



# Objectives

## Upon completion of this unit, you will be able to:

- Describe the notification enhancements to IBM Tivoli Identity Manager 4.6.
- Describe approval nodes for IBM Tivoli Identity Manager 4.6.
- Describe request for information (RFI) node enhancements for IBM Tivoli Identity Manager 4.6.
- Describe work order enhancements for IBM Tivoli Identity Manager 4.6.

## Workflow Changes in IBM Tivoli Identity Manager 4.6

- **The following changes have been made to IBM Tivoli Identity Manager 4.6:**

- Notification post office feature to aggregate notification e-mails
- Additional workflow notification templates and types
- Customization options for e-mail, to-do items, RFIs, work orders, and approvals
- Dynamic content support to extend the XML templates for manual activities
  - Mix static and dynamic content for activities such as RFIs, approvals, and work order (4.5 was only ITIM specific XML tags)
  - Use JavaScript and dynamic content tags to add dynamic content to notifications and action text
  - Customize standard string based resource bundles to customize label definitions for workflow directives, action text and e-mail notifications
- Improved workflow distribution
  - Distributing workflow process execution to cluster members
  - Using shared workflow queue to dispatch work to cluster members

# Notification Post Office

- **The post office reduces the number of e-mail notifications by collecting similar notifications and combining them into one e-mail.**
  - The post office feature is enabled for manual activities that generate notifications.
  - When the *use group e-mail topic* check box is selected, the post office will intercept e-mail notifications for an individual and hold them for a specified interval.
  - When the interval expires, the post office will aggregate all notifications that have the same group e-mail topic into one e-mail for each recipient.

# Post Office Template

- **The default template will produce the following aggregate e-mail:**

Subject: You have 3 work items requiring your attention.

Body: You have 3 work items requiring your attention.

Here are the email subjects:

This is subject 1

This is subject 2

This is subject 3

Here are the email message bodies:

This is the text body 1

This is the text body 2

This is the text body 3

- **The text is stored in the Labels.properties file.**
- **The default template can be customized using any valid dynamic content tag and JavaScript.**

# Custom Post Office Tags

- **Post office defines a set of custom tags to simplify the creation of the aggregate messages:**

- `<POGetAllBodies/>`
- `<POGetAllSubjects/>`
- `<POGetEmailAddress/>`
- `<POGetNumOfEmails/>`

- **Sample post office template:**

```
<head>  
<title>You have <POGetNumOfEmails/> work items  
  requiring your attention.  
</title>  
</head>
```

# E-mail Notification

- E-mail notifications now include the ability to send both text and XHTML together.

**GENERAL**   **AGGREGATE MESSAGE**

**Subject:**

**Text Body:**

**XHTML Body:**

# Post Office Test Configuration

- **The post office template can be tested.**
  - Open the post office system configuration page.
  - Modify the post office template test configuration file.
  - Click test.
- **The post office test configuration key and value pairs are stored in the enRole.properties file.**

```
#####
## Post Office Template Test Configuration #####
#####
# These are the contents of the emails that will be used
# when the "test" button is used on the Post Office
# configuration page.
These 3 emails will be used as the
# content to which the template will be applied.
enrole.postoffice.test.subject1=This is subject 1
enrole.postoffice.test.textbody1=This is the text body 1
enrole.postoffice.test.xhtmlbody1=This is the xhtml body 1
enrole.postoffice.test.subject2=This is subject 2
enrole.postoffice.test.textbody2=This is the text body 2
enrole.postoffice.test.xhtmlbody2=This is the xhtml body 2
enrole.postoffice.test.subject3=This is subject 3
enrole.postoffice.test.textbody3=This is the text body 3
enrole.postoffice.test.xhtmlbody3=This is the xhtml body 3
# The topic to use for the test emails above
enrole.postoffice.test.topic=topic1
# The locale to use for the test emails above
enrole.postoffice.test.locale=en_US
```



