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Managing Workflow Notifications in Oracle Fusion Applications – An Example

ORACLE

Executive Overview 1
What is a Human Workflow? 1
Task and its Rules 2
Administrator's Privileges 5
HCM Transaction 6
Notification 11
Administrator Action 11
References 13

Executive Overview

This document illustrates an example of a system administrator managing SOA Human Workflow notifications generated by Oracle Fusion HCM Tasks. As part of the privileges granted by their enterprise role, the administrator is able, for example to view, reassign, suspend, or withdraw the requested action in the task.

What is a Human Workflow?

Human Workflow is the component of Oracle's SOA suite that allows people to interact with a process. For example, a manager might need to approve a purchase order or an expense report prior to the transaction (issuing a purchase order or reimbursement of expenses) being completed or perhaps to reassign a task they are unable to complete. In addition to allowing users of an application to interact with its processes, the capabilities of the Human Workflow include full task lifecycle management through the ability to reroute tasks, escalate them, and providing deadlines by which they must be completed, in addition to the presentation of tasks to the concerned user through the BPM Worklist application or other channels such as email.

Task and Rules

This example uses an Oracle Fusion HCM Transaction to illustrate how a transaction is routed and what actions an administrator can take on that transaction.

The Table below lists Oracle Fusion Core HCM transactions that are enabled for approvals.

Seeded Approvals (Include 2 Levels of Supervisor chain)	Seeded Auto-Approved
Transfer	Manage Salary (typically configured to require approval)
Promotion	Manage Compensation (typically configured to require approval)
Change Manager	Share Information (requires approval by worker)
Change Location	Change Marital Status
Change Working Hours	Create Employment Terms
Terminate Work Relationship	Manage Employment
Hire an Employee	Manage Grades
Add a Non-worker	Manage Grade Ladders
Add a Contingent Worker	Manage Grade Rates
Add a Pending Worker	Manage Jobs
Create Work Relationship	Manage Locations

Manage Work Schedule Assignment	Manage Organizations
Manage Absence Records (1 level)	Manage Person
Manage Document Record (1 level)	Manage Positions
Submit Performance Document(1 level)	
Add Goal (1 level)	

Table 1. HCM Transactions

Here is the Promotion Task and the rules associated with that task. A composite process handles the HCM Promotion Task. This is shown in Figure 1 below.

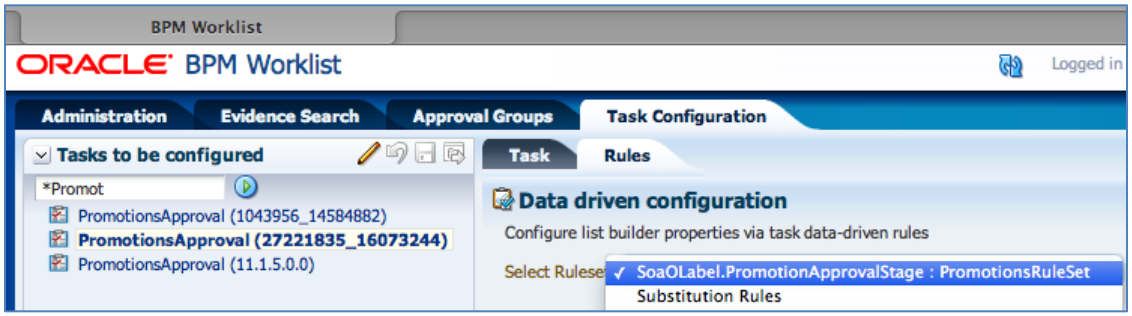
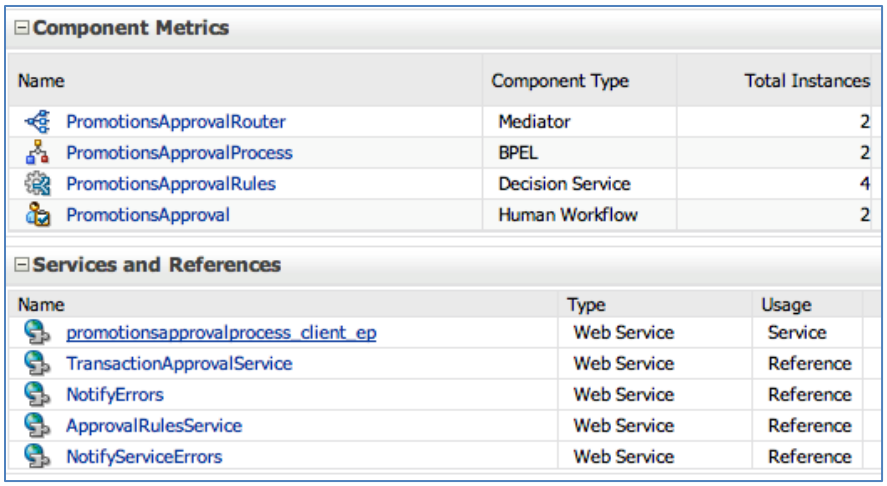


