-MGR        Purchase Manager

          9     *QRY-RCPT       Query Recipient
         10     *REP-NUM1       Sales Rep Number 1
         11     *REP-NUM2       Sales Rep Number 2
         12     *REP-NUM3       Sales Rep Number 3

   _____  More...


        Select: _ .

                                                    F12=Return
```

This screen appears after you press the F5=ADD function key on the Recipient Code Assignments Screen (p. 17-21). Use this screen to select a recipient code to assign to an alert.

Recipient Code List Screen Fields and Function Keys

Field/Function Key	Description
(Reference Number)	The reference number of the function code displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a function code for further processing. Display
Recipient Code	The list of available Recipient Codes. Display
Description	The description of the selected recipient code. Display
Select	Use this field to select the recipient code you want to add to the alert. Key the reference number displayed that corresponds to the recipient code you want to select and press ENTER. (N 2,0) Optional
F12=Return	Press the F12=RETURN function key to return to the Recipient Code Assignments Screen (p. 17-21) without assigning a recipient code.

Recipient Code List Screen Fields and Function Keys

Field/Function Key	Description
Enter	Press the ENTER key after you key a selection number in the **Select** field to assign the recipient code to the alert. The Recipient Code Assignments Detail Screen (p. 17-21) will appear.

Rule Default Assignment Screen

```
                        RULE DEFAULT ASSIGNMENT
        Alert ID: GN102 Order/Item Placed on Backorder
                Rule         Value
                1 *NTFYBO     Y



                                                              Last
        _____
            Select: _ .



                                              F5=Add      F12=Return
```

Rule Default Assignment Detail Screen

```
                        RULE DEFAULT ASSIGNMENT
        Alert ID: GN102 Order/Item Placed on Backorder
                Rule         Value
                1 *NTFYBO     Y



                                                              Last
        _____
    Rule:    *NTFYBO . . . .
    Value:   Y . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
    . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
                                    F10=Update    F12=Return    F24=Delete
```

The Rule Default Assignment Screen (p. 17-26) appears after you press the F10=ALERT/DEFAULT RULE ASSIGN function key on the Alert Maintenance Selection Screen (p. 17-3). This screen lists all of the rules assigned to this alert with the default value for each rule.

Use this screen to assign a rule to the alert, or to change or delete a rule that was previously assigned.

The Rule Default Assignment Detail Screen appears after you select a rule on the Rules List Screen (p. 17-29) or after you key a selection number in the **Select** field and press ENTER on the Rule Default Assignment Screen (p. 17-26). Use this screen to specify the default value for the rule for this alert.

Rule Default Assignment Screen and Rule Default Assignment Detail Screen Fields and Function Keys

Field/Function Key	Description
Alert	The alert ID and description of the alert selected. Display
(Reference Number)	The reference number of the rule ID displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a rule ID for further processing. Display
Rule	The list of rule identifiers assigned to this alert. Display
Value	The value assigned to the rule as the default for processing for this alert. Display
Select	The **Select** field only displays on the Rule Default Assignment Screen. Use this field to select the rule you want to change or delete. Key the reference number displayed that corresponds to the rule you want to select and press ENTER. (N 2,0) Optional
Value	The **Value** field only displays on the Rule Default Assignment Detail Screen. Use this field to specify the default value that will be used for the rule when this alert is triggered. Key the value for the rule. (A 130) Required
F5=Add	*Assignments*: Press the F5=ADD function key to assign a rule to an alert. The Rules List Screen (p. 17-29) will appear. *Detail*: The F5=ADD function key appears only after you select a rule and press ENTER on the Rules List Screen (p. 17-29). Press the F5=ADD function key to assign the rule to the alert. The Rule Default Assignment Screen (p. 17-26). will appear.
F10=Update	The F10=UPDATE field only displays on the Rule Default Assignment Detail Screen. The F10=UPDATE function key appears only after you key a selection number in the **Select** field and press ENTER on the Rule Default Assignment Screen (p. 17-26). Press the F10=UPDATE function key to save your entries and update the rule assignment.

Rule Default Assignment Screen and Rule Default Assignment Detail Screen Fields and Function Keys

Field/Function Key	Description
F12=Return	*Assignments*: Press the F12=RETURN function key to return to the Alert Maintenance Selection Screen (p. 17-3).
	Detail: Press the F12=RETURN function key to return to the Rule Default Assignment Screen without saving your entries.
F24=Delete	The F24=DELETE function key only appears on the Rule Default Assignment Detail Screen.
	Press the F24=DELETE function key to remove the selected rule from the list of those assigned to the alert. You will be prompted to press the F24=DELETE function key a second time to confirm the deletion.
Enter	*Assignments*: Press the ENTER key after you key a reference number in the **Select** field to maintain a rule assignment. The Recipient Code Assignments Detail Screen will appear.

Rules List Screen

```
                              RULES LIST
    Rule Id     Subject
 1  *ALTSPORD   Alert Special Order Rule (Y/N)
 2  *NTFINVOVR  Send Invoice Payment Overdue Notification (Y/N)
 3  *NTFYBO     Notify on Backorder Y/N
 4  *SNDNOTSHP  Send Order Not Shipped Confirmation Y/N

 5  *SNDORDCNF  Send an Order Confirmation (Y/N)
 6  *SNDOVRDUE  Send PO Due Date Check Rule Y/N
 7  *SNDSHPCNF  Send Shipping Confirmation (Y/N)
 8  *SNDVARVEN  Send Large Variance on Invoice to Vendor (Y/N)



                                                              Last
    _____

        Select: _ .

                                                        F12=Return
```

This screen appears after you press the F5=ADD function key on the Rule Default Assignment Screen (p. 17-26). Use this screen to select a rule to assign to a specific alert.

Rules List Screen Fields and Function Keys

Field/Function Key	Description
(Reference Number)	The reference number of the rule ID displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a rule ID for further processing. Display
Rule ID	The list of rule identifiers assigned to this alert. Display
Subject	The subject (short description) assigned to the rule. Display
Select	Use this field to select a rule to assign to the alert. Key the reference number displayed that corresponds to the rule you want to select and press ENTER. (N 2,0) Optional
F12=Return	Press the F12=RETURN function key to return to the Rule Default Assignment Screen (p. 17-26).

Rules List Screen Fields and Function Keys

Field/Function Key	Description
Enter	Press the ENTER key after you key a selection number in the Select field to assign a rule to an alert. The Rule Default Assignment Screen (p. 17-26) will appear.

Report Code Assignments Screen

```
                      REPORT CODE ASSIGNMENTS
    Alert: GN112 Order Confirmation
                  Report Code    Description
              1 ORDDET           Order Detail Report
              2 SHPADR           Order Ship-To Address




                                                                Last
       _____
        Select: _ .


                          F5=Add      F12=Return      F24=Delete
```

Report Code Assignments Detail Screen

```
                      REPORT CODE ASSIGNMENTS
    Alert: GN112 Order Confirmation
                  Report Code    Description
              1 ORDDET           Order Detail Report
              2 SHPADR           Order Ship-To Address




                                                                Last
       _____
        Report Code:   SHPDET

                          F5=Add      F12=Return
```

The Report Code Assignments Screen appears after you press the F11=ALERT/REPORT CODE ASSIGN
function key on the Alert Maintenance Selection Screen (p. 17-3). This screen lists all of the report
codes assigned to this alert, with the description of each report code.

Use this screen to assign a report code to the alert or select the report code you want to delete.

The Report Code Assignments Detail Screen appears after you key a selection number in the **Select** field and press ENTER on the Report Code List Screen (p. 17-34). Use this screen to display the details of the report code being assigned to an alert.

Report Code Assignments Screen and Report Code Assignments Detail Screen Fields and Function Keys

Field/Function Key	Description
Alert	The alert ID and description of the alert selected. Display
(Reference Number)	The reference number of the report code displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a report code for further processing. Display
Report Code	The list of report code assigned to this alert. Display
Description	The description of the report codes assigned to this alert. Display
Select	The **Select** field only displays on the Report Code Assignments Screen. Use this field to select the report code you want to delete. Key the reference number displayed that corresponds to the report code you want to delete and press the F24=DELETE function key. (N 2) Optional
Report Code	The **Report Code** field only displays on the Report Code Assignments Detail Screen. This field displays the report code you selected on the Report Code List Screen (p. 17-34). Display
F5=Add	*Assignments*: Press the F5=ADD function key to assign a report code to the alert. The Report Code List Screen (p. 17-34) will appear. *Detail*: Press the F5=ADD function key to assign the selected report code to the alert. The Report Code Assignments Screen (p. 17-31) will appear.
F12=Return	*Assignments*: Press the F12=RETURN function key to return to the Alert Maintenance Selection Screen (p. 17-3). *Detail*: Press the F12=RETURN function key to return to the Report Code Assignments Screen (p. 17-31) without assigning the report code.

Report Code Assignments Screen and Report Code Assignments Detail Screen Fields and Function Keys

Field/Function Key	Description
F24=Delete	*Assignments*: Press the F24=DELETE function key after you key a selection number in the **Select** field to delete the report code from the list of those assigned to the alert. You will be prompted to press F24=DELETE a second time to confirm the deletion.

Report Code List Screen

```
                          REPORT CODE LIST

            Report Code    Description
          1 ORDDET         Order Detail Report
          2 SHPADR         Order Ship-To Address
          3 SHPDET         Shipped Order Detail Report




                                                            Last
       _____

       Select: _.

