
Oracle Workflow

Oracle Apps Practice

Australia | Canada | China | France | India | New Zealand | Singapore | Switzerland | UAE | UK | USA

CONFIDENTIALITY STATEMENT

© 2009 Keane. The concepts and methodologies contained herein are proprietary to Keane Inc. Duplication, reproduction or disclosure of information in this document without the express written permission of Keane is prohibited.

Keane

Agenda

- **What is Workflow?**
- **What does Workflow do?**
- **WorkFlow Architecture**
- **Major Components of Workflow**
- **Creating a Workflow**
- **Modifying a Workflow**

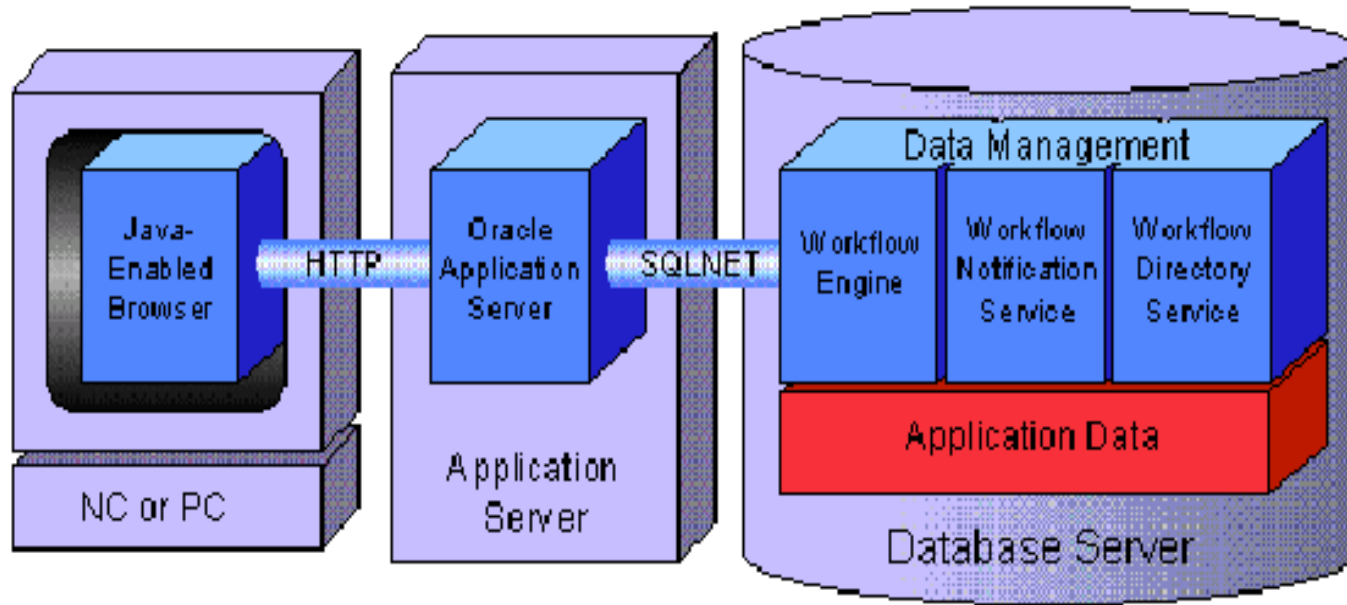
What is WorkFlow?

- **Workflow is a complete workflow management system that supports business process definition and automation**
- **Quasi-technical tool**

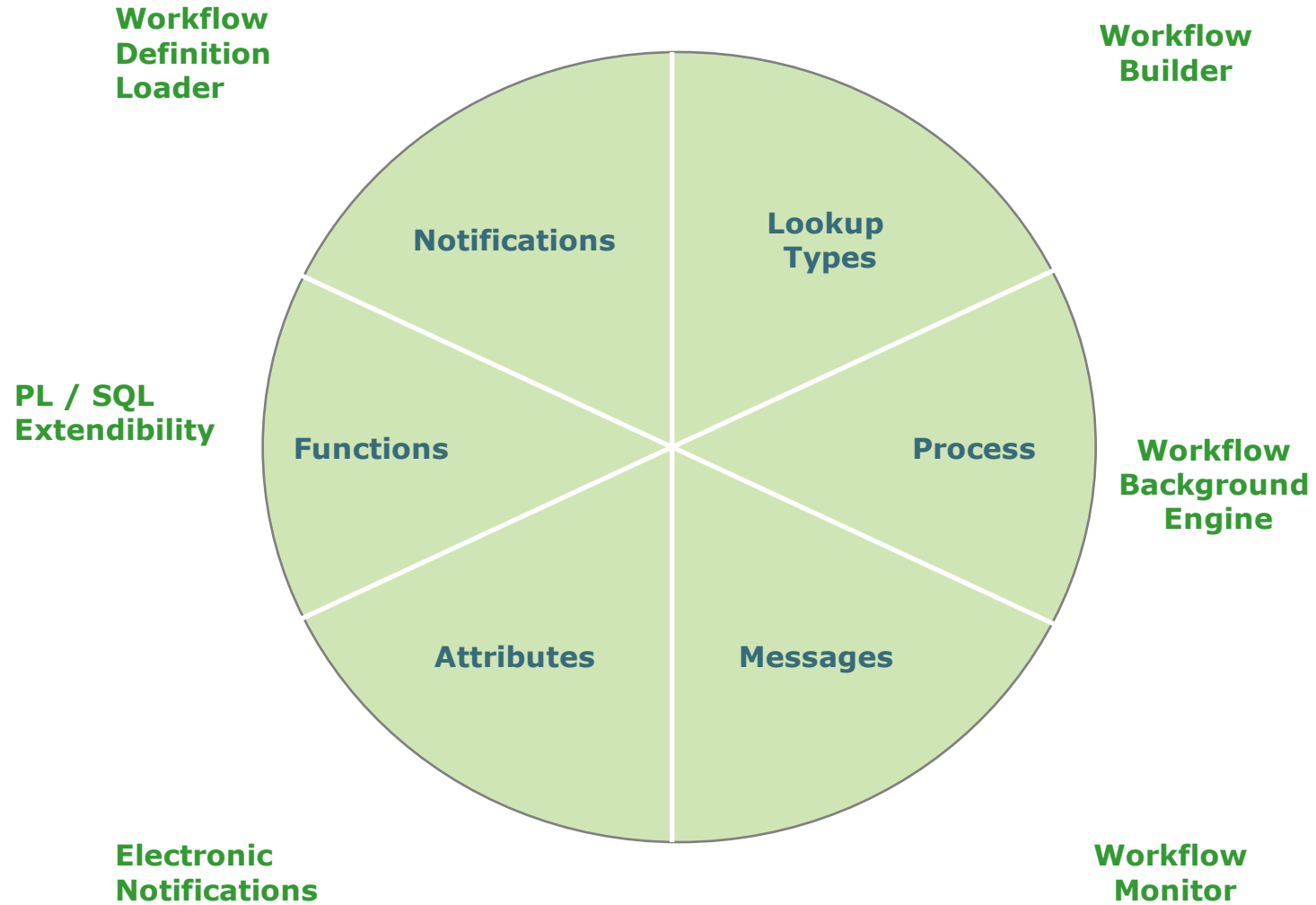
What does Workflow do?

- **Routes Information**
- **Defines and Modifies Business Rules**
- **Delivers Electronic Notifications**
- **Integrates Systems**