Figure1.Deployed Promotion Approvals Composite processes.

This composite process consists of several SOA components and includes the services and references shown in Figure 2.



Component Metrics

Name	Component Type	Total Instances
PromotionsApprovalRouter	Mediator	2
PromotionsApprovalProcess	BPEL	2
PromotionsApprovalRules	Decision Service	4
PromotionsApproval	Human Workflow	2

Services and References

Name	Type	Usage
promotionsapprovalprocess_client_ep	Web Service	Service
TransactionApprovalService	Web Service	Reference
NotifyErrors	Web Service	Reference
ApprovalRulesService	Web Service	Reference
NotifyServiceErrors	Web Service	Reference

Figure2. Components of the Promotion Approval Composite

For the promotion process and for all cases (the condition 1=1 being always true) build the approval list based on the supervisory hierarchy and process the transaction two levels above the approver, starting with the approver's manager and ending with the user "douglas.mcneil" who also happens to be the CEO and the top node in the hierarchy.

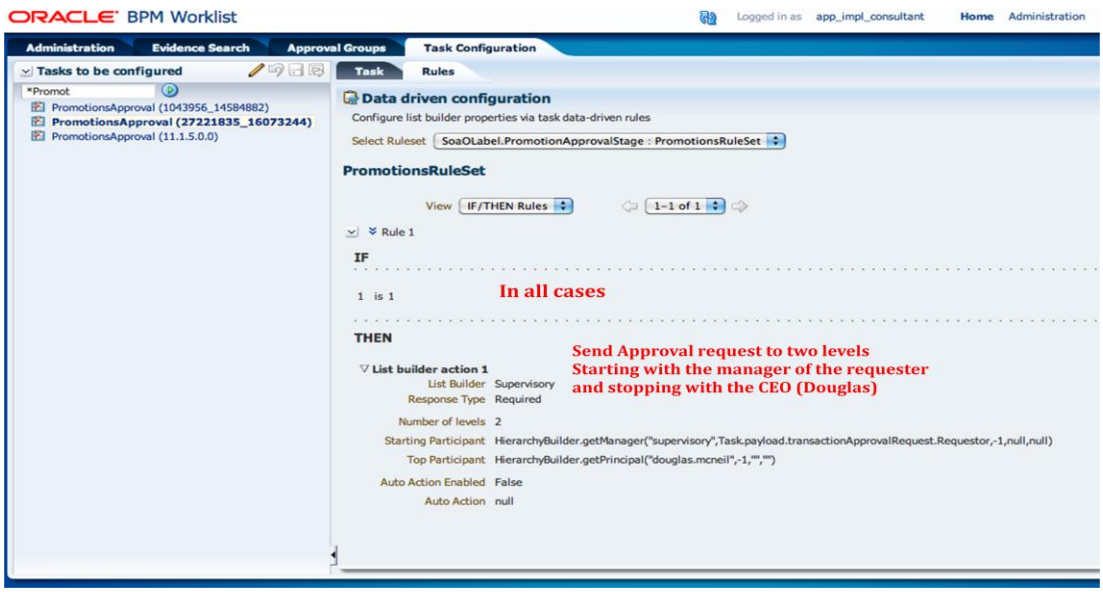


Figure3. BPM Task Configuration Rules

Administrator's Privileges

In Fusion Applications, the ability to access functions across products is controlled by functional privileges granted to a user through APM (Access Provisioning Manager). The application role that allows an administrator to view all human tasks is **"BPM Workflow System Admin Role".** Several of the seeded roles in the reference implementation inherit this duty. The table below shows the hierarchy for the Human Capital Management Application Administrator.