                                                        F12=Return
```

This screen appears after you press the F5=ADD function key on the Report Code Assignments Screen (p. 17-31). Use this screen to select a report code to assign to an alert.

Report Code List Screen Fields and Function Keys

Field/Function Key	Description
(Reference Number)	The reference number of the report code displayed on this screen. When rolling forward or backward, the reference numbers do not change. Use these numbers to reference a report code for further processing. Display
Report Code	The list of available report code. Display
Description	The description of the available report codes. Display
Select	Key the number displayed to the left of the value in the **Report Code** field that corresponds to the report code you want to select and press ENTER. (N 2,0) Optional
F12=Return	Press the F12=RETURN function key to return to the Report Code Assignments Screen (p. 17-31) without assigning a report code.
Enter	Press the ENTER key after you key a selection number in the Select field to assign a report code to an alert. The Rule Default Assignment Detail Screen (p. 17-26) will appear.

This appendix contains a description of each alert available with the installation of the Workflow Management and detailed information about the alert. You must then activate each alert you want to use through Alert Tailoring (MENU MGFILE).

Alert Setup

When you first install Workflow Management, the alerts are filled with sample messages and data. You must review the alert message and alert detail for each alert you activate and modify them to reflect the specifics of your business.

Example: Sample Message

Wherever an alert messages has a recipient code of *USER, the recipient **User ID** field becomes a required field and therefore has been set to APDEMO. You will need to replace APDEMO with the correct user ID for the alert message.

Alert GN101 (Order Placed on Hold) comes with two sample messages:

* One message is for system-generated hold codes.
* One message is for the two EDI hold codes that are user-defined through the EDI Company Options. When installed, the filter for this message uses E1 and E2 as the hold codes. If you are using EDI, you will need to replace E1 and E2 with the hold codes defined in the EDI company options.

You can modify alert messages through Message Maintenance (p. 7-1) (MENU MGFILE). You can modify alert detail through Alert Tailoring (p. 8-1) (MENU MGFILE).

> **Example:** Custom Message

A message should be sent to you when an order goes on off-line order entry hold.

Within Message Maintenance create a new message (suggestion: copy an existing message to use as a basis) for the specific instance of what has happened.

Within Alert Tailoring, add a new sequence to alert GN101 and select your new message. Change the filter of this new sequence to the OH hold code for off-line order entry. Assign the recipient and set the delivery information. Activate the message sequence just created.

Alert Descriptions

This section contains a brief description of each alert. The Alert Details section contains detailed information about all of the components of each alert (e.g., data codes, filters, messages).

Alert Summary Table

Number	Alert Name	Description
GN101	Order Placed On Hold	This alert is triggered whenever the status of an order changes to Order Held.
GN102	Order/Item Placed on Backorder	This alert is triggered when you add or change an order and the order becomes fully or partially backordered.
GN103	Special Order is Created	This alert is triggered when a special order is created.
GN104	Large Variance on Invoice	This alert is triggered when an Accounts Payable invoice for a PO has an item with a large variance.
GN105	Purchase Order Approval Required	For this alert to function, there must be a Y in the **Use Approval Code Authorization for Req/PO** field in Purchasing Options Maintenance (MENU XAFILE).
		This alert is triggered when you enter a requisition through Enter or Change Requisitions (MENU POMAIN) and leave the **Approval Code** field on the End Requisition Screen blank.

Alert Summary Table

Number	Alert Name	Description
GN106	Order Cancel Date Check	When you enter an order through Enter, Change & Ship Orders (MENU OEMAIN), you can key a cancel date on the Second Order Header Screen. Entering a cancel date indicates that the customer does not want the order if it cannot be shipped by that date.
		This alert is triggered when there is a cancel date on an open order and the cancel date is within a user-defined number of days of the current date. For example, this alert would be triggered for an open order on June 5 if the cancel date on the order is June 8 and the user-specified number of days is 3.
GN108	Offline Order Entry Errors	This alert is triggered when an error is detected in an order entered through offline order entry.
GN110	Purchase Order Due Date Check	When you enter a purchase order through Enter or Change Requisitions (MENU POMAIN), you can key a due date on the Purchase Order Header Screen. Entering a due date indicates that you need the vendor's inventory by that date and will need to contact the vendor if the inventory has not been received in the warehouse by that date.
		This alert is triggered when there is a due date on a purchase order, the due date is within a user-defined number of days of the current date, and the purchase order is still open. For example, this alert would be triggered for an open purchase order on June 5 if the due date on the order is June 8 and the user-specified number of days is 3.
GN112	Order Confirmation	This alert is triggered when an order is entered through
		• Enter, Change & Ship Orders (MENU OEMAIN)
		• the EDI offline order entry process
		• Storefront
		This alert sends a confirmation to the customer. For one-time customer orders, such as Storefront orders, this alert can get the customer's e-mail address from the order comments.

Alert Summary Table

Number	Alert Name	Description
GN113	Order Shipping Confirmation	This alert is triggered when an order is ship confirmed through • Enter, Change and Ship Orders (MENU OEMAIN) • Ship Confirm Multiple Orders (MENU OEMAIN) • Confirm Box Shipments (MENU WMMAIN), if Warehouse Management is installed and you are using the boxing function • Transaction Manager (MENU RFMAIN), if Radio Frequency is installed and the Radio Frequency Options (MENU RFFILE) are set to **Ship Confirm after last pick**
GN114	Request Ship Date Check	When you enter an order through Enter, Change & Ship Orders (MENU OEMAIN), you can key a requested ship date on the Order Header Screen. Entering a requested ship date indicates that the customer wants the order shipped by a certain date. This alert is triggered during Day-End Processing when there is a requested ship date on an open order or backorder, and the requested ship date is within a user-defined number of days of the current date. For example, this alert would be triggered for an open order on June 5 if the requested date on the order is June 8 and the user-specified number of days is 3.
GN115	AR Aging	This alert is generated when an A/R invoice is older than a user defined number of days.
GN116	Serial Item Purchased	This alert is generated to inform the vendor when a serialized item is purchased by a customer.
GN117	Req/PO Due Date Change on Special Order	This alert is generated when the Req/PO Due Date is changed on a special order line and the new value is less than the sales order line requested ship date.
GW001	Consignment Gateway Transaction	Sends an alert message to the WH Manager when a consignment count group is received through Import Orders and Customer Inventory Balances (MENU AMMAIN). The message includes the owner, company, customer, ship-to, and warehouse.