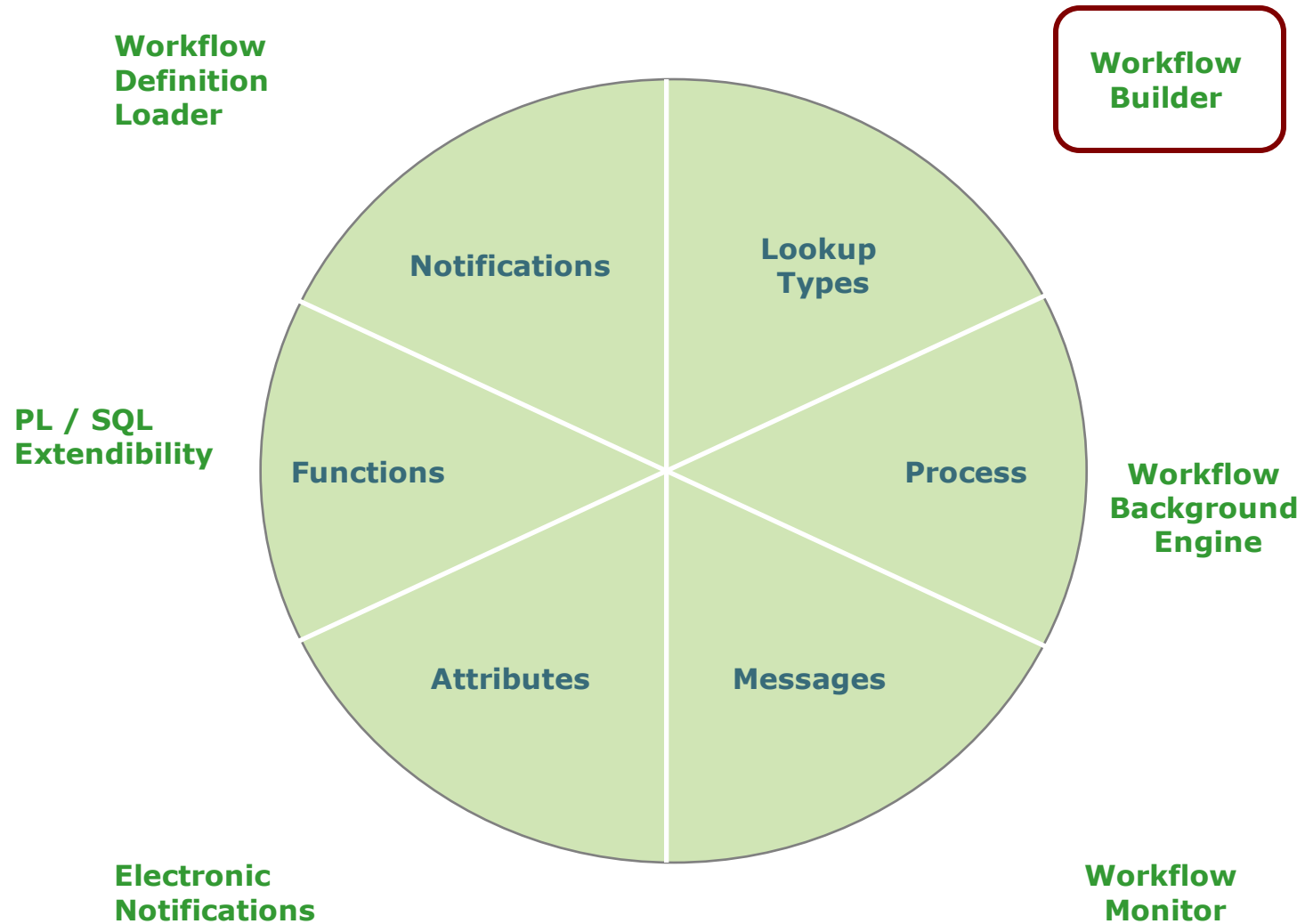
Workflow Architecture



Major Components of Workflow



Major Components of Workflow



Workflow Builder

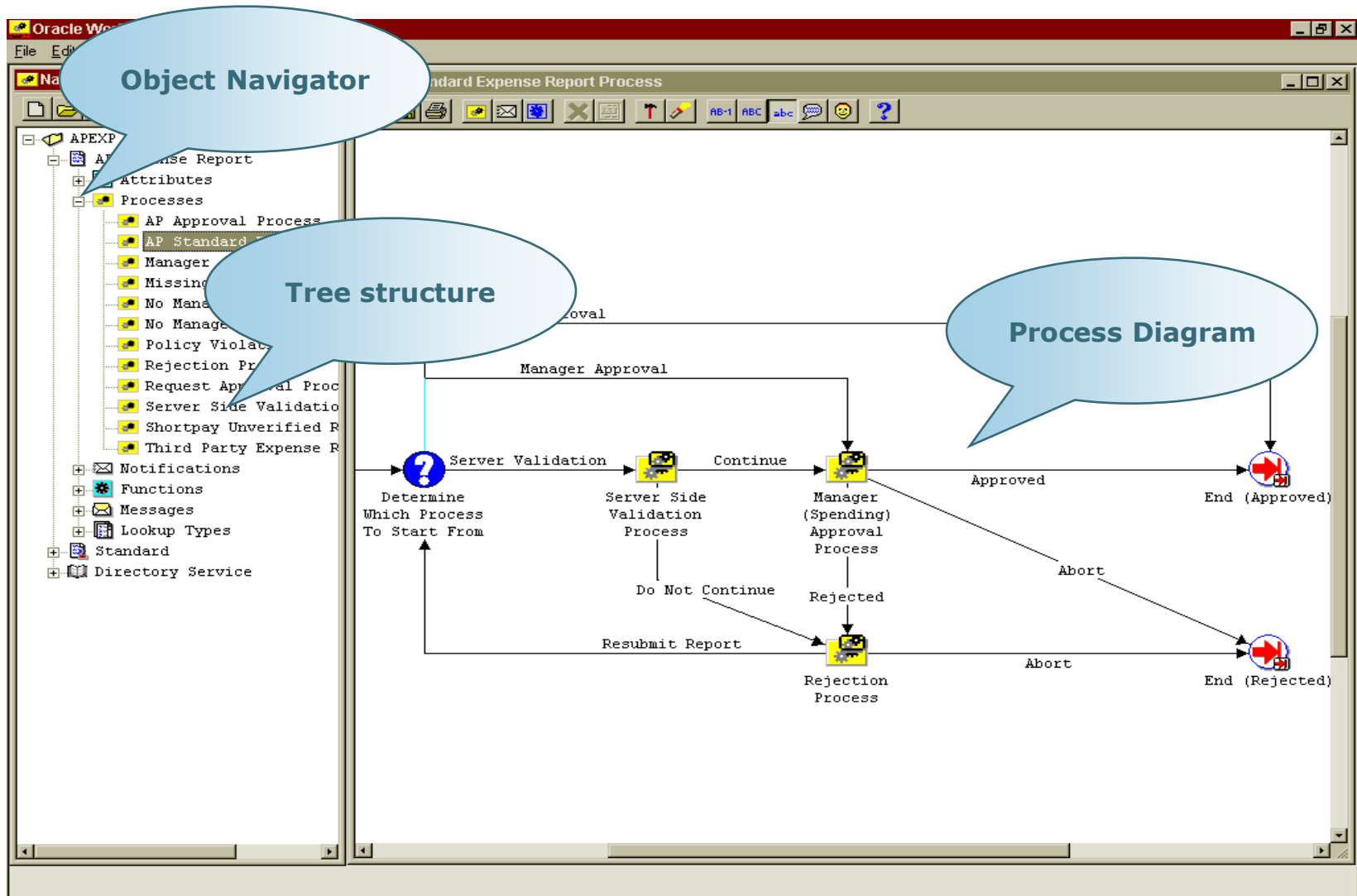
The Workflow Builder is where the user:

- Creates, views and modifies business process definitions graphically
- Defines the activities and underlying components of business processes
- Graphically creates a process diagram by assembling the activities in the process window

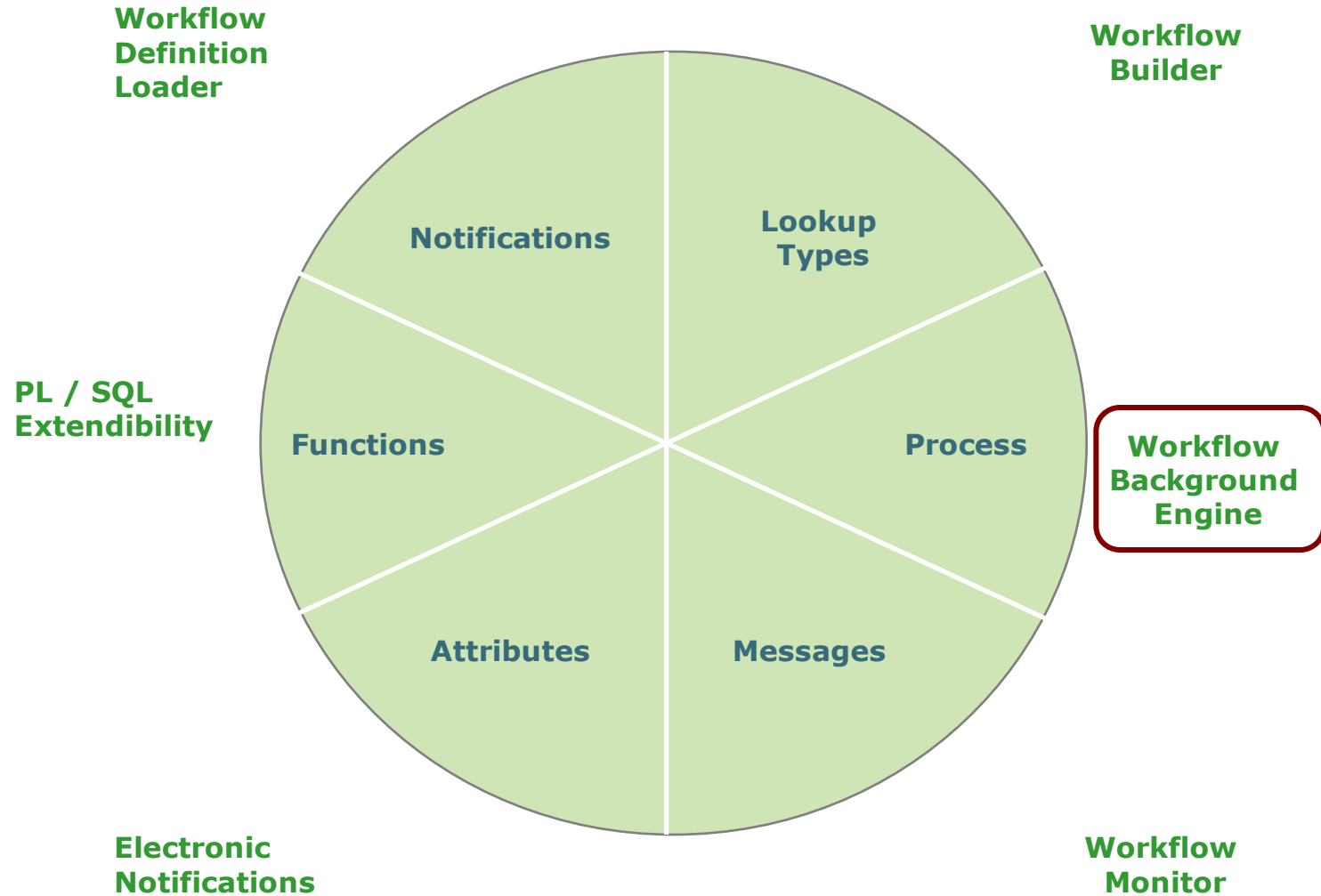
Workflow Builder allows the user to save a process diagram to a database or a flat file

