



# Sun Role Manager

## 4.1

### Feature Highlights



## Sun Role Manager 4.1

Release Features	Customer Benefits
<b>1.0 Enhanced Identity Certification Features</b>	Advanced user population selection strategy, ability to delegate a certification to any user in the Identity Warehouse, additional certification options for accurately identifying users, Roles and entitlements, ability to export in progress certifications as reports to certify them offline, ability to track revocations of completed certifications, advanced configuration & workflow options unique to each certification, and the ability to end date certifications.
<b>2.0 Enhanced UI for User Access Certifications</b>	Richer, more intuitive user access certification experience with emphasis on usability and interaction design. A completely re-designed user interface following a simple two-step process to certify user Roles and entitlements, advanced drill-down, search and filtering capabilities, display/collapse navigation panels and the ability to generate in-progress certification reports for offline sign-off.
<b>3.0 Enhanced Role Engineering &amp; Administration</b>	Robust Role Engineering & Administration capabilities which include the ability to schedule Role mining using a robust job scheduler, display entitlement glossary during Role mining, ability to generate reports from Role mining results in multiple formats, revised Role History module, enhanced Rule Engineering capabilities such as Rule Based Role Removal, Provisioning Policy Lifecycle Management, mass modification workflow, advanced Role search and Role copy features.



<b>4.0 Improved Identity Warehouse &amp; Custom Reporting</b>	Role Manager 4.1 includes an improved Identity Warehouse where Account information is supplemented with an Accounts Type field, a sophisticated search engine allows creation of complicated search conditions and searching on any of the commonly populated user fields, and the correlation mechanism is augmented by the Manual Correlation capability that allows correlation of orphan accounts and changing the associations of correlated accounts from the UI.
<b>5.0 Improved integration with Sun Identity Manager</b>	Any Roles and surrounding metadata designed in Sun Role Manager can be easily exported to Sun Identity Manager, also leveraging the new Business Roles/IT Roles feature in Sun Identity Manager 8.0, thus leading to a more complete consumption of Roles in Sun Identity Manager. Role Manager 4.1 provides enhanced performance and efficiency when integrated with Sun Identity Manager, promoted by the ability to import only new or modified users and user accounts from Sun Identity Manager to Role manager via an enhanced SPML configuration.
<b>6.0 Enhanced API Support</b>	Role Manager 4.1 extends the comprehensive set of Web Services provided in 4.0 to cover major functionality of the solution. Enhancing the API provides the ability for users to integrate Role Manager with other applications in their IT infrastructure.
<b>7.0 MySQL Support</b>	Role Manager 4.1 now adds support for MySQL deployed in both Windows and UNIX environments, a major addition to its existing support of MS SQL, Oracle and DB2.



## Role Manager 4.1 Feature Highlights

### 1.0 Enhanced Identity Certification Features

#### 1.1 Advanced User Selection Strategy

Role Manager 4.1 provides a rule-based advanced search module across the suite to search for users based on varying selection strategies. These rules support complex selection conditions and can be modeled across any users' attributes.

Create Certification > User Selection Strategy > By User

User Search

Advanced Search Quick Search

Attribute	Condition	Value	Operation
<input type="checkbox"/> Department	starts with	IT	
<input type="checkbox"/> Job Codes	contains	NC8000	AND
<input type="checkbox"/> Manager	=	rjohnson	

Search On : ( Department starts with 'IT' AND Job Codes contains 'NC8000' AND Manager = 'rjohnson' )

##### 1.1.1 User Selection Strategy – Advanced Search based on Rules

Multiple rules can also be grouped together and indexed in order to effectively and accurately search for the desired users, which can then be included in the certification population.

Create Certification > User Selection Strategy > By User

User Search

Advanced Search Quick Search

Attribute	Condition	Value	Operation
<input type="checkbox"/> Region	=	Mid-West	
<input type="checkbox"/> Title	ends with	IT Specialist	AND
<input type="checkbox"/> Custom Property 5	=	CN8790	
OR			
<input type="checkbox"/> Department	starts with	IT	
<input type="checkbox"/> Job Codes	contains	NC8000	AND
<input type="checkbox"/> Manager	=	rjohnson	

Search On : ( ( Region != 'Mid-West' AND Title ends with 'IT Specialist' AND Custom Property 5 = 'CN8790' ) OR ( Department starts with 'IT' AND Job Codes contains 'NC8000' AND Manager = 'rjohnson' ) )

##### 1.1.2 User Selection Strategy – Grouping Multiple Rules

## 1.2 Ability to End Date Certifications & Dynamic Certification Reviewer Selection

Role Manager 4.1 now provides the ability to end-date certifications. Once a certification reaches its end date, it expires and cannot be reviewed or signed-off. Escalation emails can be sent to designated actors when a certification is about to expire or when a certification actually expires.