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Level	Display Name	Role Name	Description	Inherited by
1	Human Capital Management Application Administrator	HRC_HUMAN_CAPITAL_MANAGEMENT_APPLICATION_ADMINISTRATOR_JOB	Configures the Oracle Fusion Global Human Resources application and has access to all duty roles necessary to implement the Compensation, Workforce Deployment, and Workforce Development offerings.	
2	BPM Workflow System Admin Role	BPMWorkflowAdmin	This role grants a user the privilege to perform administrative actions in the workflow functionality via the worklist UI. A user in this role will be able to view all tasks in the system, recover errored (incorrectly assigned) tasks, create approval groups and edit task configuration / rules DT@RT UI (both AMX functionality). This is a business administrator type role. This role is granted to SOAAdmin.	1

Table 2.Seeded Roles that provide access to all Tasks in the Worklist application

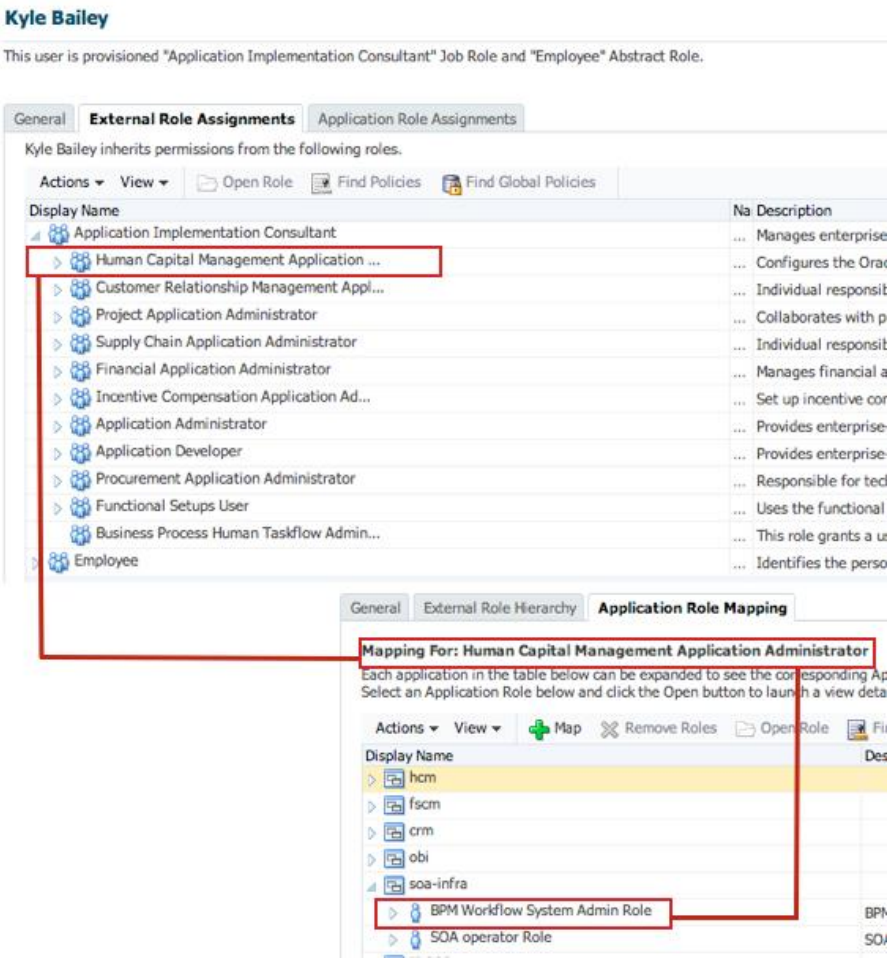

Figure 4. Role hierarchy assigned to the administrator for the example in this document

HCM Transaction

As part of a performance evaluation cycle, a manager determines that an employee is a candidate for a promotion. The manager initiates the request from the manager Resources

Dashboard. The necessary adjustments are made to the employee's Job, and compensation details and the transaction is submitted.

The transaction used here is submitted for employee Jamie Gregg, by her manager Stella Marcus. Based on the approval rules we had defined earlier, this promotion request will be routed to the next two levels in the hierarchy in sequence to Donald Alexander and Douglas McNeil. Figures 5a, 5b, 5c show the three levels in the supervisory hierarchy

Figure5a. Supervisory Hierarchy: Donald Alexander reports to Douglas McNeil

Figure5b. Supervisory Hierarchy: Stella Marcus reports to Donald Alexander

Figure5c. Supervisory Hierarchy:Jamie Gregg reports to Stella Marcus

The manager selects the Promote action from the employee's card in the Org chart.