Alert Summary Table

Number	Alert Name	Description
GW004	SO/RQ Edit Error Messages	Sends an alert message to the Buyer when there are errors found in the SO/RQ Edit Report that is created from Special Order Automatic Req Creation (MENU POMAST). The message includes the vendor, item number, and error message.
GW005	Gateway Transaction Error	The Gateway Error Handler program will send a message to **Recipient Code** *USER when there is an error in a Gateway transaction including the program name where the error occurred and the date/time stamp when it happened.
QUERY	Query Alert	This alert is triggered when the conditions of a user-defined Query are met.

Alert Details

The following pages contain detailed information about each alert, including:

- the alert program name
- the data codes, recipient codes, special values, function numbers, and report codes associated with the alert
- the alert detail
- alert rule assignments and the rules hierarchy
- wildcards assigned
- message detail
- the defaults and filters for each message and alert sequence

Alert Definition Detail

Alert Definitions

Order Placed On Hold GN101

Alert Source: OEA100

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	02	Y	02
	Order Number	*ORD-NUM	2	Y	01	Y	01
	Order Generation	*ORD-GEN	3	Y	03	Y	03
	Order Type	*ORD-TYP	4	N		N	
	Customer Number	*CUST-NUM	5	N		N	
	A/R Customer Number	*AR-CUST	6	N		N	
	Customer Class	*CUST-CLS	7	N		N	
	Customer Sub-class	*CUST-SBCL	8	N		N	
	Sales Rep 1	*REP-NUM1	9	N		N	
	Sales Rep 2	*REP-NUM2	10	N		N	
	Sales Rep 3	*REP-NUM3	11	N		N	
	Hold Code	*HLD-CODE	12	N		N	
	A/R Call Rep	*AR-REP	13	N		N	
	Original User	*ORG-USR	14	N		N	
	Warehouse Number	*WHS-NUM	15	N		N	
	Ship-To Number	*SHIP-TO#	16	N		N	
	Customer Name	*CUST-NAM	17	N		N	
	Hold Code Description	*HLD-DESC	18	N		N	
	EDI Order Y/N	*EDI-FLAG	19	N		N	
	Requested Ship Date	*RQSH-DAT	20	N		N	
	Order Source Code	*ORD-SRC	21	N		N	
	Order Value	*ORD-VAL	22	N		N	

Order Placed On Hold (cont'd)   GN101

Recipients Assigned:		Recipient Code	Recipient Code Seq
MGRCD		*CRD-MGR	1
		*WH-MGR	2
		*SALES-MGR	3
		*REP-NUM1	4
		*REP-NUM2	5
		*REP-NUM3	6
		*USER	7
		*EMAIL	8
		*AR-REP	9
		*ION	10

Alert Control Value:	Description	Value	Type	Required
MGACT	none			

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq
MGAFN	Open Order Inquiry	386	1
	Customer Inquiry	251	2
	Release Held Orders	372	3

Reports Assigned:	Report Name	Description
MGARP	N/A	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
	G1001, Seq 1	*HLD-CODE	EQ	CR
	G1001, Seq 2	*HLD-CODE	EQ	SP
	G1001, Seq 3	*HLD-CODE	EQ	WM
	G1001, Seq 4	*HLD-CODE	EQ	GX
	G1001, Seq 7	*HLD-CODE	EQ	GM
		*HLD-CODE	EQ	E1
	G1002, Seq 5	*EDI-FLAG	EQ	Y
		*HLD-CODE	EQ	E2
	G1002, Seq 6	*EDI-FLAG	EQ	Y
	Seq 8	*HLD-CODE	EQ	CR

Order Placed On Hold (cont'd)　　　　　　　　　　　　　　　　GN101

Seq 9	*HLD-CODE	9	
Seq 10	*HLD-CODE	10	
Seq 11	none	11	

Alert Detail: MGADT

Recipients			Send Interval	Escalate
Seq 1*CRD-MGR	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N
Seq 2*A/R-REP	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	Y, D, 1
Seq 3*WH-MGR	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N
Seq 4*SALES-MGR	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N
Seq 7*REP-NUM1	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N
Seq 5*USER (APDEMO)	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		I	N
Seq 6*USER (APDEMO)	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		I	N
Seq 8*CRD-MGR	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = Y		I	N
Seq 9*A/R-REP	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = Y		I	N
Seq 10*SALES-MGR	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = Y		I	N
Seq 11*ION	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = Y		I	N

Order Placed On Hold (cont'd)   GN101

Alert Rules Assignment:	Rule	Value
MGRVD	None	

Alert Rule Hierarchy:	Rule	Entity Type	Seq
MGRHI	None		

Order/Item On Backorder   GN102

Alert Source: OEA100

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	02	Y	02
	Order Number	*ORD-NUM	2	Y	01	Y	01
	Order Generation	*ORD-GEN	3	Y	03	Y	03
	Order Status	*ORD-STAT	4	N		N	
	Order Type	*ORD-TYP	5	N		N	
	Order Value	*ORD-VAL	6	N		N	
	Customer Number	*CUST-NUM	7	N		N	
	Requested Ship Date	*RQSH-DAT	8	N		N	
	Special Order Code	*SO-COD	9	N		N	
	Notify of Backorders	*NTFYBO	10	N		N	
	Sales Rep 1	*REP-NUM1	11	N		N	
	Sales Rep 2	*REP-NUM2	12	N		N	
	Sales Rep 3	*REP-NUM3	13	N		N	
	Customer Class	*CUST-CLS	14	N		N	
	Customer Sub-class	*CUST-SBCL	15	N		N	
	Hold Code	*HLD-CODE	16	N		N	
	Original User ID	*ORG-USR	17	N		N	
	Order Source Code	*ORD-SRC	18	N		N	
	Warehouse Number	*WHS-NUM	19	N		N	
	EDI Order Y/N	*EDI-FLAG	20	N		N	
	Ship-To Number	*SHIP-TO#	21	N		N	
	Customer Name	*CUST-NAM	22	N		N	

Recipients Assigned:	Recipient Code	Recipient Code Seq
MGRCD	*CUSTOMER	1
	*REP-NUM1	2
	*REP-NUM2	3
	*REP-NUM3	4
	*EMAIL	5
	*USER	6
	*ION	7

Order/Item On Backorder (cont'd)   GN102

Alert Control Value:	Description	Value	Type	Required
MGACT	none			

Tasks/Functions Assigned:	**Task Name**	**Infor A+ Function**	**Seq**	
MGAFN	Open Order Inquiry	386	1	
	Customer Inquiry	251	2	

Reports Assigned:	**Report Name**	**Description**	
MGARP	N/A		

Alert Detail Filters: MGAFL	**Message ID & Seq #**	**Data Code**	**Operation**	**Value**
	G1010, Seq 1	*NTFYBO	EQ	Y
	G1011, Seq 2	*NTFYBO	EQ	Y
	Seq 3	*NTFYBO	EQ	Y
	Seq 4	none		

Alert Detail: MGADT	**Recipients**			**Send Interval**	**Escalate**
	Seq 1*REP-NUM1	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N
	Seq 2*CUSTOMER	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N
	Seq 3*CUSTOMER	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = Y		I	N
	Seq 4*ION	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = Y		I	N

Order/Item On Backorder (cont'd)   GN102

Alert Rules Assignment:	Rule	Value	
MGRVD	*NTFYBO	Y	*required

Alert Rule Hierarchy:	Rule	Entity Type	Seq
MGRHI	*NTFYBO	*ORDER	10
	*NTFYBO	*CUSTOMER	20

Special Order is Created   GN103

Alert Source: OEA100

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	02	Y	02
	Order Number	*ORD-NUM	2	Y	01	Y	01
	Order Generation	*ORD-GEN	3	Y	03	Y	03
	Special Order Line Seq	*SO-SEQ	4	Y	04	Y	04
	Item Number	*ITM-NUM	5	N		N	
	Warehouse Number	*WHS-NUM	6	N		N	
	Vendor Number	*VEND-NUM	7	N		N	
	Order Value	*ORD-VAL	8	N		N	
	Line Value	*LINE-VAL	9	N		N	
	Special Order Type	*SO-TYP	10	N		N	
	Buyer	*BUYER-ID	11	N		N	
	Sales Rep 1	*REP-NUM1	12	N		N	
	Sales Rep 2	*REP-NUM2	13	N		N	
	Sales Rep 3	*REP-NUM3	14	N		N	
	Customer Class	*CUST-CLS	15	N		N	
	Customer Sub-class	*CUST-SBCL	16	N		N	
	Original User ID	*ORG-USR	17	N		N	
	Order Source	*ORD-SRC	18	N		N	
	Warehouse Transfer	*WHS-TRAN	19	N		N	
	Customer Number	*CUST-NUM	20	N		N	
	Mfg Item Number	*MFG-NUM	21	N		N	
	Work Order PO	*WO-FLAG	22	N		N	
	Customer Name	*CUST-NAM	23	N		N	
	Ship-To Number	*SHIP-TO#	24	N		N	
	Allow Transfer Special Orders	*ALTSPORD	25	N		N	

Recipients Assigned:		Recipient Code	Recipient Code Seq
MGRCD		*BUYER	1
		*USER	2
		*EMAIL	3
		*ION	4

Special Order is Created (cont'd)   GN103

Alert Control Value:	Description	Value	Type	Required
MGACT	none			

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq	
MGAFN	Open Order Inquiry	386	1	
	Maintain Special Orders	418	2	
	Create Special Order PO's	838	3	
	Consignment Inventory Work Sheets	726	4	

Reports Assigned:	Report Name	Description
MGARP	N/A	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
	G1020, Seq 1	none		
	G1021, Seq 2	none		
	Seq 3	*WO-FLAG	EQ	N

Alert Detail: MGADT	Recipients			Send Interval	Escalate
	Seq 1*BUYER	Active = N, Consolidate = Y, Interrupt = Y, Allow Dups = N, Send to ION = N		I	N
	Seq 2*USER (APDEMO)	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N		I	N