The Workflow Builder consists of:

- Object Navigator
- Tree structure
- Process Diagram



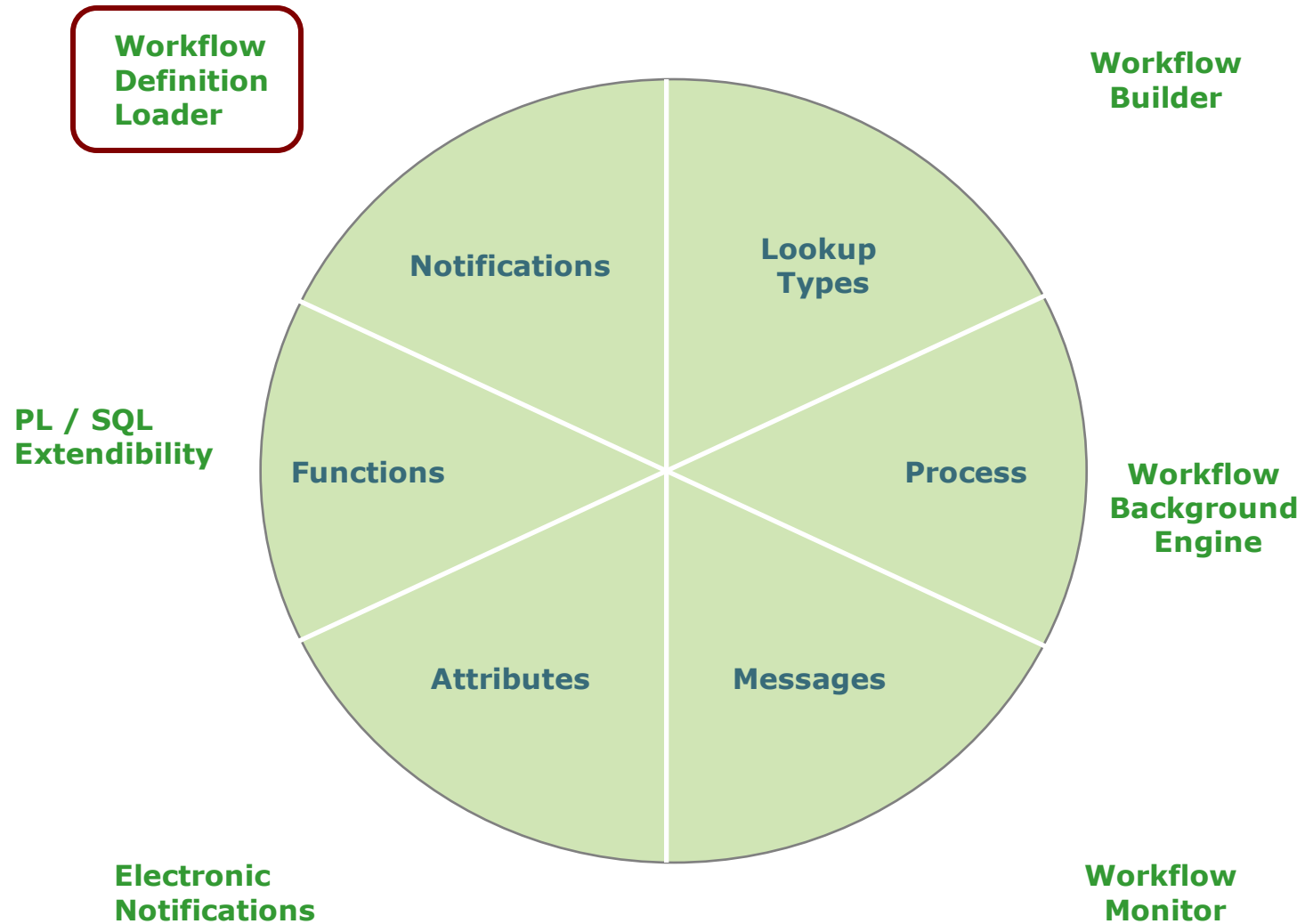
Major Components of Workflow



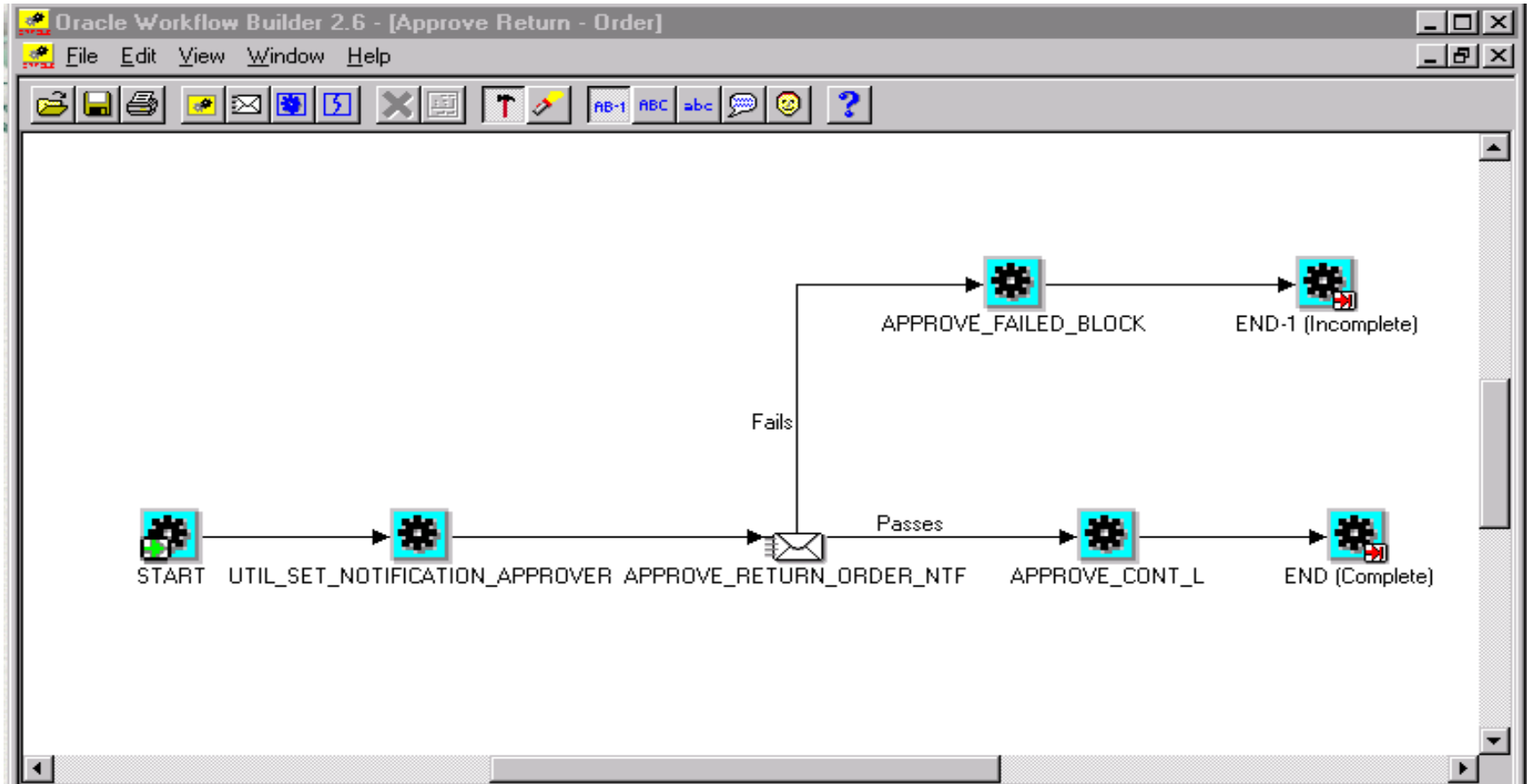
Oracle Workflow Engine

- **Embedded in the Oracle8/8i server**
- **Monitors workflow statuses**
- **Coordinates the routing of activities for a process**
- **Contains all packages and procedures used in Workflow**

Major Components of Workflow



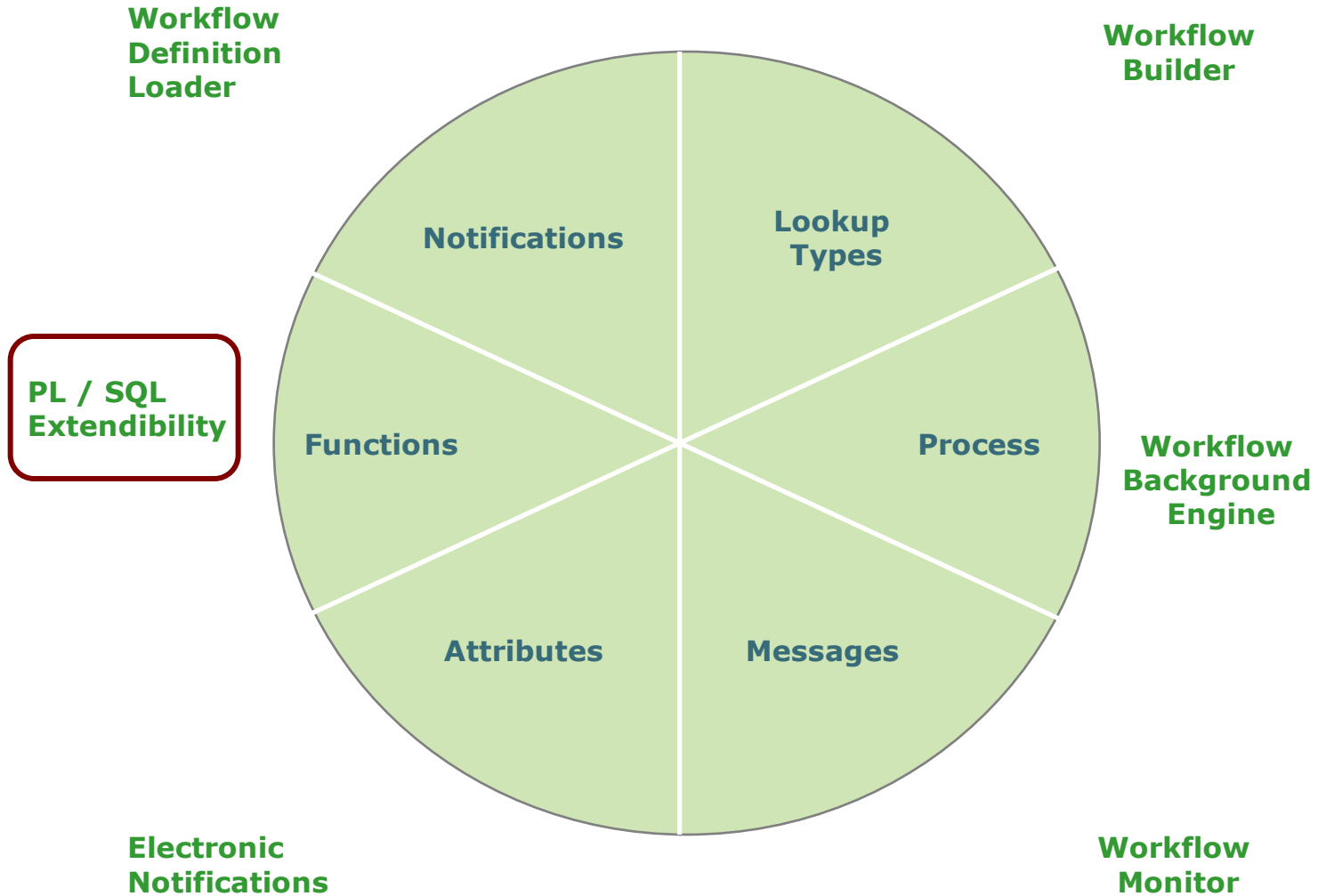
WorkFlow Definitions Loader



WorkFlow Definitions Loader

- **A utility program that allows the user to transfer process definitions between a database and a flat file**
- **You can use it to move workflow definitions from a development to a production database, or to apply upgrades to existing definitions.**

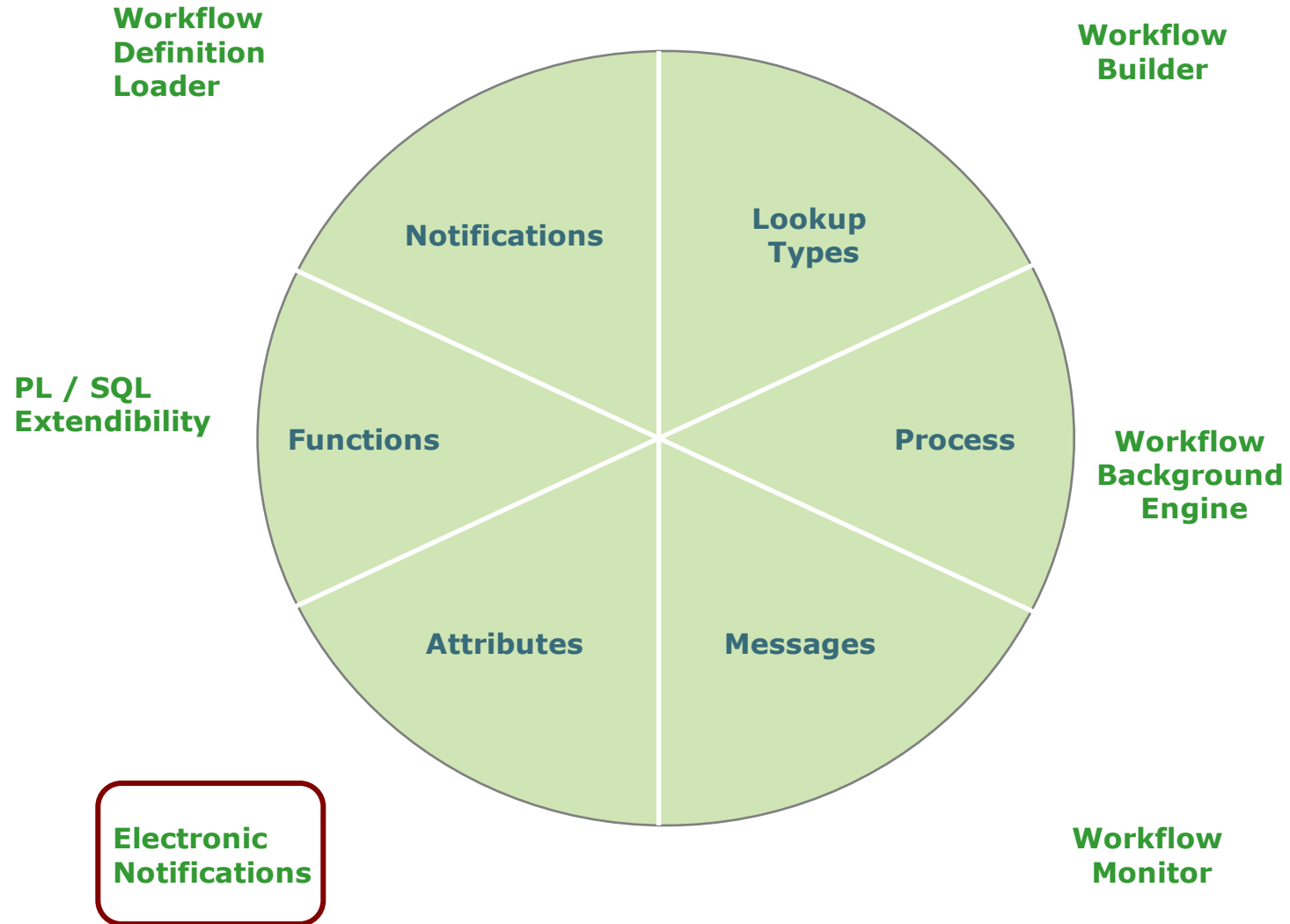
Major Components of Workflow



PL/SQL Extensibility

- **Oracle Workflow lets you include your own PL/SQL procedures or external functions as activities in your workflows.**
- **Workflow has specific standard API format for writing the procedures and functions for workflow.**

Major Components of Workflow



Electronic Notifications

- **Receive and respond to notifications using e-mail or a Web browser**
- **With available Web functionality, all users with access to the Internet can be included in the workflow process**
- **Access to Notification Worklist from Oracle Applications**

Notification WorkList

Select	Priority	Type	Subject	Sent	Due
<input checked="" type="checkbox"/>		Expense	Expense W12346, OAUG San Diego for 7,000.00 requires your approval	13-APR-99	13-APR-99
<input type="checkbox"/>		Requisition	Requisition R677493, Office Suplies for 98.00 requires your approval	13-APR-99	13-APR-99
<input type="checkbox"/>		Requisition	Requisition R76594, Marketing Ads for 6,000.00 requires your approval	13-APR-99	13-APR-99
<input checked="" type="checkbox"/>		Expense	Expense W98356, Parking for 10.00 requires your approval	13-APR-99	13-APR-99
<input checked="" type="checkbox"/>		Expense	Expense R190756, Dell Laptop for 2,300.00 requires your approval	13-APR-99	13-APR-99
<input type="checkbox"/>		Requisition	Requisition R143456, Office Desk for 4,500.00 requires your approval	13-APR-99	13-APR-99
<input type="checkbox"/>		Documents	Please Review Document Send Document	13-APR-99	