## Notification Changes in IBM Tivoli Identity Manager 4.6

- **All manual activity types have their own notification tabs.**
  - This functionality existed in 4.5 but has been extended for 4.6 to include approvals and RFIs.
- **New default notification templates have been added as well as the ability to override the workflow activity with:**
  - Custom notification templates
  - Custom system notifications
- **System notifications can now be turned off from the graphical user interface.**

# Notification Types

- System notifications that do not require user action
- Manual activity notifications that require user action

# System Notifications

- **System notifications are activated by selecting the enabled check box:**

- New account template
- New password template
- Change account template
- Restore account template
- Suspend account template
- Deprovision account template
- Activity timeout template
- Process timeout template
- Process completion template

# Manual Activity Notifications

- Any manual activity notification can be *enabled* or *disabled* by leaving the subject empty:
  - To-do reminders template
  - Manual activity approval template
  - Manual activity RFI template
  - Manual activity work order template
  - Compliance template

# Dynamic Content Tags

## • Default Dynamic Content Tags:

- When a JavaScript expression is encountered, the text between the <JS> tags will be evaluated as JavaScript.

– <JS>insert *JavaScript code here*</JS>

- Example code:

```
An account request has been initiated for  
<JS>process.requesteeName: </JS>
```

- Example output:

```
An account request has been initiated for  
John Smith
```

- A replace tag can be used for internationalized message replacement.
- Inline variables such as \$TITLE allow images to be localized and the login link to function properly.
- Parameters can contain plain text or dynamic content tags.
  - <RE>insert *plain text or JavaScript here*</RE>

## • Manual Activity Dynamic Content Tags:

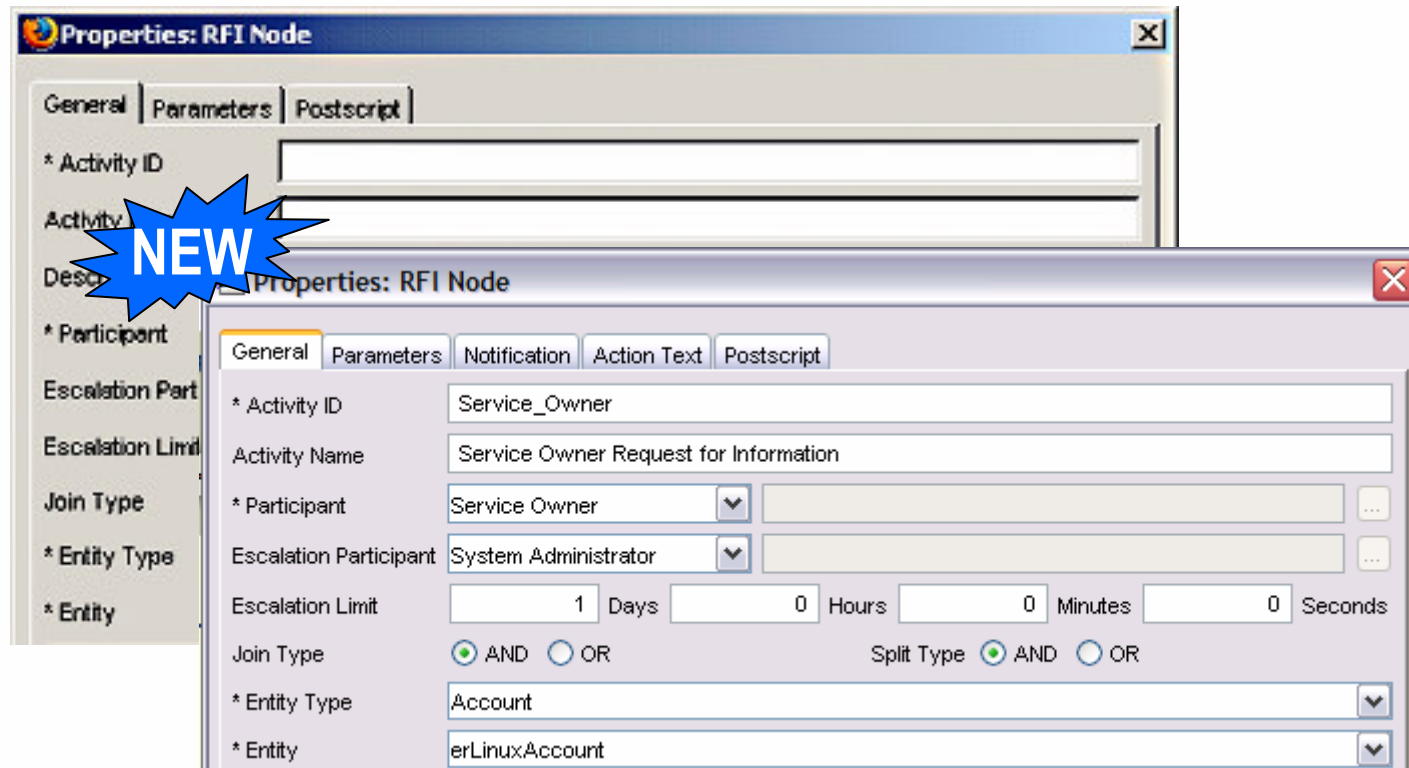
- Using the ID tag will insert the identification number of the activity.
- The resource bundle tag has been deprecated and will not be supported in future releases.