	Seq 3*ION	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = Y		I	N

Alert Rule Assignments:	Rule	Values	
MGRVD	*ALTSPORD	Y	

Rules Hierarchy:	Rule ID	Entity	Seq
MGRHI	*ALTSPORD	*VENDOR	10

Large Variance On Invoice   GN104

Alert Source: AP113

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	4	N	
	Voucher Group	*VCH-GRP	2	Y	2	Y	2
	Voucher Number	*VOUCH-NUM	3	Y	1	Y	1
	Voucher Company	*VCH-CMP	4	Y	5	N	
	Vendor Number	*VEND-NUM	5	Y	3	Y	4
	Vendor Name	*VEN-NAM	6	N		N	
	Vendor Invoice Number	*VEN-INVNO	7	N		N	
	Receiver Number	*RCPT-NUM	8	N		Y	7
	Line Sequence	*LINE-SEQ	9	N		Y	3
	Item Number	*ITM-NUM	10	N		Y	5
	Invoice Value	*INVC-VAL	11	N		Y	6
	Invoice Quantity	*INVC-QTY	12	N		N	
	Receipt Quantity	*RCPT-QTY	13	N		N	
	Receipt Value	*RCPT-VAL	14	N		N	
	PO Number	*PO-NUM	15	N		N	
	Requisition Number	*REQ-NUM	16	N		N	
	Variance $	*VARIANCE$	17	N		N	
	Variance %	*VARIANCE%	18	N		N	
	Buyer	*BUYER-ID	19	N		N	
	Receipt Date	*RCPT-DAT	20	N		N	
	Warehouse Number	*WHS-NUM	21	N		N	
	Invoice Date	*INVC-DAT	22	N		N	
	Send Variance to Vendor	*SNDVARVEN	23	N		N	
	Warehouse Transfer	*WHS-TRAN	24	N		N	
	Assignee	*ASSGNEE	25	N		N	
	Original/Last User ID	*ORG-USR	26	N		N	

Large Variance On Invoice (cont'd)　　　　　　　GN104

Recipients Assigned:

	Recipient Code	Recipient Code Seq
MGRCD	*VENDOR	1
	*BUYER	2
	*USER	3
	*EMAIL	4
	*PUR-MGR	5
	*ORIG-USR	6
	*ION	7

Alert Control Value:

	Description	Value	Data Type	Required
MGACT	None			

Tasks/Functions Assigned:

	Task Name	Infor A+ Function	Seq
MGAFN	PO Inquiry	422	1
	Item Inquiry	211	2

Reports Assigned:

	Report Name	Description
MGARP	N/A	

Alert Detail Filters: MGAFL

Message ID & Seq #	Data Code	Operation	Value
G1030, Seq 1	none		

Alert Detail: MGADT

Recipients			Send Interval	Escalate
Seq 1 *BUYER	Active = N, Consolidate = N, Interrupt = Y, Allow Dups = N, Send to ION = N		I	N

Alert Rules Assignment:

	Rule	Values		
MGRVD	*SNDVARVEN	Y	*required	

Alert Rule Hierarchy:

	Rule	Entity Type	Seq
MGRHI	*SNDVARVEN	*PO	10
	*SNDVARVEN	*VENDOR	20

PO Approval Required   GN105

Alert Program Source: PO100B

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	02	Y	02
	Vendor Number	*VEND-NUM	2	N		N	
	Requisition Number	*REQ-NUM	3	Y	01	Y	01
	Original/Last User ID	*ORG-USR	4	N		N	
	Buyer	*BUYER-ID	5	N		N	
	PO Order Value	*PO-VALUE	6	N		Y	03
	PO Entry Date	*PO-ENTDT	7	N		N	
	Due Date	*DUE-DATE	8	N		N	
	Approval Code	*PO-APRVL	9	N		Y	04
	PO Hold Code	*PO-HLDCD	10	N		N	
	Approval Code Authorization	*APRV-AUT	11	N		Y	05

Recipients Assigned:		Recipient Code	Recipient Code Seq
MGRCD		*BUYER	1
		*MANAGER	2
		*USER	3
		*EMAIL	4
		*ION	5

Alert Control Value:	Description	Value	Data Type	Required
MGACT	none			

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq
MGAFN	Req/PO Inquiry	422	1
	Enter or Change Requisitions	416	2

Reports Assigned:	Report Name	Description
MGARP	N/A	

PO Approval Required (cont'd)   GN105

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
		*APRV-AUT	EQ	Y
		*PO-APRVL	EQ	[blank]
	G1040, Seq 1	*PO-HLDCD	EQ	[blank]
		*APRV-AUT	EQ	Y
		*PO-APRVL	EQ	[blank]
		*PO-HLDCD	EQ	[blank]
	G1041, Seq 2	*PO-VALUE	GE	5000
	Seq 3	*PO-HLDCD	EQ	[blank]
	Seq 4	*PO-HLDCD	EQ	[blank]

Alert Detail: MGADT	Recipients			Send Interval	Escalate
	Seq 1 *BUYER	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N		I	N
	Seq 2 *MANAGER	Active = N, Consolidate = Y, Interrupt = Y, Allow Dups = N, Send to ION = N		I	N
	Seq 3 *MANAGER	Active = N, Consolidate = Y, Interrupt = Y, Allow Dups = N, Send to ION = Y		I	N
	Seq 4 *ION	Active = N, Consolidate = Y, Interrupt = Y, Allow Dups = N, Send to ION = Y		I	N

Alert Rule Assignments:	Rule	Values
MGRVD	None	

Rules Hierarchy:	Rule	Entity	Seq
MGRHI	None		

Order Cancel Date Check   GN106

**Alert Source: Day-end Open
Order Report**

Data Codes Assigned:

	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	02	Y	02
	Order Number	*ORD-NUM	2	Y	01	Y	01
	Warehouse Number	*WHS-NUM	3	N		N	
	Customer Number	*CUST-NUM	4	N		N	
	Ship-To Number	*SHIP-TO#	5	N		N	
	Customer Name	*CUST-NAM	6	N		N	
	Cancel Date	*CNCL-DATE	7	N		Y	03
	Original User ID	*ORG-USR	8	N		N	
	Sales Rep 1	*REP-NUM1	9	N		N	
	Sales Rep 2	*REP-NUM2	10	N		N	
	Sales Rep 3	*REP-NUM3	11	N		N	
	Order Status	*ORD-STAT	12	N		N	
	Hold Code	*HLD-CODE	13	N		N	
	Order Value	*ORD-VAL	14	N		Y	04
	Hold Code Description	*HLD-DESC	15	N		N	
	Order Generation	*ORD-GEN	16	N		N	
	Requested Ship Date	*RQSH-DAT	17	N		N	

Recipients Assigned:

	Recipient Code	Recipient Code Seq
MGRCD	*USER	1
	*ORIG-USR	2
	*REP-NUM1	3
	*REP-NUM2	4
	*REP-NUM3	5
	*EMAIL	6
	*ION	7

Alert Control Value:

	Description	Value	Data Type	Required
MGACT	Days Before/After Cancel Date	7	INT	N

Order Cancel Date Check (cont'd)   GN106

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq
MGAFN	Open Order Inquiry	386	1

Reports Assigned:	Report Name	Description
MGARP	N/A	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
				WEB@WO
	G1050, Seq 1	*ORG-USR	NE	RK
	G1051, Seq 2	none		

Alert Detail: MGADT	Recipients			Send Interval	Escalate
	Seq 1*ORIG-USER	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N
	Seq 2*REP-NUM1	Active = Y, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N

Alert Rule Assignments:	Rule	Values
MGRVD	None	

Rules Hierarchy:	Rule	Entity	Seq
MGRHI	None		

Offline Order Entry Errors   GN108

Alert Source: OE130

Data Codes Assigned:

	Desc	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	02	Y	05
	Customer Number	*CUST-NUM	2	N		N	
	Ship-To Number	*SHIP-TO#	3	N		N	
	Order Number	*ORD-NUM	4	Y	01	Y	01
	Order Generation	*ORD-GEN	5	Y	03	Y	04
	Original User ID	*ORG-USR	6	N		N	
	EDI Order Y/N	*EDI-FLAG	7	N		N	
	Trading Partner	*TRAD-ID	8	N		N	
	EDI Line Reference #	*EDI-LINE	9	N		N	
	Order Value	*ORD-VAL	10	N		N	
	Off-line Order Type	*OE-OFFTP	11	N		N	
	Error Text	*ERR-TXT	12	N		Y	03
	Error Code	*ERR-CODE	13	N		N	
	Off-line Identifier	*OE-OFFID	14	N		N	
	Order Generated	*ORGEN-FLG	15	N		N	
	Off-line OE Run Date	*OFFOE-DT	16	N		N	
	Off-line OE Run Time	*OFFOE-TM	17	N		N	
	Sales Rep 1	*REP-NUM1	18	N		N	
	Sales Rep 2	*REP-NUM2	19	N		N	
	Sales Rep 3	*REP-NUM3	20	N		N	
	Line Sequence	*LINE-SEQ	21	N		Y	02
	Item Number	*ITM-NUM	22	N		N	
	Warehouse Number	*WHS-NUM	23	N		N	

Recipients Assigned:

	Recipient Code	Recipient Code Seq
MGRCD	*USER	1
	*EMAIL	2
	*REP-NUM1	3
	*REP-NUM2	4
	*REP-NUM3	5
	*ION	6

Offline Order Entry Errors (cont'd)   GN108

Alert Control Value:	Description	Value	Data Type	Required
MGACT	None			

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq
MGAFN	Open Order Inquiry	386	1

Reports Assigned:	Report Name	Description
MGARP	N/A	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
	G1070, Seq 1	*EDI-FLAG	EQ	N
	G1071, Seq 2	*EDI-FLAG	EQ	Y

Alert Detail: MGADT	Recipients			Send Interval	Escalate
	Seq 1*USER (APDEMO)	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N		I	N
	Seq 2*USER (APDEMO)	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N		I	N

Alert Rules Assignment:	Rule	Values	Seq
MGRVD	None		

Alert Rule Hierarchy:	Rule	Entity Type	Seq
MGRHI	None		

Purchase Order Due Date Check GN110

Alert Source: PO812

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	03	Y	03
	PO Number	*PO-NUM	2	Y	01	Y	01
	Warehouse Number	*WHS-NUM	3	N		N	
	Vendor Number	*VEND-NUM	4	N		N	
	Vendor Name	*VEN-NAM	5	N		N	
	PO Entry Date	*PO-ENTDT	6	N		N	
	Due Date	*DUE-DATE	7	N		N	
	Promised	*PROMIS	8	N		N	
	PO Status	*PO-STAT	9	N		N	
	Buyer	*BUYER-ID	10	N		N	
	PO Order Value	*PO-VALUE	11	N		N	
	PO Line Sequence #	*LINE-SEQ	12	Y	02	Y	02
	Item Number	*ITM-NUM	13	Y		N	
	Amount Due	*AMT-DUE	14	N		N	
	Due Quantity	*DUE-QTY	15	N		Y	04
	Special Order Code	*SO-COD	16	N		N	
	Drop Ship Code	*DS-COD	17	N		N	
	Original/Last User ID	*ORG-USR	18	N		N	
	Number of Days Late	*DAYS-LATE	19	N		N	