Figure6. The manager selects Promote from the org chart.

The manager completes the promotion request and reviews the details prior to submission.

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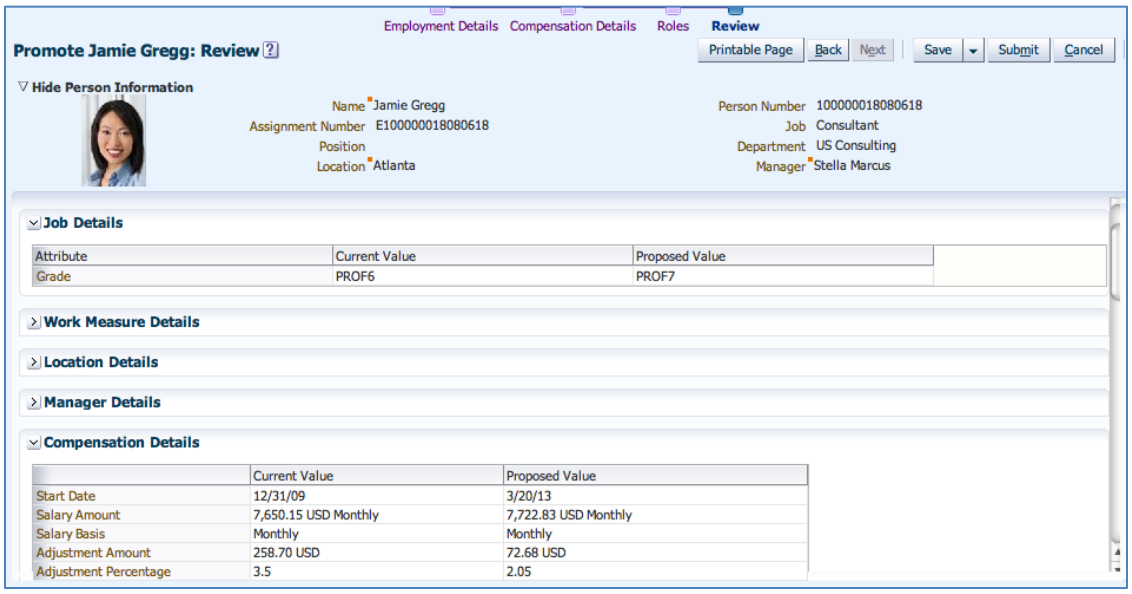

Figure7a. The manager reviews the request prior to submission

In the final step of the transaction, the manager builds the approval list.

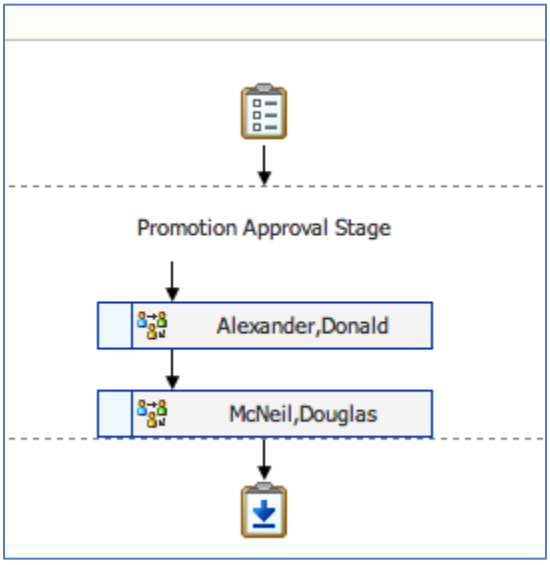

Figure7b. The Approval list built in the last step of the transaction prior to submission.

The initiated transaction generates an instance of the composite process discussed earlier (see Figure 8 below) , and becomes available to the participants and administrator. The instance also retains the status and history of the transactions during its lifecycle and after completion.

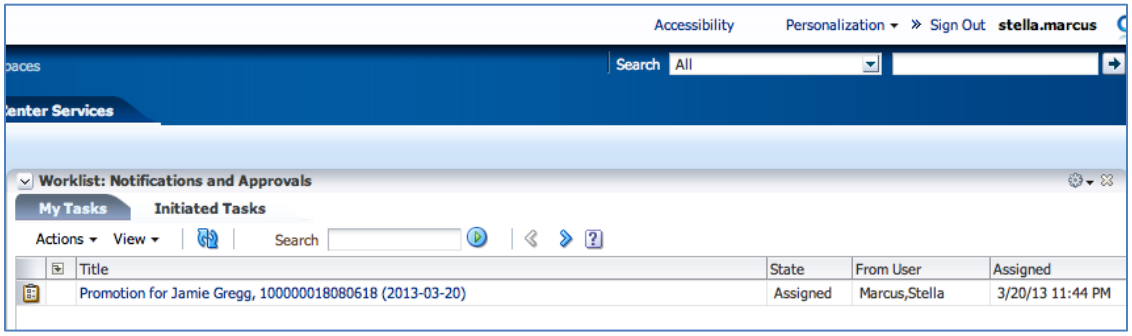

Figure 8. TheTask instance in the Worklist of the manager

After submission, the manager reviews the initiated task and amends it by adding attachments or comments as seen in Figure 9 below.

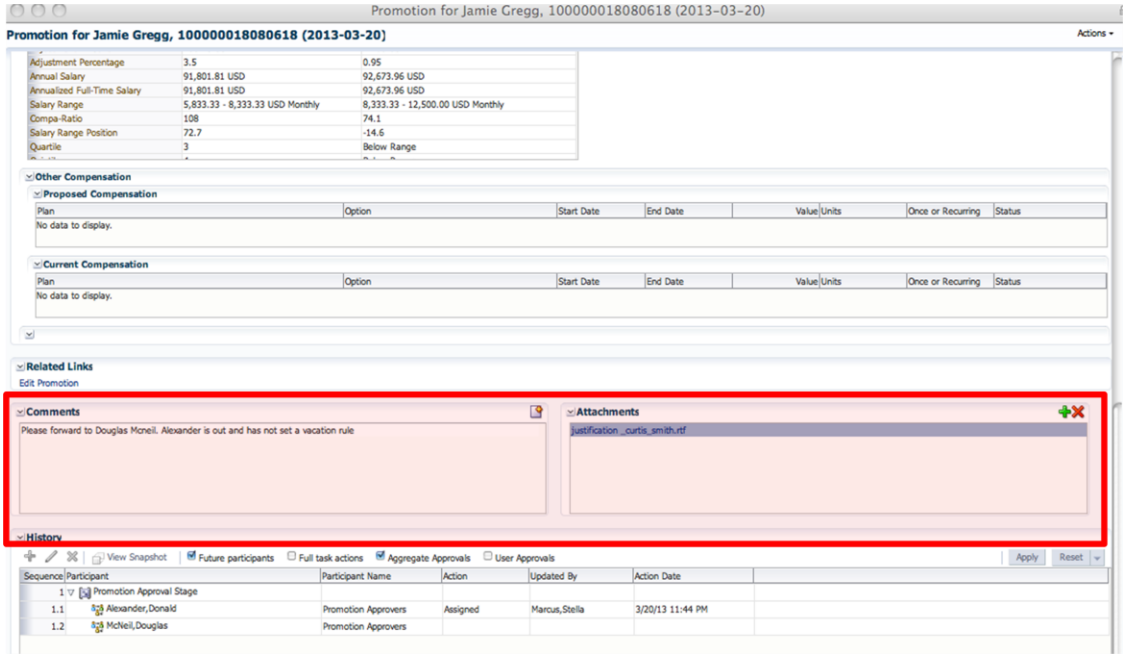

Figure 9. Comments and Attachments added to the request

Notification

Based on the rules applicable to the promotion transaction we discussed earlier, the process sends a request for approval to the manager of the requestor. However, let us assume that Donald Alexander, the manager of Stella Marcus and the the first of the two approvers, is not available to take an action on the request. Stella makes a request via the comments field to have the administrator to skip the current stage and forward the request to the next approver.