Reassign... Close

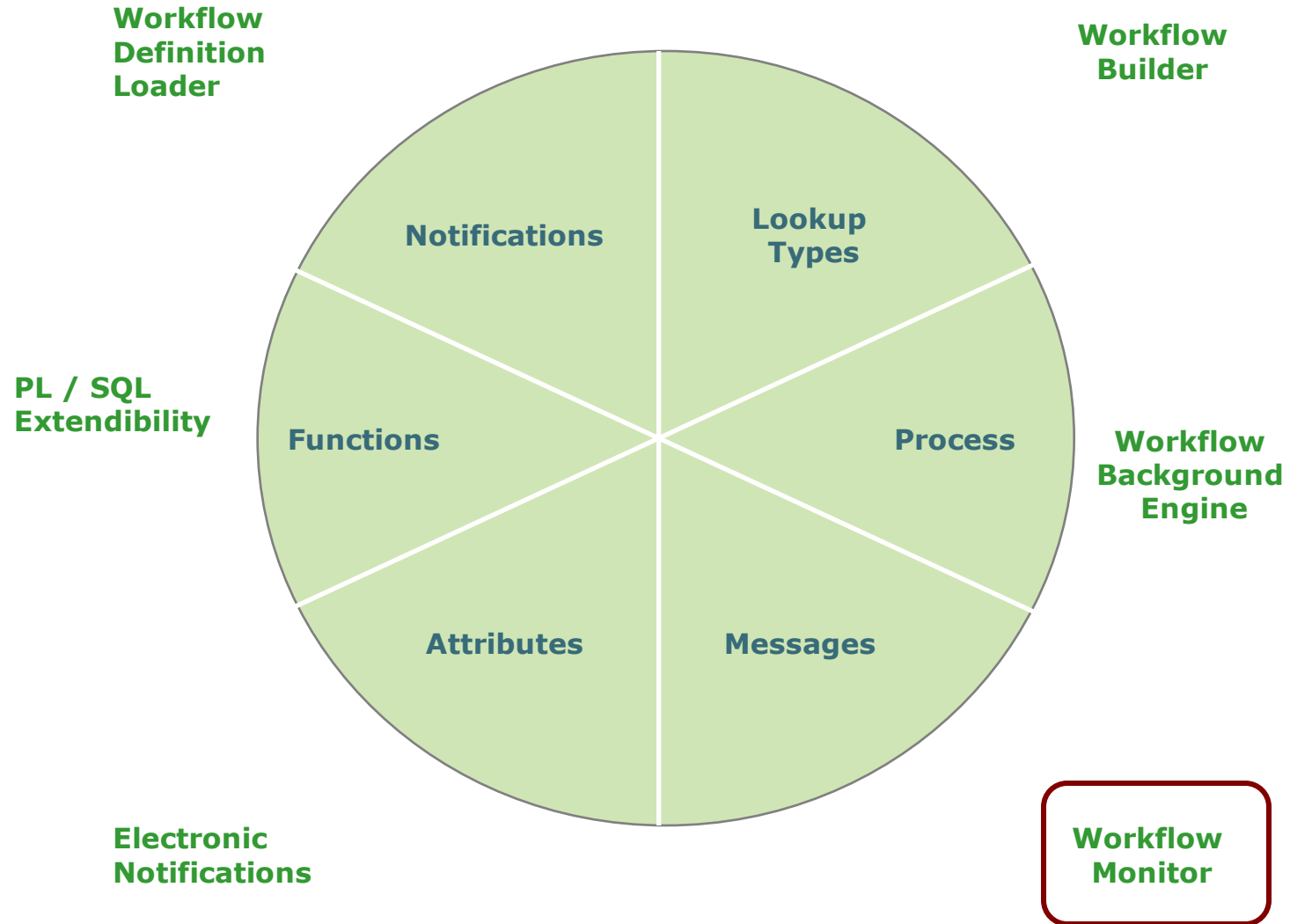
Document: Done

Electronic Notifications

Notifications Process Flow :

- Workflow Engine stops
- Notification System responds to trigger by sending note
- Response (if applicable) is validated
- Notification System notifies Workflow Engine to continue process

Major Components of Workflow



Workflow Monitor

Features

- Graphically depicts the status of a workflow process
- Displays detailed information about individual activities

WorkFlow Monitor

The screenshot displays the Oracle WorkFlow Monitor interface within a Netscape browser window titled "WFDEMO R677493 - Netscape". The interface includes a menu bar (File, Edit, View, Go, Communicator, Help) and a toolbar with icons for "View Diagram", a search light, a yellow arrow, and a question mark. The Oracle logo is visible in the top right corner.

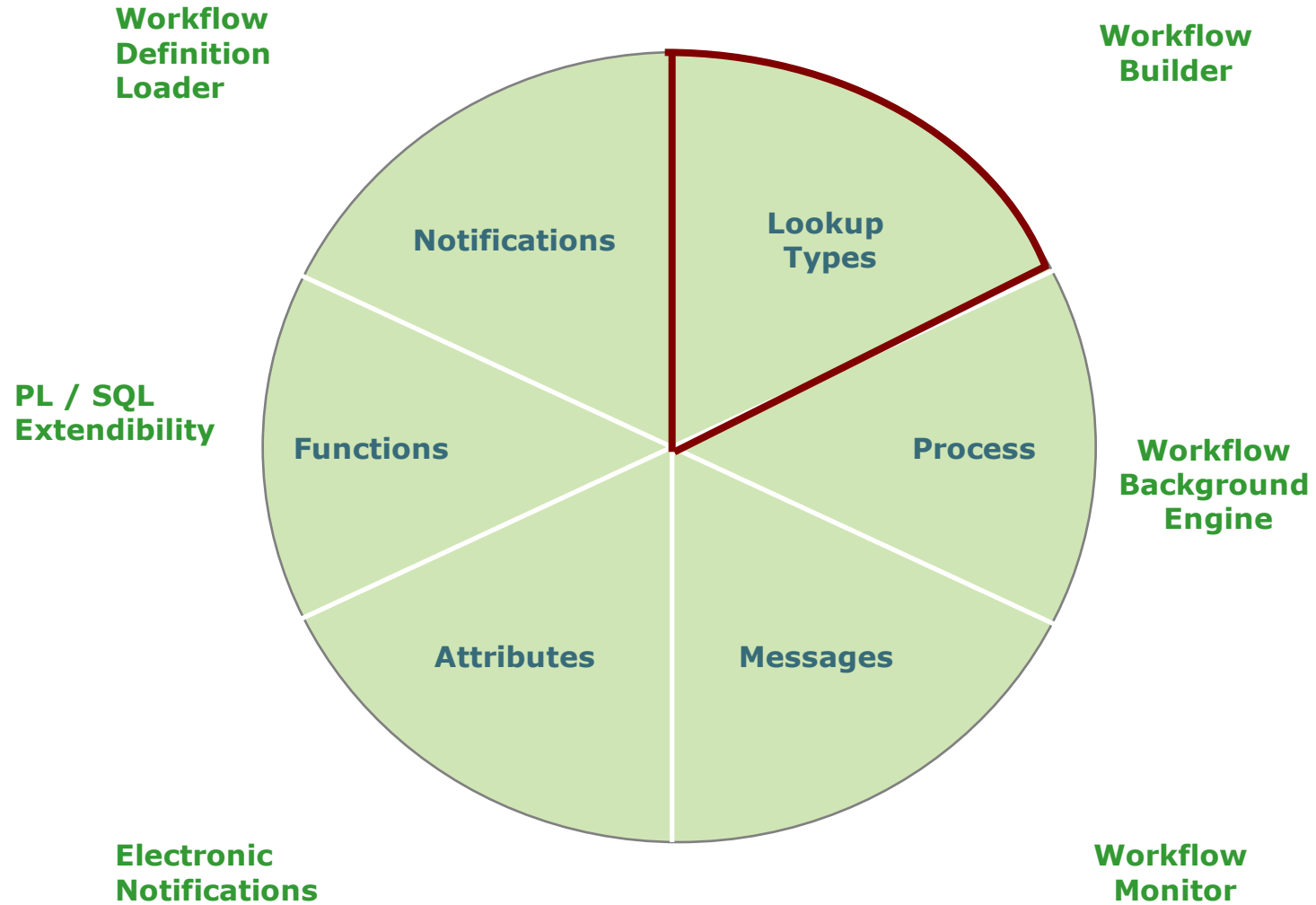
The main area shows a workflow diagram for "Requisition Approval: WFDEMO, Office Supplies". The process starts with a "Start" node, leading to a "Select Approver" node. From "Select Approver", a "True" path leads to "Record Requisition Forward" and a "False" path leads to "Notifv Requestor of Forward". Both paths converge at an "And" node, which then leads to "Notify Approver". From "Notify Approver", an "Approve" path leads to "Verify Authority". From "Verify Authority", a "Yes" path leads to "Approve Requisition", which then leads to "Notifv Requestor of Approval" and finally "End (Approve)". A "No" path from "Verify Authority" loops back to "Select Approver". A "Reject" path from "Notify Approver" leads to "Reiect Requisition", which then leads to "Notifv Requestor of Rejection" and finally "End (Reject)".