	Send Overdue Purchase Orders	*SNDOVRDUE	20	N		N	
	Requisition Number	*REQ-NUM	21	N		N	

Recipients Assigned:	Recipient Code	Recipient Code Seq
MGRCD	*BUYER	1
	*USER	2
	*EMAIL	3
	*PUR-MGR	4
	*MANAGER	5
	*VENDOR	6
	*ORIG-USR	7
	*ION	8

Purchase Order Due Date Check (cont'd)　　　　　　　　　GN110

Alert Control Value:	Description	Value	Data Type	Required
MGACT	Days Before/After PO Due Date	8	Integer	N

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq
MGAFN	PO Inquiry	422	1
	Vendor Performance Inquiry	426	2

Reports Assigned:	Report Name	Description
MGARP	N/A	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
	G1090, Seq 1	none		
	G1091, Seq 2	none		

Alert Detail: MGADT	Recipients			Send Interval	Escalate
	Seq 1*VENDOR	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		I	N
	Seq 2*BUYER	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	Y

Alert Rules Assignment:	Rule	Values
MGRVD	*SNDOVRDUE	Y

Alert Rule Hierarchy:	Rule	Entity Type	Seq
MGRHI	*SNDOVRDUE	*PO	10
	*SNDOVRDUE	*VENDOR	20

Order Confirmation   GN112

Alert Source: OEA100

Data Codes Assigned:

Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL						
Company Number	*COMP-NBR	1	Y	02	Y	02
Order Number	*ORD-NUM	2	Y	01	Y	01
Order Generation	*ORD-GEN	3	N		N	
Order Type	*ORD-TYP	4	N		N	
Order Source Code	*ORD-SRC	5	N		N	
Customer Number	*CUST-NUM	6	N		N	
Customer Class	*CUST-CLS	7	N		N	
Customer Sub-Class	*CUST-SBCL	8	N		N	
Entry Date	*ENT-DATE	9	N		N	
Requested Ship Date	*RQSH-DAT	10	N		Y	04
Order Status	*ORD-STAT	11	N		N	
Company Name	*COMP-NAM	12	N		N	
Send Order Confirmation	*SNDORDCNF	13	N		Y	03
Customer Name	*CUST-NAM	14	N		N	
Off-line Order	*OFF-LINE	15	N		N	
Hold Code	*HLD-CODE	16	N		N	
Original User ID	*ORG-USR	17	N		N	
Ship-To Number	*SHIP-TO#	18	N		N	
Sales Rep 1	*REP-NUM1	19	N		N	
Sales Rep 2	*REP-NUM2	20	N		N	
Sales Rep 3	*REP-NUM3	21	N		N	
EDI Order Y/N	*EDI-FLAG	22	N		N	

Recipients Assigned:

	Recipient Code	Recipient Code Seq
MGRCD	*CUSTOMER	1
	*REP-NUM1	2
	*REP-NUM2	3
	*REP-NUM3	4
	*EMAIL	5

Order Confirmation (cont'd)   GN112

	*USER	6	
	*ION	7	

Alert Control Value:	**Description**	**Value**	**Data Type**	**Required**
MGACT	None			

Tasks/Functions Assigned:	**Task Name**	**Infor A+ Function**	**Seq**
MGAFN	Open Order Inquiry	386	1
	Customer Inquiry	251	2

Reports Assigned:	**Report Name**	**Description**	**Seq**
MGARP	ORDDET	Open Order Detail Report	1
	SHPADR	Order Ship-To Address Report	2

Alert Detail Filters: MGAFL	**Message ID & Seq #**	**Data Code**	**Operation**	**Value**
	G1100, Seq 1	none		
	G1101, Seq 2	none		

Alert Detail: MGADT	**Recipients**		**Send Interval**	**Escalate**
	Seq 1*CUSTOMER	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N	S	N
	Seq 2*REP-NUM1	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N	S	N

Alert Rules Assignment:	**Rule**	**Value**	
MGRVD	*SNDORDCNF	Y	*required

Alert Rule Hierarchy:	**Rule**	**Entity Type**	**Seq**
MGRHI	*SNDORDCNF	*ORDER	10
	*SNDORDCNF	*SHIP-TO	20
	*SNDORDCNF	*CUSTOMER	30

Order Shipping Confirmation   GN113

Alert Source: OEA100

Data Codes Assigned:

Desc	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
Company Number	*COMP-NBR	1	Y	02	Y	02
Order Number	*ORD-NUM	2	Y	01	Y	01
Order Generation	*ORD-GEN	3	Y	03	Y	03
Order Type	*ORD-TYP	4	N		N	
Order Source Code	*ORD-SRC	5	N		N	
Customer Number	*CUST-NUM	6	N		N	
Ship-To Number	*SHIP-TO#	7	N		N	
Customer Class	*CUST-CLS	8	N		N	
Customer Sub-Class	*CUST-SBCL	9	N		N	
Entry Date	*ENT-DATE	10	N		N	
Requested Ship Date	*RQSH-DAT	11	N		N	
Company Name	*COMP-NAM	12	N		N	
Send Shipping Confirmation	*SNDSHPCNF	13	N		N	
Customer Name	*CUST-NAM	14	N		N	
Off-line Order Type	*OE-OFFTP	15	N		N	
Original User ID	*ORIG-USR	16	N		N	
Sales Rep 1	*REP-NUM1	17	N		N	
Sales Rep 2	*REP-NUM2	18	N		N	
Sales Rep 3	*REP-NUM3	19	N		N	
EDI Order Y/N	*EDI-FLAG	20	N		N	
Ship Date	*SHIP-DAT	21	N		N	
Carrier Code	*CARRIER	22	N		N	
Warehouse Number	*WHS-NUM	23	N		N	

MGARL

Recipients Assigned:

	Recipient Code	Recipient Code Seq
	*CUSTOMER	1
	*REP-NUM1	2
	*REP-NUM2	3
	*REP-NUM3	4
	*EMAIL	5
	*USER	6

MGRCD

Order Shipping Confirmation (cont'd)   GN113

	*ORIG-USR	7	
	*ION	8	

Alert Control Value:	Description	Value	Data Type	Required
MGACT	None			

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq	
MGAFN	Order Inquiry	386	1	
	Customer Inquiry	251	2	

Reports Assigned:	Report Name	Description	Seq	
MGARP	SHPDET	Shipped Order Detail Report	1	
	SHPADR	Order Ship-To Address Report	2	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
	G1300, Seq 1	none		
	G1301, Seq 2	none		

Alert Detail: MGADT	Recipients			Send Interval	Escalate
	Seq 1*CUSTOMER	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N
	Seq 2*REP-NUM1	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N

Alert Rules Assignment:	Rule	Values		
MGRVD	*SNDSHPCNF	Y	*required	

Alert Rule Hierarchy:	Rule	Entity Type	Seq	
MGRHI	*SNDSHPCNF	*ORDER	10	
	*SNDSHPCNF	*SHIP-TO	20	
	*SNDSHPCNF	*CUSTOMER	30	

Request Ship Date Check   GN114

Alert Source: OE650

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	02	Y	02
	Order Number	*ORD-NUM	2	Y	01	Y	01
	Order Generation	*ORD-GEN	3	Y	03	Y	03
	Warehouse Number	*WHS-NUM	4	N		N	
	Customer Number	*CUST-NUM	5	N		N	
	Ship-To Number	*SHIP-TO#	6	N		N	
	Customer Name	*CUST-NAM	7	N		N	
	Entry Date	*ENT-DATE	8	N		N	
	Requested Ship Date	*RQSH-DAT	9	N		Y	04
	Original User ID	*ORG-USR	10	N		N	
	Sales Rep 1	*REP-NUM1	11	N		N	
	Sales Rep 2	*REP-NUM2	12	N		N	
	Sales Rep 3	*REP-NUM3	13	N		N	
	Order Status	*ORD-STAT	14	N		N	
	Order Value	*ORD-VAL	15	N		Y	05
	Hold Code	*HLD-CODE	16	N		N	
	Hold Code Description	*HLD-DESC	17	N		N	
	Number of Days Late	*DAYS-LATE	18	N		N	
	Send Not Shipped By Date	*SNDNOTSHP	19	N		N	

Recipients Assigned:	Recipient	Seq
MGRCD	*ORIG-USR	1
	*REP-NUM1	2
	*REP-NUM2	3
	*REP-NUM3	4
	*SALES-MGR	5
	*EMAIL	6
	*USER	7
	*CUSTOMER	8
	*ION	9

Request Ship Date Check (cont'd)   GN114

Alert Control Value:	Description	Value	Data Type	Required
	Days Before/After			
MGACT	Request Date	8	INT	N

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq	
MGAFN	Order Inquiry	386	1	
	Customer Inquiry	251	2	

Reports Assigned:	Report Name	Description	Seq	
MGARP	ORDDET	Open Order Detail Report	1	
	SHPADR	Order Ship-To Address Report	2	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
				WEB@WO
MGAFL	G1400, Seq 1	*ORG-USR	NE	RK

Alert Detail: MGADT	Recipients			Send Interval	Escalate
		Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N,			
	Seq 1*ORIG-USR	Send to ION = N		I	N

Alert Rules Assignment:	Rule	Values		
MGRVD	*SNDNOTSHP	Y	*required	

Alert Rule Hierarchy:	Rule	Entity Type	Seq	
MGRHI	*SNDNOTSHP	*ORDER	10	
	*SNDNOTSHP	*SHIP-TO	20	
	*SNDNOTSHP	*CUSTOMER	30	

A/R Aging Invoices More Than X Days Old   GN115

Alert Source: AR610

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL	Company Number	*COMP-NBR	1	Y	02	Y	04
	Invoice Number	*INVC-NUM	2	Y	01	Y	01
	Order Number	*ORD-NUM	3	N		N	
	Order Generation	*ORD-GEN	4	Y	03	N	
	A/R Customer Number	*AR-CUST	5	N		N	
	Customer Number	*CUST-NUM	6	N		N	
	Customer Name	*CUST-NAM	7	N		N	
	Invoice Date	*INVC-DAT	8	N		N	
	Invoice Value	*INVC-VAL	9	N		N	
	Invoice Balance Value	*INVC-BAL	10	N		Y	03
	Invoice Type	*INVC-TYP	11	N		N	
	A/R Terms	*AR-TERM	12	N		N	
	Aging Alert Value Period	*AGE-PER	13	N		Y	02
	Invoice Aging Date	*AGE-DATE	14	N		N	
	History Sequence Number	*HIST-SEQ	15	N		N	
	Sales Rep 1	*REP-NUM1	16	N		N	
	Sales Rep 2	*REP-NUM2	17	N		N	
	Sales Rep 3	*REP-NUM3	18	N		N	
	A/R Call Rep	*AR-REP	19	N		N	
	Last Payment Date	*LSTPAYDT	20	N		N	
	Unposted Cash	*UNPOSTAMT	21	N		N	
	Send Overdue Invoice Alerts?	*NTFINVOVR	22	N		Y	05

Recipients Assigned:		Recipient Code	Recipient Code Seq
MGRCD		*CUSTOMER	1
		*CRD-MGR	2
		*AR-REP	3
		*REP-NUM1	4
		*REP-NUM2	5
		*REP-NUM3	6