Administrator Action

The administrator, Kyle Bailey, searches for transactions assigned to Donald Alexander

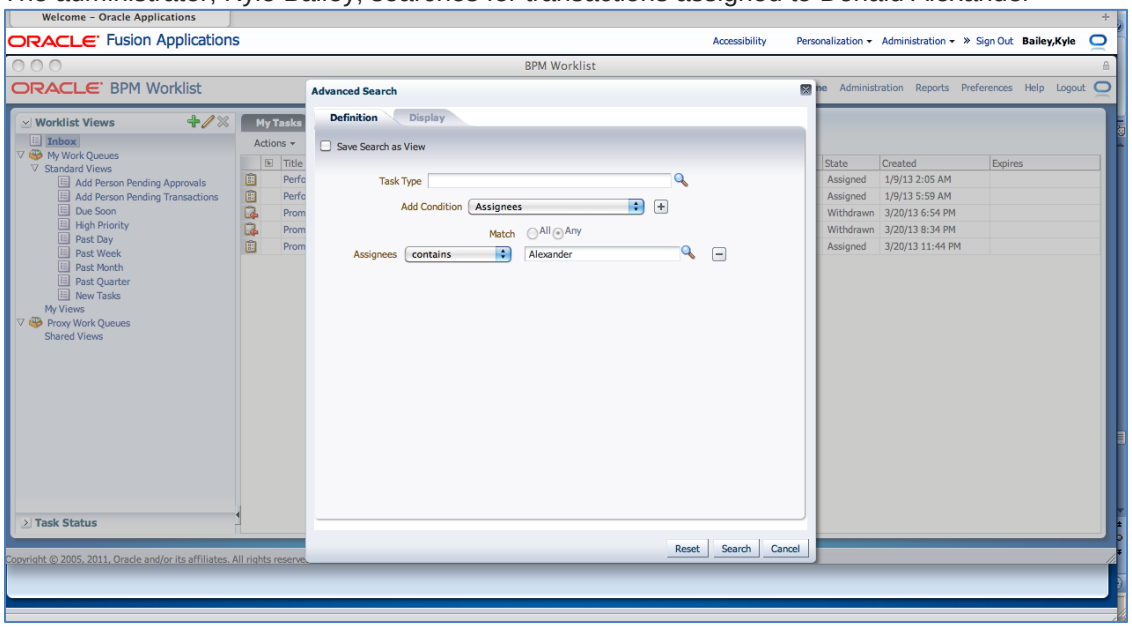

Figure 10. Administrator queries tasks assigned to Donald Alexander

The administrator then performs one of the following actions:

- Reassign
- Escalate
- Suspend

- Withdraw
- Skip current assignment

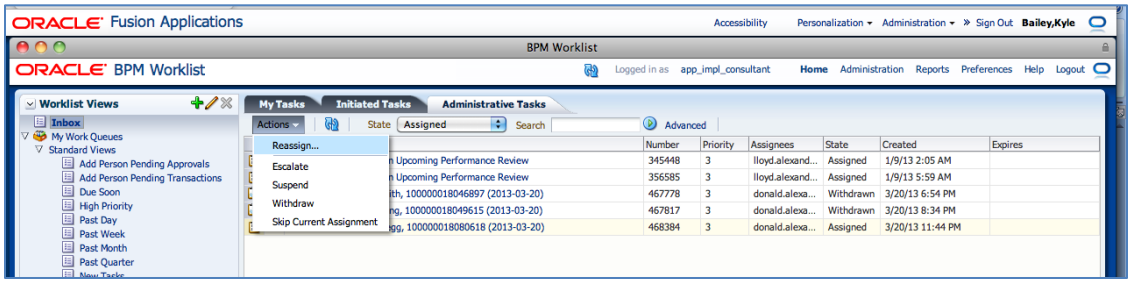

Figure 11. Actions an administrator can take on an assigned task

After reassignment of the task by the administrator to the next approver, Douglas McNeil can now see the task in his worklist.