# Changes to RFIs, Approvals, and Work Orders

- **New tabs have been added to the RFI and approvals workflow items.**
  - RFIs can be customized to include justifications, custom e-mail notifications, and custom approval or rejection codes.
  - Approvals can be customized with more appropriate action statements, custom e-mail notifications, and custom titles for to-do items.

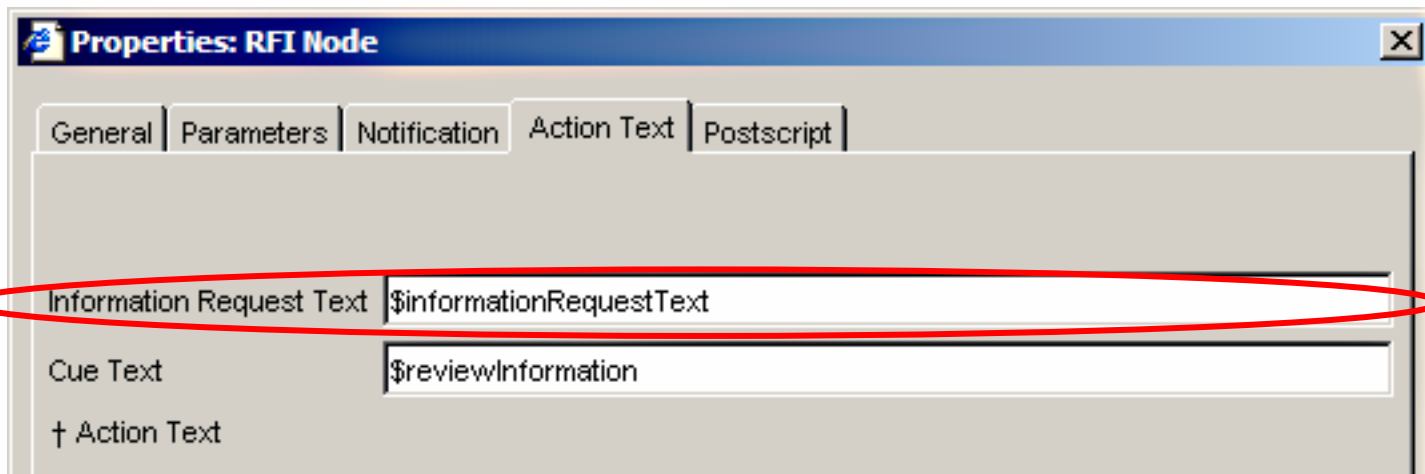
# Then and Now (RFI Node Enhancements)

- Two new tabs have been added to RFI node properties
  - Notification
  - Action text



# RFI Node Enhancements

- The attributes for RFI nodes can be customized to provide more appropriate instruction or information to workflow participants.