A/R Aging Invoices More Than X Days Old (cont'd)   GN115

		*USER	7		
		*EMAIL	8		
		*ION	9		

Alert Control Value:	**Description**	**Value**	**Data Type**	**Required**	**Seq**
	Period 1				
MGACT	Invoice Overdue Days	30	INT	N	1
	Period 2				
	Invoice Overdue Days	60	INT	N	2
	Period 3				
	Invoice Overdue Days	90	INT	N	3
	Period 4				
	Invoice Overdue Days	120	INT	N	4

Tasks/Functions Assigned:	**Task Name**	**Infor A+ Function**	**Seq**
MGAFN	Customer Inquiry	251	1
	Invoice Number Inquiry	892	2

Reports Assigned:	**Report Name**	**Description**
MGARP	N/A	

Alert Detail Filters: MGAFL	**Message ID & Seq #**	**Data Code**	**Operation**	**Value**
	G1500, Seq 1	none		

Alert Detail: MGADT	**Recipients**			**Send Interval**	**Escalate**
	Seq 1*CUSTOMER	Active = N, Consolidate = Y, Interrupt = N, Allow Dups = N, Send to ION = N		S	N

Alert Rules Assignment:	**Rule**	**Values**	**Seq**
MGRVD	*NTFINVOVR	Y	*required

Alert Rule Hierarchy:	**Rule**	**Entity Type**	**Seq**
MGRHI	*NTFINVOVR	*CUSTOMER	10

Serial Item Purchased   GN116

Alert Source: WM650C

Data Codes Assigned: MGARL	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
	Company Number	*COMP-NBR	1	N	0	N	0
	Order Number	*ORD-NUM	2	N	0	N	0
	Order Generation	*ORD-GEN	3	N	0	N	0
	Customer Number	*CUST-NUM	4	N	0	N	0
	Customer Name	*CUST-NAM	5	N	0	N	0
	Lot/Serial	*LOT-SRL	6	N	0	N	0
	Item Number	*ITM-NUM	7	N	0	N	0
	MFG Item Number	*MFG-NUM	8	N	0	N	0
	Item Description	*ITEM-DESC	9	N	0	N	0
	Vendor Number	*VEND-NUM	10	N	0	N	0
	Vendor Name	*VEN-NAM	11	N	0	N	0
	Address Line 1	*ADDR1	12	N	0	N	0
	Address Line 2	*ADDR2	13	N	0	N	0
	Address Line 3	*ADDR3	14	N	0	N	0
	City	*CITY	15	N	0	N	0
	State	*STATE	16	N	0	N	0
	Zip Code	*ZIP	17	N	0	N	0
	History Sequence	*HIST-SEQ	18	N	0	N	0

Recipients Assigned: MGRCD	Recipient Code	Recipient Code Seq
	*USER	1
	*VENDOR	2
	*ION	3

Alert Control Value: MGACT	Description	Value	Data Type	Required
	None			

Tasks/Functions Assigned: MGAFN	Task Name	Infor A+ Function
	None	

Serial Item Purchased (cont'd)   GN116

Reports Assigned:	Report Name	Description
MGARP	None	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
	GN116, Seq 1	none		

Alert Detail: MGADT	Recipients			Send Interval	Escalate
	Seq 1*VENDOR	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N		I	N

Alert Rules Assignment:	Rule	Value
MGRVD	none	

Alert Rule Hierarchy:	Rule	Entity Type	Seq
MGRHI	none		

Req/PO Due Date Change on S/O   GN117

Alert Source: POA100

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL							
	Company Number	*COMP-NBR	1	N	0	N	0
	Order Number	*ORD-NUM	2	N	0	N	0
	Order Generation Number	*ORD-GEN	3	N	0	N	0
	Special Order Seq Number	*SO-SEQ	4	N	0	N	0
	Item Number	*ITM-NUM	5	N	0	N	0
	Warehouse Number	*WHS-NUM	6	N	0	N	0
	Special Order Type	*SO-TYP	7	N	0	N	0
	Sales Rep Number 1	*REP-NUM1	8	N	0	N	0
	Sales Rep Number 2	*REP-NUM2	9	N	0	N	0
	Sales Rep Number 3	*REP-NUM3	10	N	0	N	0
	Customer Number	*CUST-NUM	11	N	0	N	0
	Customer Name	*CUST-NAM	12	N	0	N	0
	Ship-To Number	*SHIP-TO#	13	N	0	N	0
	Requested Ship Date	*RQSH-DAT	14	N	0	N	0
	Vendor Number	*VEND-NUM	15	N	0	N	0
	Vendor Name	*VEN-NAM	16	N	0	N	0
	Requisition Number	*REQ-NUM	17	N	0	N	0
	Purchase Order Number	*PO-NUM	18	N	0	N	0
	Line Sequence	*LINE-SEQ	19	N	0	N	0
	Due Date	*DUE-DATE	20	N	0	N	0
	Last User ID	*LAST-USR	21	N	0	N	0
	Original User ID	*ORG-USR	22	N	0	N	0

Recipients Assigned:		Recipient Code	Recipient Code Seq
MGRCD		*REP-NUM1	1
		*REP-NUM2	2
		*REP-NUM3	3
		*ORIG-USR	4
		*LAST-USR	5

Req/PO Due Date Change on S/O (cont'd)   GN117

	*SALES-MGR	6
	*MANAGER	7
	*USER	8
	*EMAIL	9
	*ION	10

Alert Control Value:	**Description**	**Value**	**Data Type**	**Required**
MGACT	None			

Tasks/Functions Assigned:	**Task Name**	**Infor A+ Function**
MGAFN	None	

Reports Assigned:	**Report Name**	**Description**
MGARP	None	

Alert Detail Filters: MGAFL	**Message ID & Seq #**	**Data Code**	**Operation**	**Value**
	G2010, Seq 1	*PO-NUM	EQ	[blank]
	G2010, Seq 2	*PO-NUM	EQ	[blank]
	G2010, Seq 3	*PO-NUM	EQ	[blank]
	G2020, Seq 1	*PO-NUM	NE	[blank]
	G2020, Seq 2	*PO-NUM	NE	[blank]
	G2020, Seq 3	*PO-NUM	NE	[blank]

Alert Detail: MGADT	**Recipients**			**Send Interval**	**Escalate**
	Seq 1 *REP-NUM1	Active = N, Consolidate = N, Interrupt = Y, Allow Dups = Y, Send to ION = N		I	N
	Seq 2 *LAST-USR	Active = N, Consolidate = N, Interrupt = Y, Allow Dups = Y, Send to ION = N		I	N
	Seq 3 *ORIG-USR	Active = N, Consolidate = N, Interrupt = Y, Allow Dups = Y, Send to ION = N		I	N

Req/PO Due Date Change on S/O (cont'd)   GN117

Seq 4*REP-NUM1	Active = N, Consolidate = N, Interrupt = Y, Allow Dups = Y, Send to ION = N		I	N
Seq 5*LAST-USR	Active = N, Consolidate = N, Interrupt = Y, Allow Dups = Y, Send to ION = N		I	N
Seq 6*ORIG-USR	Active = N, Consolidate = N, Interrupt = Y, Allow Dups = Y, Send to ION = N		I	N

Alert Rules Assignment:	**Rule**	**Value**
MGRVD	none	

Alert Rule Hierarchy:	**Rule**	**Entity Type**	**Seq**
MGRHI	none		

Consignment Gateway Transaction   GW001

Alert Source: GW715

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL							
	Owner	*OWNER	1	N	0	Y	1
	Company Number	*COMP-NBR	2	N	0	N	0
	Customer Number	*CUST-NUM	3	N	0	N	0
	Ship-To Number	*SHIP-TO#	4	N		N	0
	Warehouse Number	*WHS-NUM	5	N		N	0

Recipients Assigned:		Recipient Code	Recipient Code Seq
MGRCD		*WH-MGR	1
		*USER	3
		*CUSTOMER	4
		*SHIP-TO	5
		*ION	6

Alert Control Value:	Description	Value	Data Type	Required
MGACT	None			

Tasks/Functions Assigned:	Task Name	Infor A+ Function
MGAFN	None	

Reports Assigned:	Report Name	Description
MGARP	None	

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
	GW001, Seq 1	*WH-MGR	1	

Alert Detail: MGADT	Recipients		Send Interval	Escalate
	Seq 1*VENDOR	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N	I	N

Consignment Gateway Transaction (cont'd)   GW001

Alert Rule Hierarchy:	Entity Type	Rule ID	Seq
MGRHI	None		

Alert Rules Assignment:	Key	Value	
MGRVD	None		

SO/RQ Edit Error Messages   GW004

Alert Source: PO170C

Data Codes Assigned:	Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
MGARL							
	Vendor Number	*VEND-NUM	1	Y	1	N	0
	Requisition Number	*REQ-NUM	2	Y	2	N	0
	PO Number	*PO-NUM	3	Y	3	N	0
	Company Number	*COMP-NBR	4	Y	4	N	0
	Customer Number	*CUST-NUM	5	Y	5	N	0
	Order Number	*ORD-NUM	6	Y	6	N	0
	Special Order Type	*SO-TYP	7	Y	7	N	0
	Item Number	*ITM-NUM	8	Y	8	N	0
	Error Text	*ERR-TXT	9	Y	9	N	0
	Buyer	*BUYER-ID	10	Y	10	N	0
	Warehouse Number	*WHS-NUM	11	Y	11	N	0
	Vendor Name	*VEN-NAM	12	Y	12	N	0

Recipients Assigned:		Recipient Code	Recipient Code Seq
MGRCD		*BUYER	1
		*EMAIL	2
		*USER	3
		*ION	4

Alert Control Value:	Description	Value	Data Type	Required
MGACT	None			

Tasks/Functions Assigned:	Task Name	Infor A+ Function	Seq
MGAFN	Maintain Special Orders	418	1

Reports Assigned:	Report Name	Description
MGARP	None	

SO/RQ Edit Error Messages (cont'd)   GW004

Alert Detail Filters: MGAFL	Message ID & Seq #	Data Code	Operation	Value
	GW004, Seq 1	none		

Alert Detail: MGADT	Recipients			Send Interval	Escalate
	Seq 1*BUYER	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N		I	N

Alert Rules Assignment:	Rule	Value
MGRVD	None	

Alert Rule Hierarchy:	Rule	Entity Type	Seq
MGRHI	None		

Gateway Transaction Error | GW005

Alert Source: GW699

Data Codes Assigned:
MGARL

Description	Name	Data Code Seq	Search	Search Seq	Dup	Dup Seq
Error Message	*ERR-MSG	1	N	0	Y	1
Program	*PGM	2	N	0	Y	2
Time Stamp	*TIMESTAMP	3	N	0	Y	3
Time	*TIME	4	N	0	Y	4

Recipients Assigned:
MGRCD

	Recipient Code	Recipient Code Seq
	*USER	1
	*EMAIL	2
	*ION	3

Tasks/Functions Assigned:
MGAFN

Task Name	Infor A+ Function	Seq
None		

Reports Assigned:
MGARP

Report Name	Description
None	

Alert Detail:
MGADT

Message ID	Recipients	Seq
GW005	*USER	1

Alert Control Value:
MGACT

Description	Value	Data Type	Required
none			

Alert Detail Filters: MGAFL

Message ID & Seq #	Data Code	Operation	Value
GW005, Seq 1			

Gateway Transaction Error (cont'd)   GW005

Alert Detail: MGADT	**Recipients**			**Send Interval**	**Escalate**
	none	Active = N, Consolidate = N, Interrupt = N, Allow Dups = N, Send to ION = N		I	N

Alert Rules Assignment:	**Rule**	**Value**	
MGRVD	none		

Alert Rule Hierarchy:	**Rule**	**Entity Type**	**Seq**
MGRHI	none		

B

Query Alerts

Workflow Alerts happen as a result of detecting occurrences of certain business events or the existence of certain business conditions. This is achieved by placing alert logic in existing application programs or by creating queries over the database. A special alert, Alert QUERY, has been included as part of the Workflow Management module to aid with this custom method.

The query approach provides an easy way to create custom alerts triggered by any customer specific business condition. To create alerts from a query, the output of the query must be a physical file that includes certain data expected by the Workflow Alert Processor. The Workflow Alert Processor will analyze the query data, load it into the appropriate workflow files, and process it like any other alert; by first determining if an alert condition exists, and then by determining who should receive the alert message, what the content of the message is, how the message should be delivered, etc.

NOTE: Although generic Query Alert is a very powerful feature, it does not have the functions and reports options available to regular Alerts.

Workflow Alert Processor - Query Processing

When Workflow System Options (MENU MGFILE) **Include Query Alerts Processing** is set to Y, the first step in the Workflow Alert Processor cycle will be processing Query Alerts.

The Query Alert Processor program checks the **Query Alert Library** specified in Workflow System Options (MENU MGFILE) for any query output files. For each file found, it reads each line and creates a pending alert record in the Message Pending File (MGPND), and the line content becomes a **Data Code** value string. Processed files are deleted.

The alert specific program for Alert QUERY is called MGQUERY. It does not need to populate data values in the alert data string since it is already done. This program can be modified if there is a need for additional custom logic for alert generation conditions.

Creating Query Alerts

Step 1. Workflow System Options (MENU MGFILE)

- Set **Include Query Alerts Processing** field to Y.

- Enter the name of the **Query Alert Library** where Query Alert output files will be stored.

Step 2. Create Queries

- Create a query with a query tool. Regardless which query tool is used, the output file must have a structure expected by the Workflow Alert Processor (See "Query Output File Structure" on page B-3).

  - Assign a unique ***QRY-ID** data code for each query. This value can be used when applying filters through Alert Tailoring (MENU MGFILE).

  - Set the ***ENV-ID** data code to the current environment value.

  - The ***QRY-RCPT** data code can be either the User ID (as a recipient of the message) or left blank (recipient will be taken from Alert QUERY detail values defined through Alert Tailoring (MENU MGFILE).

  - The ***QRY-DTA01** through ***QRY-DTA32** data codes can be used for query data. Use as many as needed, leave the rest blank.

  - Place the output file into the **Query Alert Library** defined in Workflow System Options. (MENU MGFILE).

Step 3. Alert Message Maintenance (MENU MGFILE)

- Create the alert message through Message Maintenance (MENU MGFILE) by adding messages for the QUERY alert ID. You can create different messages for different queries or recipients and all query fields (data codes) can be used to create messages.

Step 4. Alert Tailoring (MENU MGFILE)

- Activate the QUERY alert.

- Add detail entries for the QUERY alert as you would for any other alert.

- Assign a recipient for the QUERY alert. The recipient list consists of *USER (enter User ID), *EMAIL (enter Email address) or *QRY-RCPT. If *QRY-RCPT is selected, the actual recipient will be taken from query data value (this value must be a valid User ID, otherwise the message created will be sent to the Workflow Administrator).

- Use *QRY-ID as a filter, in order to map the query to it's alert detail.

- Assign other fields, such as the selected time, escalation, consolidation, etc. the same way, as you would use them for any other alert.

Query Output File Structure

The output file, created by a query, should have the following fields. The fields in the output file are Data Codes for the QUERY alert and can be used in Alert Tailoring and Message Maintenance (MENU MGFILE).

Data Code Field	Description	Field Type
*QRY-ID	Unique Query Identifier	Required
*QRY-ENV	Environment ID	Required
*QRY-RCPT	User ID	Optional
*QRY-DTA01 … *QRY-DTA32	32 Data fields	Optional

Important

All these fields are Data Codes for Alert 'QUERY' and therefore can be used in Alert Detail Filters and Messages.

Workflow Programs

When the Workflow Alert Processor is started, it runs each of these processes and then waits at the bottom for the number of minutes specified in the Workflow Management system options. After that wait time has expired, the Workflow Alert Processor begins again at the top and runs each of the processes again.

Before running the Query Alert Process, the Workflow Alert Processor captures the date and time and saves it into a program variable. Each step will then only process data that was due to be processed on or before the captured process time. This prevents any one step from running for an excessive length of time if alerts are constantly being generated. Refer to the "Processes and Flows" on page 2-3 for program descriptions.

- Alert Broker Program (MG600)
  - Query Alert Processor (MG610)
  - Alert Processor (MG620)
    - Alert Program (MG[Alert ID])
    - Rules Processing (MG629)
    - Filter Processing (MG621)
    - Recipient Processing (MG622)
    - Duplicate Alert Check (MG623)
    - Report Processing (MG624)
    - Build Alert Search Files (MG625)
  - Message Processor
    - Application Mail Interface (MG701)
    - Mail Server Interface (MG702)
  - Escalation Processor (MG640)

Workflow Physical Files

With one exception, the physical files for Workflow Management are found in the APLUSbb library (where bb is the Base ID). If there are multiple file libraries attached to a single base, the message processing happens together for all the file libraries associated with that base.

Several of the files are filled with system data. As new releases and patch updates are processed, the installation/update programs will verify the completeness of the system data and will load records that are not found in the file already. If the data record already exists, it is bypassed.

File Name	Description	Has Data
MGACT	Alert Control Values File	Y
MGADT	Alert Detail File	Y
MGAFL	Alert Filters File	Y
MGAFN	Alert Function File	Y
MGAHD	Alert Header File	Y
MGARL	Alert Data Code File	Y
MGARP	Alert Report Code File	Y
MGAWC	Alert Wildcard File	N
MGEEX	Escalation Exceptions File	N
MGENV	Alert Environment File	N
MGFNC	Alert Function File	Y
MGLMN	Message Link Manager File	N
MGLNK	Message Link File	N
MGMDT	Message Detail File	Y
MGMHD	Message Header File	Y
MGMRA	Message Request Activity File	N
MGMRQ	Message Request File	N
MGMSX	Message Send Request Search File	N
MGNAM	Alert Data Code Master File	Y
MGPND	Message Pending File	Y

File Name	Description	Has Data
MGQFL	Workflow Query Alert List File	Y
MGQYD	Query Alert Data Format File	Y
MGRCD	Recipient Code File	Y
MGRCP	Recipient Codes File	Y
MGRDF	Workflow Rule Definition File	Y