Below the diagram is a status panel with tabs for "Definition", "Usage", "Status", "Notification", and "Item". The "Status" tab is active, showing the following information:

- Current Location : Requisition Approval/Requisition Approval
- Status : Active
- Result : Null
- Begin Date : 13-APR-99 17:38:45
- End Date :
- Due Date :
- Notification :
- Assigned User :

At the bottom of the status panel are several control buttons: "Abort Process", "Suspend Process", "Resume Process", "Reassign", "Expedite", and "Attribute". The bottom status bar indicates "Applet oracle.apps.fnd.wf.Monitor running".

Major Components of Workflow



Lookup Types

- Static list of values
- Are referenced by activities and by item type, message or activity attributes.
- Lookup Codes are attached to lookup Types

Oracle Workflow Builder 2.6 - [Navigator]

File Edit View Window Help

Lookup Type :
HBC_APPR_YES_NO
(HBC Approval Yes No)
Lookup Code :
Yes
No

Navigator Control Properties

Lookup Type | Access

Internal Name: HBC_APPR_YES_NO

Display Name: HBC Approval Yes No

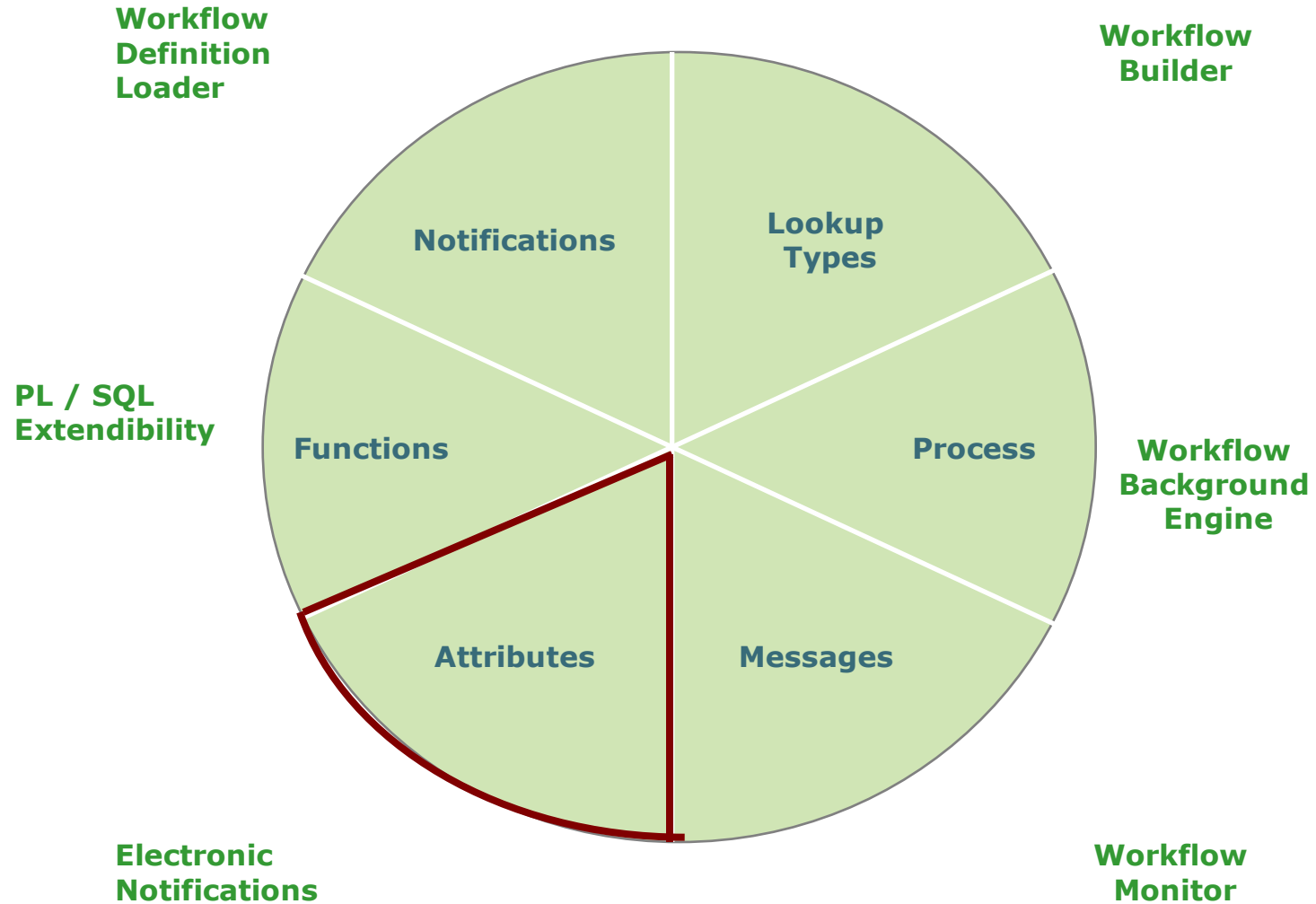
Description:

OK Cancel Apply Help

Lookup Type Properties

Start | [Icons] | TextP... | Untitle... | Untitle... | Pramil... | Micros... | Acrob... | Oracle... | 12:01 PM

Major Components of Workflow



Attributes

- Properties associated with activities.
- Act as variables which can be referenced by the activities.
- E.g. :

Message :
APPROVE_RETURN_ORDER [Approve Return Order]