Specifying end-dates places the emphasis on certification reviewers (such as Managers, Role Owners and Application Owners) to complete certifications in their inbox within a specific period of time and provides administrators the ability to track certifications within a given cycle that are not being acted upon.

[Create Certification](#) > [User Selection Strategy](#) > [By Business Unit](#) > [Period And Certifier](#)

**Period And Certifier**

Certifier : Business Unit Manager ▾

Start Date : 09/16/2008

End Date : 10/16/2008

Customize Configuration And Email Template :

### 1.2.1 Ability to End Date a Certification

Role Manager 4.1 now supports two options to select a certifier for a selected population of users:

- 1) **Global User Manager:** This option assumes each user has their manager field populated and should be the designated certification reviewer. If each user in the selected population has different managers, Role Manager automatically creates different certifications for each of these managers and notifies them of pending certifications.
- 2) **Select a Reviewer:** This option allows an administrator to dynamically query for a certification reviewer by presenting Quick Search and Advanced Search options. The selected reviewer is then responsible for certifying the selected population of users.

[Create Certification](#) > [User Selection Strategy](#) > [By Business Unit](#) > [Period And Certifier](#)

**Period And Certifier**

Certifier : Select Nesco, Lily

Start Date : 09/16/2008

End Date : 10/16/2008

Customize Configuration And Email Template :

### 1.2.2 Dynamic Selection of Certification Reviewer

## 1.3 Advanced Configuration & Workflow Options

Role Manager 4.1 Certification Wizard now includes the ability to customize a configuration and workflow template unique to each certification. This allows for a more flexible option to create and select escalation workflow email templates and configuration parameters that are unique to each certification.

[Create Certification](#) > [User Selection Strategy](#) > [By Business Unit](#) > [Period And Certifier](#)

**Period And Certifier**

Certifier : Select Nesco, Lily

Start Date : 09/16/2008

End Date : 10/16/2008

Customize Configuration And Email Template :

### 1.3.1 Certification Configuration Template per Certification

Two new configuration options that have been added to facilitate job transfers and email based escalation workflow:

- 1) **Reporting Changes:** Managers or certification reviewers now have the ability to specify a new manager or reviewer in case a particular user does not report up to them. This change can either be recorded in a report sent to administrators who can then place the user in the correct certification or automatically create a new certification for new reviewer to sign off.
- 2) **Certification Expiry Notification:** An email can be sent to a certification reviewer in case a certification is about to expire. An email can also be sent to administrators once a certification reaches its expiry date.

**Reporting Changes**

**Enable Reporting Changes**

Record reporting changes

Create new certification per reporting manager

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**Certification Expiry Notification**

**Certification About To Expire Notification**

Notification interval : 1 days

Email Template : [...]

**Expired Certification Notification**

Email Template : [...]

### 1.3.2 Reporting Changes & Certification Expiry Notification Workflow

## 1.4 Track Revocations of Completed Certifications

The ability to track revocations from completed certifications is a step in the direction of “Closed Loop Compliance”, and has now been added in Role Manager 4.1. This feature is extremely useful for administrators, Role owners, business and auditors alike to view and act upon access (Roles and entitlements) revoked in a certification and ensure that it has indeed been remediated from the source target systems and applications. This feature adds great value to an enterprise with the ability to view the progress of revoked access and ensure it is completed in a timely manner.

Role Manager
Welcome admin, admin
Home | Logout | Help

My Settings | My Requests | Identity Warehouse | Identity Certification | Role Engineering | Role Management | Identity Audit | Reports | Administration

Dashboard | My Certifications | Remediation Tracking | Certification Jobs

**Remediation Tracking**

**Account Remediation Status by certification**

**Remediation Counts**

Remediated Accounts = 0  
Pending Accounts = 6  
Total Revoked Accounts = 6

Certification Name	Type	Start Date	End Date	Total Revoked Entities	Total Remediated Entities	Total Pending Entities
UA_2100	User	09/02/2008	10/02/2008	Roles : 0 Accounts : 2	Roles : 0 Accounts : 0	Roles : 0 Accounts : 2
aHarmsen_Vaau Inc.	Application Owner	09/02/2008	10/02/2008	Accounts : 4	Accounts : 0	Accounts : 4

### 1.4.1 Remediation Tracking Module

Drilling into each certification would display revoked Roles and entitlements from and their status to ensure whether they were remediated or remain in pending state.



Revocations from Role Owner Certifications can be directly remediated by automatically sending the appropriately modified Role to their Role Owner(s) for approval.

## 1.5 Other Certification Enhancements

Role Manager 4.1 provides additional certification options for accurately identifying users, Roles & entitlements. These options provide more flexibility to designate and provide input on each user, Role or entitlement, thus making the remediation process much easier for administrators. These options are:

### Employee Verification Options:

- 1) Works for me
- 2) Does not work for me
- 3) Has been terminated
- 4) Reports to another person

### Role/Entitlement Options:

- 1) Certify
- 2) Revoke
- 3) Unknown
- 4) Exception Allowed

Role Manager 4.1 also provides the ability to delegate a certification to any user in the Identity Warehouse. Once a Certification is launched, a manager or certification reviewer can open the certification and delegate it to another reviewer. The certification is then displayed in the new reviewer's Role Manager inbox for sign-off.

A certification reviewer has the ability to export in-progress certifications as reports, to certify them offline. These reports can be exported in .pdf or .xls formats, thus making it easier for reviewers to validate these certifications offline and log back in to Role Manager at a later stage and complete the sign-off process.



Certification Details Show Details | Collapse

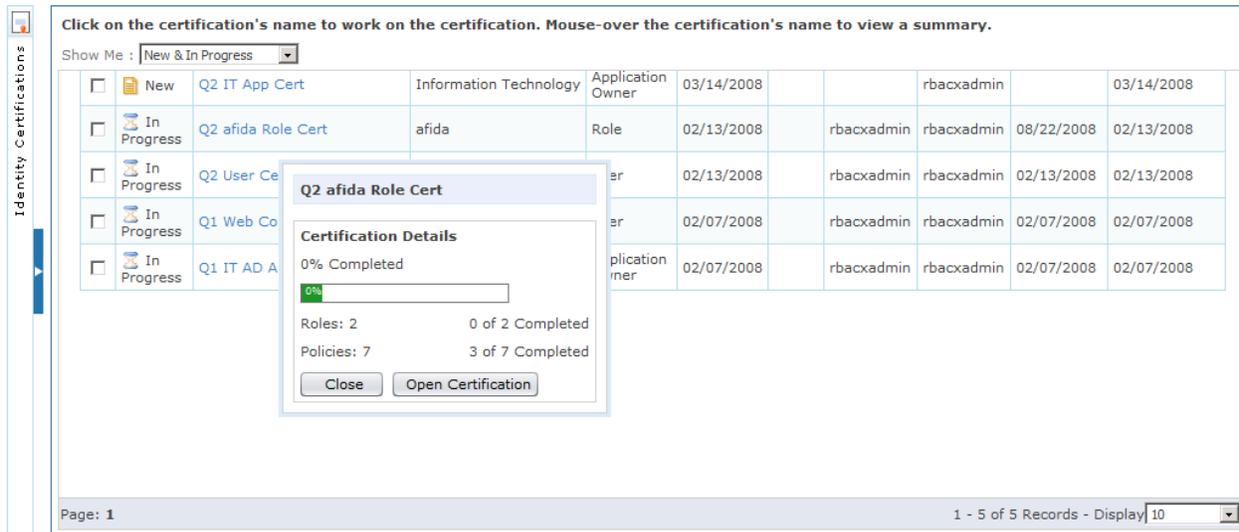
Certification Overview	Certification History	Export Options
<p><b>Certification:</b> Q2 User Cert IT</p> <p><b>Business Unit:</b> Information Technology</p> <p><b>Completed(%):</b> <input type="text" value="6%"/></p> <p><b>Number of Users:</b> 31</p> <p><b>Number of Roles:</b> 9</p> <p><b>Number of Accounts:</b> 127</p> <p><b>Certifier:</b> <input type="text"/> <input type="button" value="Search"/></p>	<p><b>Start Date:</b> 02/13/2008</p> <p><b>End Date:</b></p> <p><b>Incremental:</b></p> <p><b>Created By:</b> rbackadmin</p> <p><b>Creation Date:</b> 02/13/2008</p> <p><b>Last Updated By:</b> rbackadmin</p> <p><b>Last Update Date:</b> 02/13/2008</p>	<p>You can download the certification reports in following formats.</p> <p> <a href="#">Export to PDF...</a>  <a href="#">Export to XLS...</a></p>

### 1.5.1 Certification Delegation & Export Options

## 2.0 Enhanced UI for User Access Certifications

The Identity Certification module in Role Manager 4.1 provides a new, highly interactive and intuitive Web 2.0 user interface, which greatly improves the usability and performance for a typical end user, such as a business manager or access reviewer. Re-designed menu options and intuitive icons enable the end user to easily navigate through the Identity Certification module and complete their certifications with ease. The principal focus for the 4.1 release has been on usability and interaction design for end users and has resulted in some of the following UI enhancements:

- Ability to perform advanced drill-down within the graphical dashboards. For example, clicking on the graph for “Completed” certifications, would route an administrator to the Completed certifications section.
- Rollover images across the certification module display useful certification information such as number of users, Roles and entitlements to be certified or viewing a contact card for a particular employee.



### 2.0.1 Rollover Images

- The sign-off process has been simplified to a two step process to first determine whether a user reports to a manager or not and second, signing off on Roles and Entitlements that belong to that particular user. Bulk sign-off options are available throughout the certification module. Also, instructive text throughout the certification process has been provided to ensure a smooth and accurate sign-off experience for the end user.

- Statistics unique to each certification provide useful widgets to managers or access reviewers related to the number of users, Roles, entitlements that need to be signed-off and also display a progress bar and percentage complete status throughout the certification cycle. Certification History statistics provide the date of initiation and expected date of completion of each certification, who created it, and what type of a certification they are signing-off. The ability to export a certification in .pdf or .xls format is also provided in the form of a widget.

**Certification Details** Show Details | Collapse

Certification Overview	Certification History	Export Options
<p><b>Certification:</b> Q2 User Cert IT</p> <p><b>Business Unit:</b> Information Technology</p> <p><b>Completed(%):</b> <span style="display: inline-block; width: 100px; height: 10px; background-color: #ccc; position: relative;"> <span style="position: absolute; left: 0; top: 0; bottom: 0; right: 0; background-color: #4CAF50; width: 6%;"></span> </span> 6%</p> <p><b>Number of Users:</b> 31</p> <p><b>Number of Roles:</b> 9</p> <p><b>Number of Accounts:</b> 127</p> <p><b>Certifier:</b> <input type="text" value=""/> </p>	<p><b>Start Date:</b> 02/13/2008</p> <p><b>End Date:</b></p> <p><b>Incremental:</b></p> <p><b>Created By:</b> rbackadmin</p> <p><b>Creation Date:</b> 02/13/2008</p> <p><b>Last Updated By:</b> rbackadmin</p> <p><b>Last Update Date:</b> 02/13/2008</p>	<p>You can download the certification reports in following formats.</p> <p> <a href="#">Export to PDF...</a> <a href="#">Export to XLS...</a> </p>

### 2.0.2 Certification Widgets

- These widgets can also be displayed and collapsed throughout the certification process, thus allowing a larger work area to complete the certification, thus decreasing the amount of scrolling.
- Another significant enhancement to this new UI is the effective use of Accordions. AJAX Accordion Control makes efficient use of screen real estate by enabling the smooth animated transition between different content panes. Accordions, combined with strong automatic paging capabilities automatically open and close as Managers or Access Reviewers move forward with the certification sign-off process. Two types of Accordions are provided, one for Role sign-off and the other for Entitlements sign-off. Once a manager or access reviewer completes certifying a user's Role(s), the Entitlements Accordion automatically opens and the Role Accordion automatically closes. This is helpful since it does not overwhelm end users with information and displays it only when they are ready to view and act on it.



Step 1: Employment Verification    ➔ Step 2: Approve or Revoke Roles and Entitlements  
Approve or Revoke the roles and entitlements of the user

Black, George	In Progress
Brady, Lia	In Progress
Brighi, Albert	In Progress

**Brighi, Albert**  
Network    Phone:  
EID: alBrighi    E-Mail:

**Certify or Revoke roles**

➔ Certify this employee's roles by selecting approve or revoke for each role.

Action	Name	Description	Department	Comments
<input type="text" value="Certify"/>	Consultant			

**Certify or Revoke Entitlements**

Carrol, Joyce	In Progress
Cerreta, Jan	In Progress
Davis, Peter	In Progress
Dunham, Patrick	In Progress
Farber, Abby	In Progress
Fitzpatrick, Patricia	In Progress
Gallagher, Kevin	Complete

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### 2.0.3 Collapsible/Expandable Accordion Control

- Each certification can also be filtered and sorted on the basis of important User attribute such as Manager, Department, Cost Center, Job Title, Job Code, etc.

## 3.0 Enhanced Role Engineering & Administration

### 3.1 Ability to Schedule Role Mining

With Role Manager 4.1, Role designers or administrators can now schedule their Role mining efforts using a Mining Wizard that allows them to schedule repeatable jobs. This is particularly helpful when mining against populations involving large number of users and associated access. Mining results, which include suggested Roles and policies for each schedule are there categorically stored and can be easily accessed for further review.

**Role Engineering > Task Scheduler > RoleMining Jobs**

Select the date and time for the run to be scheduled

Scheduled Dates :  Daily  Monthly  One Time Only

Select the time and day for the task to start

Start Time : 1 : 13 : 56 PM

Perform this Task :  Every Day  Weekdays

Start Date : 09/16/2008

#### 3.1.1 Role Mining Job Scheduler

### 3.2 Display Entitlement Glossary during Role Mining

Role Manager 4.1 provides comprehensive Glossary definitions across the Role Mining Results pane. Expanding any suggested Role provides a hierarchy of associated namespaces and associated entitlements, along with their mining statistics. However, each entitlement displays the glossary definition instead of its actual value, making it easier for business to validate the results.

### 3.3 Ability to Generate Reports from Role Mining Results

Role Mining results, which include 1) suggested Roles 2) associated provisioning policies 3) entitlements encapsulated within those policies 4) glossary definitions of associated entitlements and 5) mining statistics for each Role, can now be exported into reports which can be saved in .xls and .pdf formats. These reports can then be sent to business managers, application owners and Role owners for further validation and feedback.



## RoleMining Reports

Role Name Role : 6::RM-Tue Sep 02 22:23:32 PDT 2008

### Membership Details

First Name	Last Name	Full Name
Atul	Vij	Vij, Atul
Arijeet	Harmsen	Harmsen, Arijeet

### Role Details

Namespace	Endpoint	Attribute	Value	Users	% of Users
ActiveDirectory	Vaau Active	Group Membership	Bases II Repair DBA Accounts	1	50%
ActiveDirectory	Vaau Active	Group Membership	Read Only User Accounts Group	1	50%
ActiveDirectory	Vaau Active	Group Membership	Bases II Repair DBA Accounts Group	1	50%
ActiveDirectory	Vaau Active	Group Membership	GB eBillView DBA Accounts Group	1	50%
SAP R3	SAP-Productiton-	Account Roles	Z_CRM_BC_DEV_ALL_ENV	2	100%
SAP R3	SAP-Productiton-	Account Roles	Z_CRM_BC_ALL_USERS	2	100%
SAP R3	SAP-Productiton-	Account Roles	Z_CRM_BC_ALL_USERS,	2	100%
SAP R3	SAP-Productiton-	Output Device	LOCL	2	100%
SAP R3	SAP-Productiton-	Authorization Profiles	SU02	2	100%
SAP R3	SAP-Productiton-	Authorization Profiles	SU06	2	100%

05/09/08 14:49

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### 3.3.1 Role Mining Results Report

## 3.4 Enhanced Role History

An enhanced Role History module provides comprehensive detail on the lifecycle of each Role including changes made to its membership, provisioning policies, ownership and entitlements added/removed from the Role. This helps to truly report and audit the status of every Role in the Identity Warehouse.

Roles » Cash and Stock Reconciliation Clerk

Search Role Name Search

**Roles**

Cash and Stock Reconciliation Clerk

- Finance Assistant Assistant
- Loan Administrator
- Management Accountant
- Operations Generalist
- Settlement Analyst
- Trade Finance & Documentary Credits Clerk

General Business Units Policies Users Exclusion Roles Ownership Custom Properties Versions History

**Role Membership History** [Show Details](#) | [Collapse](#)

Member Added	Member Removed	Date	Requested By
Daniels, Melanie			
Brady, Lia			
Stockman, Linda		03/14/2008 14:16:09	rbackadmin
Mathew, