



Infor Distribution A+

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 iBusiness (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 MGFFILE).

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 iBusiness (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 iBusiness (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 iBusiness (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 iBusiness (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 iBusiness (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 for more information.

Application Mail

Registered Distribution iBusiness (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 iBusiness (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 iBusiness (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 iBusiness (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 MGFIL), 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 iBusiness (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.

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 iBusiness (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 iBusiness (A+). Function numbers are used in messages as placeholders for a hyperlink to an Distribution iBusiness (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 caret (^). 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 iBusiness (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 iBusiness (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 iBusiness (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 iBusiness (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 iBusiness (A+) event happens, it will trigger publishing of the Distribution iBusiness (A+) custom **SyncAplusWorkflow BOD**, that in turn triggers an ION Activity Deck alert, task, or notification.

The Distribution iBusiness (A+) User ID is the alert recipient based on Recipient Code by storing it as an element of **SyncAplusWorkflow BOD**. This Distribution iBusiness (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 iBusiness (A+) workflow recipient logic, the Recipient Code ***ION** is used as a generic recipient in Distribution iBusiness (A+)Alert Tailoring (MENU MGFILE) detail instances. The Recipient Code ***ION** exists for each of the Distribution iBusiness (A+) Alerts so it can be used when creating new instances of any Distribution iBusiness (A+) Alerts.

When an Distribution iBusiness (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.