Attribute :
RMA_HDR_SHORT_DESCRIPTOR

Message Properties :
Attribute used here

Oracle Workflow Builder 2.6

File Edit View Window

Navigator Control Properties

Message Body Roles Access Result

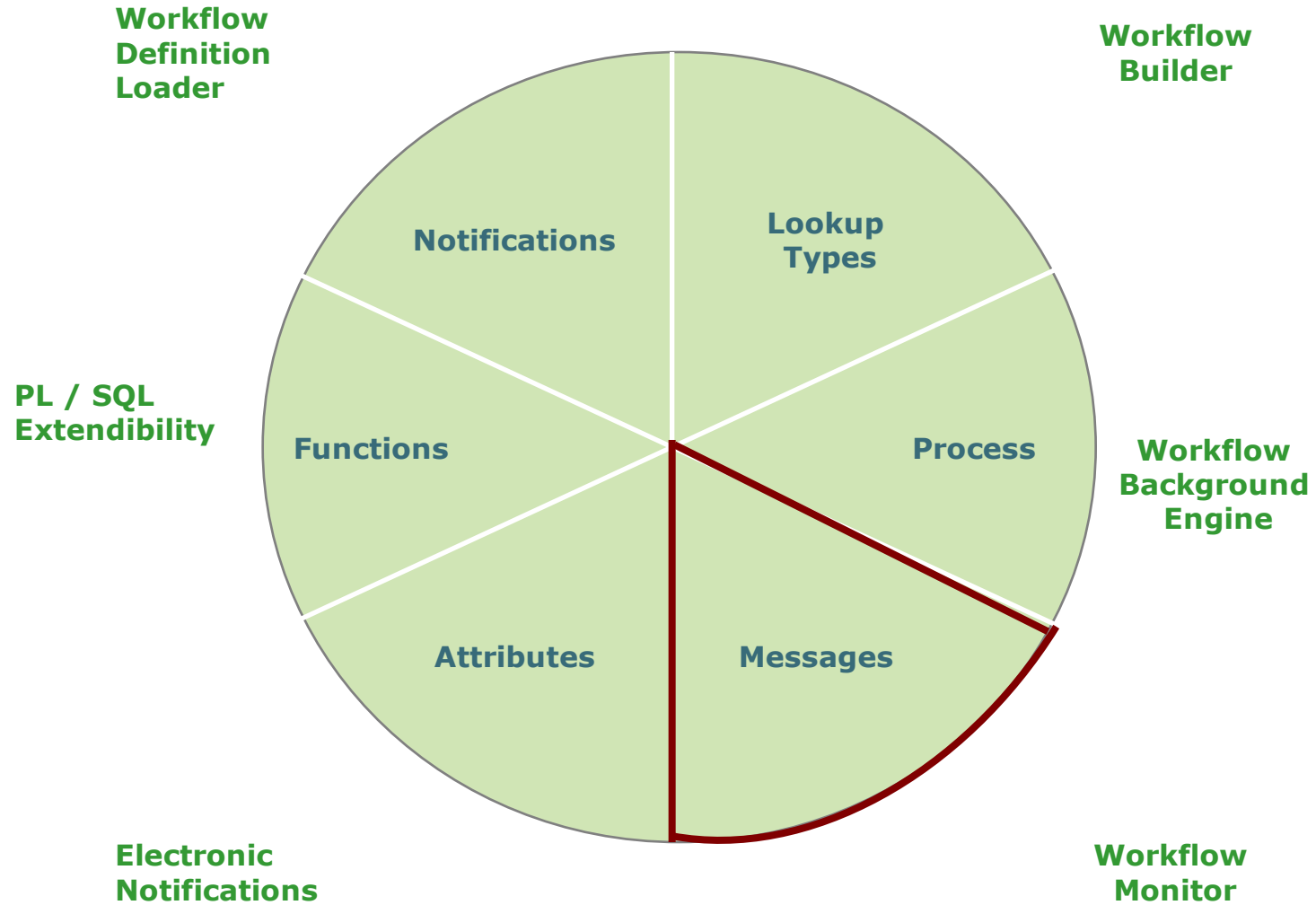
Subject Approve Return Order

Text Body HTML Body

This return order (&RMA_HDR_SHORT_DESCRIPTOR) requires your approval

OK Cancel Apply Help

Major Components of Workflow

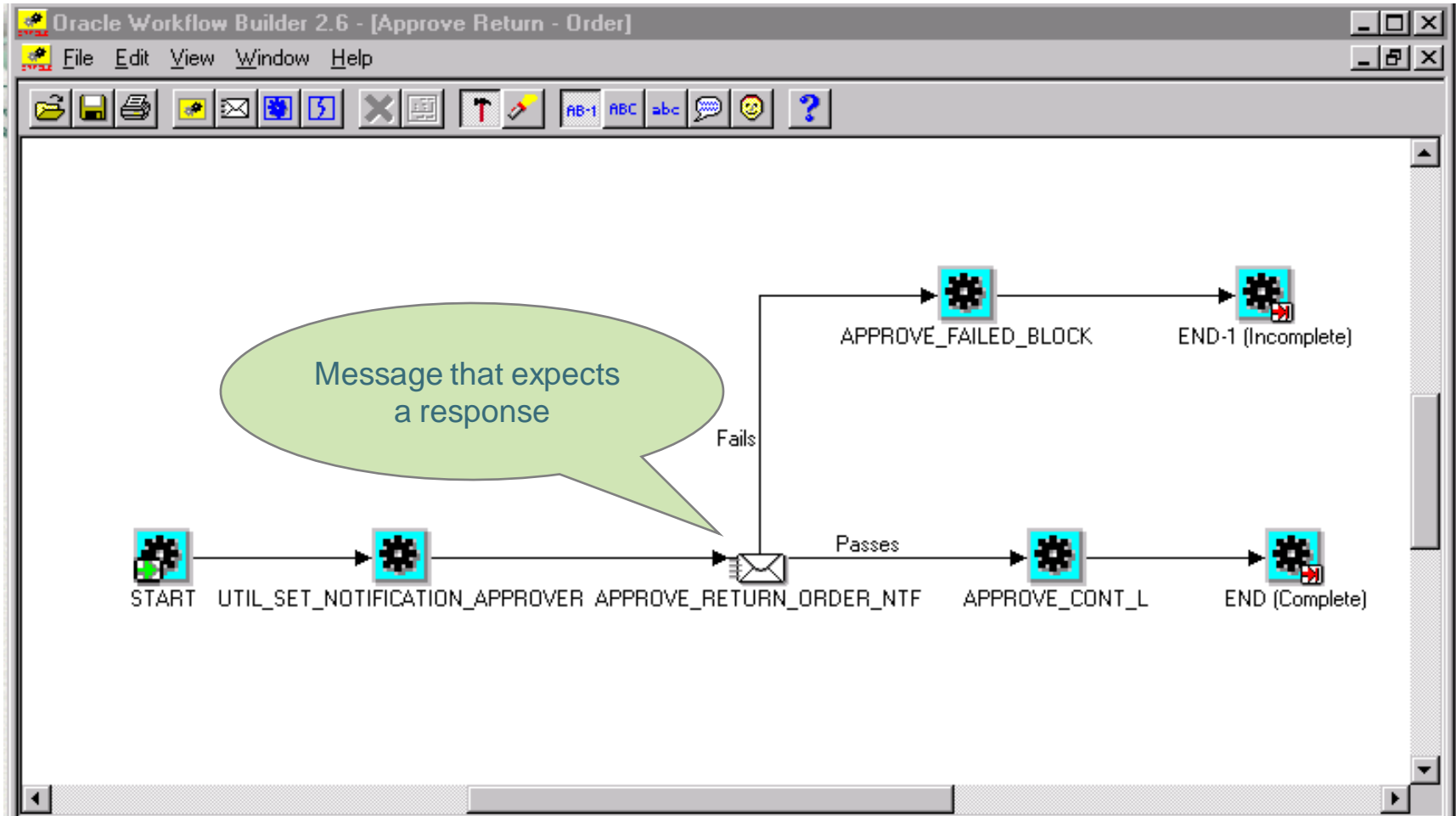


Messages

A message is what a notification activity sends to a role in a workflow process.

Two types :

- Information sent to the role
- Prompts a response from the role to determine the next sequence of activities.



Activities

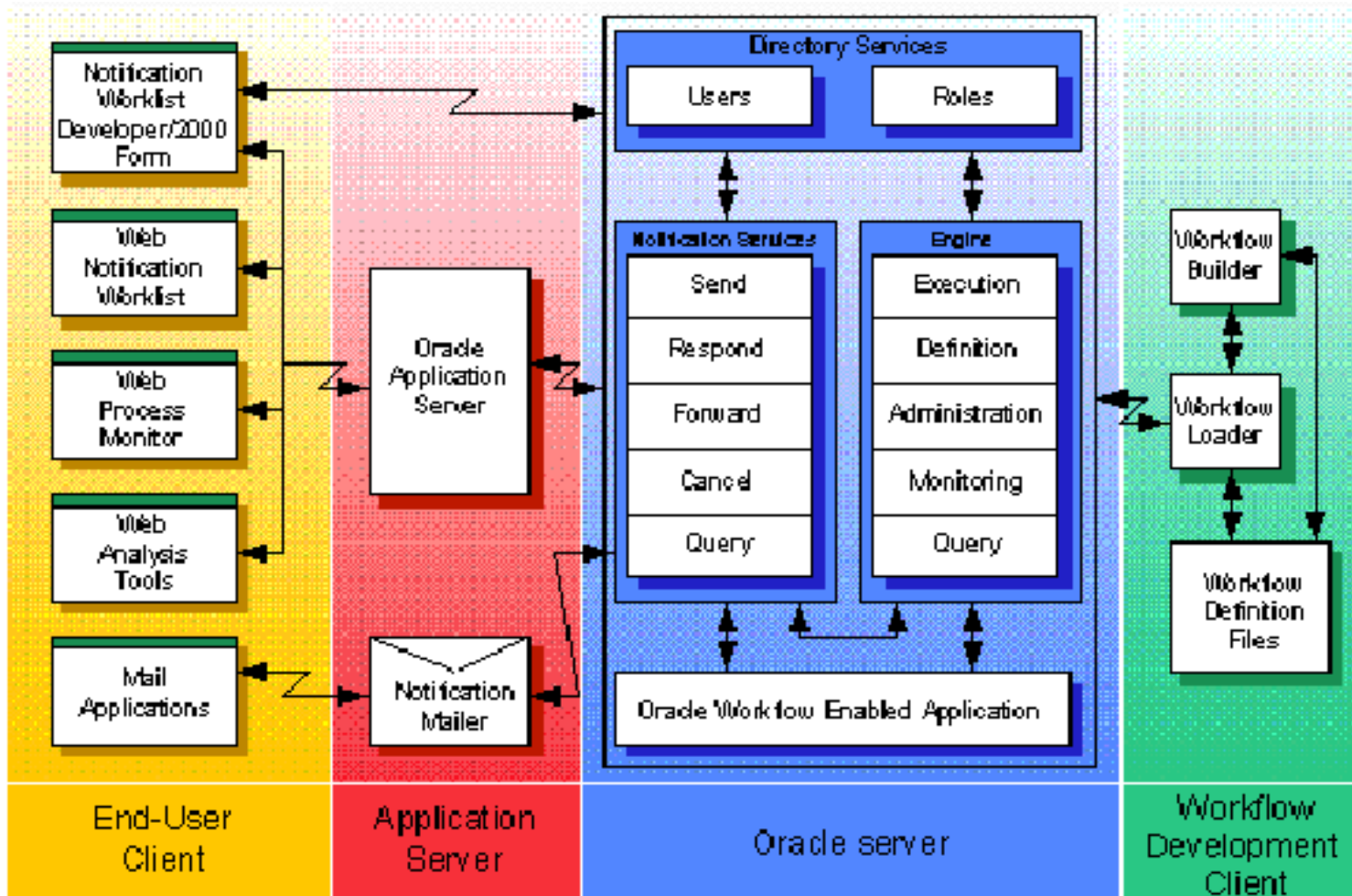
- **Unit of work that contributes toward the accomplishment of a process.**
- **Can be a notification, a function, or a process.**

Notification Activity

- **When the workflow engine reaches a notification activity, it issues a `Send()` API call to the Notification System to send the message to an assigned performer.**
- **Message is defined in a notification**

Activities

- Co-ordination between the notification system and workflow engine



Activities

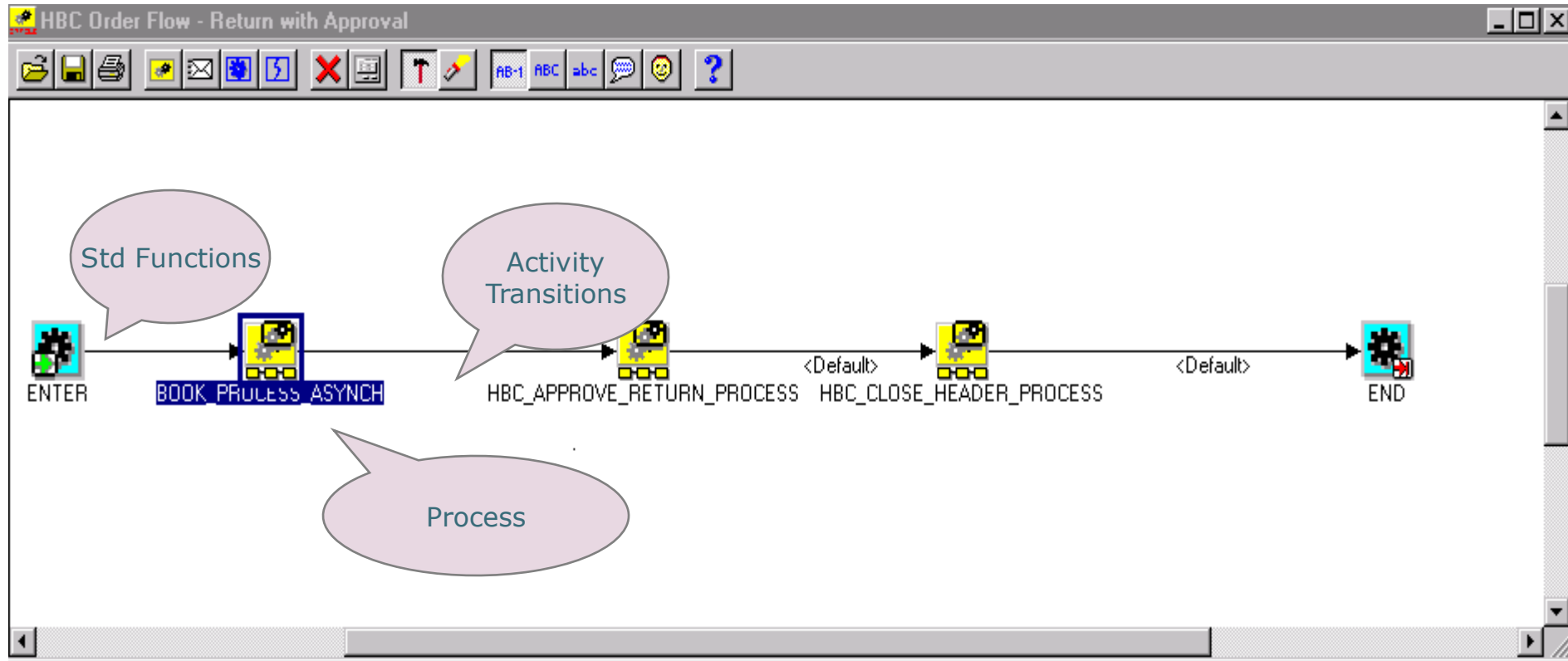
Function Activity

- A function activity is defined by the PL/SQL stored procedure or external program that it calls.
- As a PL/SQL stored procedure, a function activity accepts standard arguments and can return a completion result.

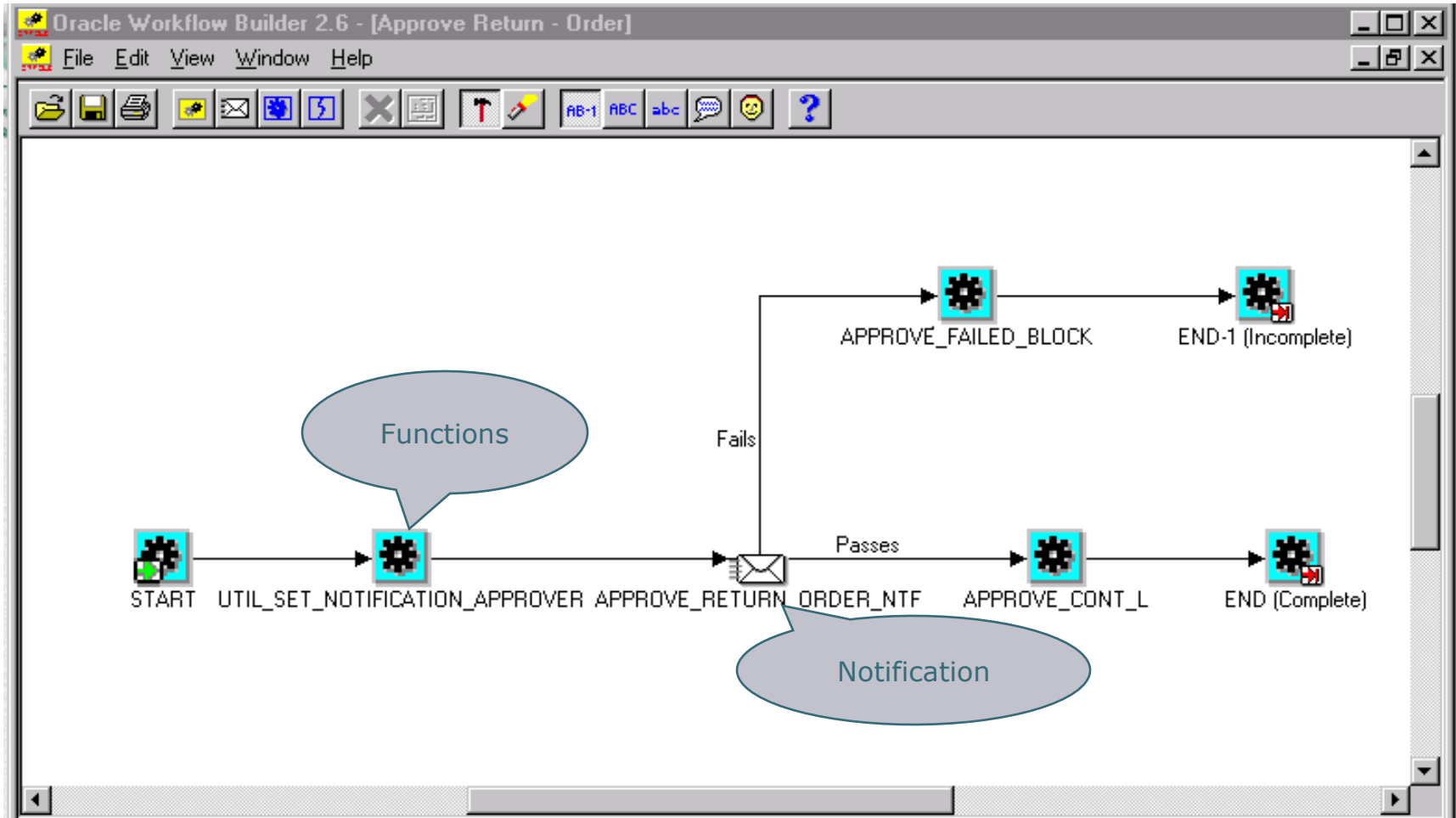
Process Activity

- A process activity represents a collection of activities in a specific relationship.
- When a process activity is contained in another process it is called a sub process.

Representation in Workflow Process



Representation in Workflow Process



Creating a Workflow

- Create a new item type. The item type classifies the work item to be managed by the process.
- Define item type attributes to fully describe your item type and have the activities in your process refer to these attributes for information.
- Create new lookup types. Before defining an activity, you should define the lookup type that represents your activity's Result Type.
- Create new messages. If you wish to create a notification activity for your process, you should first create the message that you want the notification activity to send.
- Create a new process activity, notification activity, function activity, or event activity.
- Diagram the process.
- In a database accessible by your Oracle Workflow server, create the PL/SQL stored procedures called by your PL/SQL function activities.

Modifying a Workflow

Deleting an activity in the process flow :

- Check for dependencies and then delete the object.

Modifying an activity in the Process :

- Versioning of work items

Keane

Questions?

Keane Corporate Headquarters

100 City Square

Boston, MA 02129

Toll free: +1 877.88.KEANE

www.keane.com

Australia | Canada | China | France | India | New Zealand |
Singapore | Switzerland | UAE | UK | USA

Keane

Thank You

Keane Corporate Headquarters

100 City Square

Boston, MA 02129

Toll free: +1 877.88.KEANE

www.keane.com

Australia | Canada | China | France | India | New Zealand |
Singapore | Switzerland | UAE | UK | USA