Properties: RFI Node

General Parameters Notification Action Text Postscript

Information Request Text \$informationRequestText

Cue Text \$reviewInformation

+ Action Text

.../itim/data/CustomLabels.properties

```
# Workflow Designer
reqApprovalCue=Approve/Reject the Request
reviewInformation=Review Information
workOrderKey=Complete WorkOrder
informationRequestText=Provide Information
```



# Then and Now (Approval Node Enhancements)

- Two new tabs have been added to approval node properties
  - Notification
  - Action text

**NEW**

**Properties: Approval Node**

General | Postscript

\* Activity ID

Activity Name

Description

\* Participant

Escalation Participant

Escalation Limit

Join Type

Entity Type

Input Parameters

ID

ID	Type	Relevant Data ID
entity	Account	entity

General | Notification | Action Text | Postscript

\* Activity ID

Activity Name

\* Participant

Escalation Participant

Escalation Limit

Join Type

Split Type

Entity Type

Input Parameters

Search Relevant Data

ID	Type	Relevant Data ID
entity	Account	entity

# Approval Node Enhancements

- The attributes for approval nodes can be customized to provide more appropriate instruction or information to workflow participants.

The screenshot shows a dialog box titled "Properties: Approval Node" with four tabs: "General", "Notification", "Action Text", and "Postsript". The "Action Text" tab is selected. It contains several input fields:
 

- \* Approval Code: AA
- \* Rejection Code: AR
- Cue Text: \$reqApprovalCue (highlighted with a red oval)
- † Action Text: (empty)

.../itim/data/CustomLabels.properties

```
# Workflow Designer
reqApprovalCue=Approve/Reject the Request
reviewInformation=Review Information
workOrderKey=Complete WorkOrder
informationRequestText=Provide Information
```

## Customized E-mail Action Text

- Administrators can choose the default notification template or customize an activity title.

You have 2 work items requiring your attention.

Here are the email subjects:

Pending workflow action: Case 827827202010.82938376617

Pending workflow action: Case 821751652635.82763398962

Description: Owner of this account is required to recertify

Requestee:

Subject: hhill

Request Initiated: Sat Apr 02 23:16:07 BST 2005

Process Reference: 82734787276756

Requested by process:

Process ID: 8273478722342

Process Name:

Description: Process: ifc...

Requester: o

Requestee: n

Subject: na

Authorize or deny access to the TAM Service

You are requested to authorize a TAM notification.

Activity ID:02383878487283.17262940783762364

Request for: Dina Torres

ITIM base url: http://ITIMServer:80

custom  
notification

## Other Customizations

- **The default titles, to-do appearance, and e-mail templates can be customized by editing the CustomLabels.properties file.**
  - Action text can now be added to customize to-do list descriptions and details.
  - Cue text can now be added to customize to-do list instructions.
- **Approval and rejection code translation can provide more meaningful workflow and audit information for workflow requests.**

# Work Order Enhancements

Properties: Work Order Node

General Notification Postscript

Use Default Template

† Subject

```
<RE key="pending_workitem_subject"><PARM><ID /></PARM></RE>
```

Text XHTML

† Message Body

```
<RE key="wiWorkOrder_message" />
```

Use Group Email Topic

Group Email Topic

Notify\_Supervisor

Ok Cancel

\* Required Property † Accepts text template

Java Applet Window

- Use the default e-mail work order notification template or customize the template (system wide or within the workflow).
- Use CustomLabel.properties to override the default settings.
- Select *Use Group Email Topic* to aggregate e-mails.

# Summary

## You should now be able to:

- Describe the notification enhancements to IBM Tivoli Identity Manager 4.6.
- Describe approval nodes for IBM Tivoli Identity Manager 4.6.
- Describe RFI node enhancements for IBM Tivoli Identity Manager 4.6.
- Describe work order enhancements for IBM Tivoli Identity Manager 4.6.

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