MGRDT	Alert Report Detail File	N
MGRED	Workflow Rule Entity Definition File	Y
MGRHD	Message Report Header File	N
MGRHI	Workflow Rule Hierarchy File	N
MGRPT	Alert Report Master File	Y
MGRVD	Workflow Rule Value Defaults File	Y
MGSHD	Sent Message Header File	N
MGURP	User Alert Replacement File	N
MGUSR	Workflow User File	N
MG623A	Message Send Request Search Work File	N
MG630A	Message Request Consolidate Work File	N
MG630B	Message Request Header Work File	N
MG630C	Message Request Detail Work File	N
MG630F	Message Request Footer Work File	N
MG630H	Message Request Header Work File	N
MG630R	Message Request Report Work File	N
MGRAS *	Workflow Rule Assignments File * This file is in each environment file library	N

Glossary

G

Alert	An identified action, condition, or task associated with an Distribution A+ function. The Workflow Management module includes a General Release Pack of pre-defined alerts. You can purchase additional alert packs. Custom alerts can also be created for your company by Infor, an authorized business partner, or your MIS staff.
Alert Class	A two-character code that you can create and assign to alerts to group alerts with common properties.

Alert classes are:

- created through Alert Class Maintenance (MENU MGFILE)

- assigned to an alert through Alert Tailoring (MENU MGFILE)

Alert Message   The message that gets sent when an alert is triggered. The message text is defined through Message Maintenance (MENU MGFILE).

Data Code   A named data element used as a placeholder for message data, message filters, and criteria for selecting the message recipient.

Data codes are:

- created through Data Code Maintenance (MENU MGSYST)

- assigned to alerts through Alert Maintenance (MENU MGSYST)

- added to messages through Message Maintenance (MENU MGFILE)

- used to define filters for a message through Alert Tailoring (MENU MGFILE)

Entity   A code used to identify parties (such as a vendor or customer), documents (such as a Purchase Order or an Invoice, or control sets (such as a

company default value or a system default value) that apply to specific Workflow Management rules.

Entities are:

- defined through Entity Maintenance (MENU MGSYST)
- used to create rules through Rule Maintenance (MENU MGSYST)

Escalation   A Workflow Management feature that sends a copy of an alert message to the original recipient's manager, or some other designated user ID, if the message is not acknowledged within a specified time period.

If a recipient does not acknowledge a message through Application Mail in the time specified in the *Escalation Factor* field on the Alert Detail Screen in Alert Tailoring (MENU MGFILE), the message will be forwarded to the escalation recipient specified for that user in the *Escalate to User ID* field on the User Workflow Management Options Screen in Register A+ User IDs (MENU XACFIG). If a message is sent to an e-mail address, escalation will cease.

Filter   A condition or set of conditions that must be true before an alert message will be sent. The ability to use filters allows you to generate different messages for the same alert, depending on conditions within the application, or to specify that a message should be sent only under certain conditions. For example, you can specify that the credit manager should be notified of orders on credit hold only if the value of the order is more than $2500. When an order goes on credit hold, an alert will be generated. No message will be sent, however, if the value of the order is less than or equal to $2500.

You can also set up an alert to send the same message to different recipients under different conditions. For example, if an alert triggers a message whenever an order is put on hold, you can specify that if the order is on credit hold, the message should be sent to the credit manager, but if the order is on warehouse management hold, the message should be sent to the warehouse manager.

Function Number   A number that identifies a menu option in Distribution A+. Function numbers are used in messages as placeholders for a hyperlink to an Distribution A+ function that will be included in the alert message when it is sent.

Function numbers are:

- defined through Function Number Maintenance (MENU MGSYST)
- assigned to an alert through Alert Maintenance (MENU MGSYST)
- added to a message through Message Maintenance (MENU MGFILE)

| Hierarchy | A hierarchy of entities for a specific rule. A rule hierarchy allows a rule to be defined on multiple levels. The entities in each sequence of the hierarchy define where the data will be obtained from to generate the rule. |

TABLE GL-1.

Example:
A rule is set up to determine if an order confirmation message should be sent. The Workflow Alert Processor will check each entity listed on the Rules Hierarchy Screen () in the specified order for an entry in the *Value* field as defined through Workflow Rule Assignments (MENU MGFILE - Option 4). If a value is found, that value will be used to populate the rule data code. If a value is not found, the default value will be used. The rule data code is used as a filter value in the alert detail.

| Query Alert | An alert generated from the results of an AS/400 query. The data output from the query is stored in an output file in the query alert library identified through Workflow System Options Maintenance (MENU MGFILE - Option 1). The Workflow Alert Processor looks in the query alert library for this data. If there is data, an alert is generated with a message containing the data. |

| Recipient Code | A code that identifies the person or persons who will receive a message. Recipient codes are: |

- created through Recipient Code Maintenance (MENU MGSYST)

- assigned to an alert through Alert Maintenance (MENU MGSYST)

- assigned to an alert message through Alert Tailoring (MENU MGFILE)

| Report Code | A code that identifies a group of data defined in Workflow Management. Report codes are used in messages as placeholders for a report that will be included in the alert message when it is sent. |

Report codes are:

- created through Report Code Maintenance (MENU MGSYST)

- assigned to an alert through Alert Maintenance (MENU MGSYST)

- assigned to an alert message through Message Maintenance (MENU MGFILE)

Rule	A special type of data code whose value is derived by the Workflow Alert Processor using a set of predefined conditions and placed in the data string, rather than being taken directly from the application.

Workflow rules provide for alerts that require a more complex process for determining if a message should be sent when an alert is triggered, or when a large number of recipients are involved.

Example:

Your distribution company has 1,000 customers. One-quarter of those customers want to receive a message whenever an order goes on backorder, the rest do not want to be informed. You could use a filter that checks the customer number to determine when the message should be sent, but this would require setting up filters for 250 individual customer numbers. Instead, you can set up a single rule that provides the same result.

Rules can also be designed to handle exception processing, such as a customer who wants to be informed only when a specific type of order goes on backorder, and not for the majority of that customer's orders.

Rules are:

- created through Rule Maintenance (MENU MGSYST)
- assigned to an alert through Alert Maintenance (MENU MGSYST)

Workflow Alert Processor	A batch process that receives input for alerts and generates the messages. This engine extracts the necessary data for the alert message and determines:

- which message to send
- to whom it will be sent
- how to send it

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