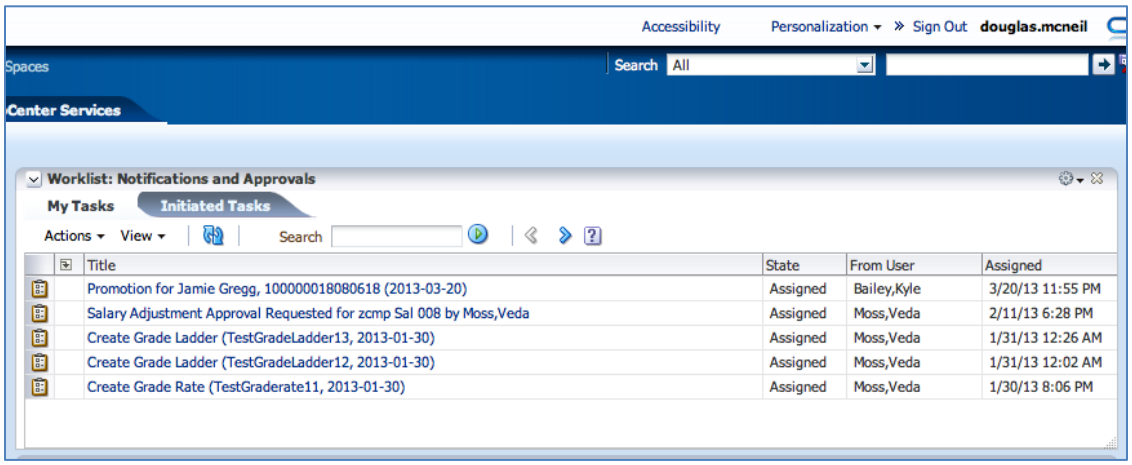

Figure 12. Worklist of the user to whom the task was reassigned

All changes made to a task instance remain with the task and can be viewed by all users who have access to that task, namely the participants in the transaction (the approvers) and the administrator. A completed task with a full history of task actions and the participants who made them, is shown in Figure 13 below.

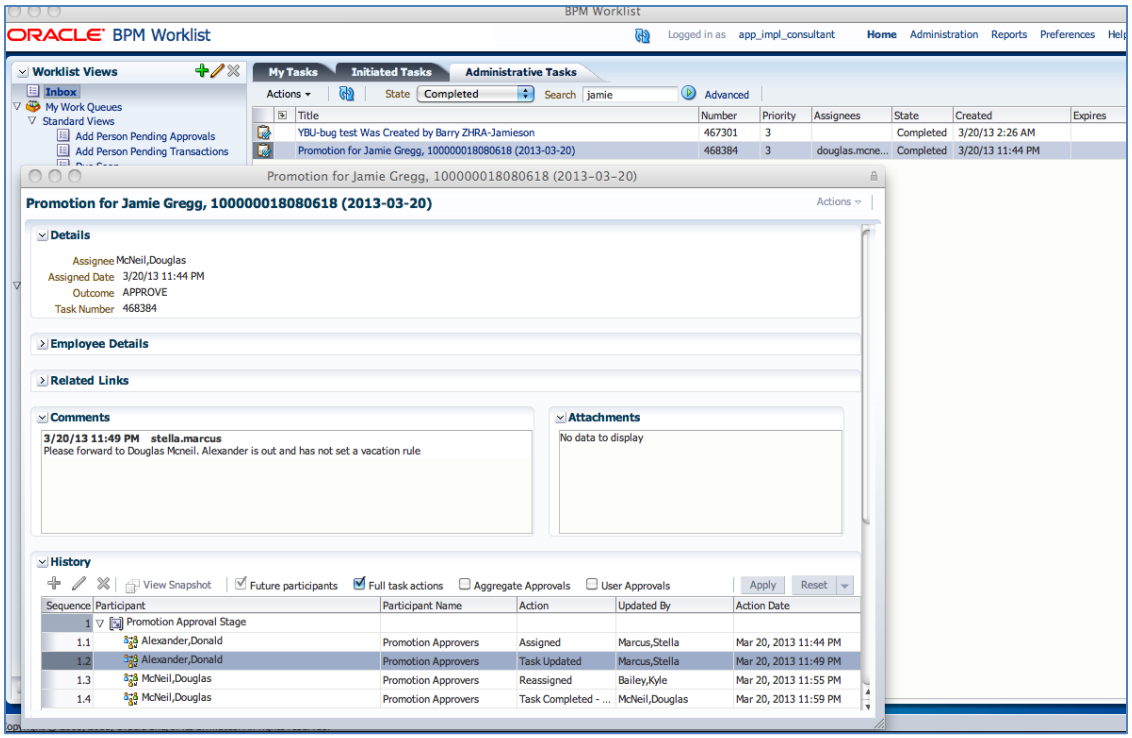

Figure 13.Completed Task

References

Oracle® Fusion Middleware Developer's Guide for Oracle SOA Suite11g Release 1 (11.1.1) Part Number E10224-05 -- Chapter 27
http://docs.oracle.com/cd/E14571_01/integration.1111/e10224/bp_introhwf.htm

Oracle SOA Suite Componentshttp://docs.oracle.com/cd/E14571_01/integration.1111/e10223/12_human_workflow.htm

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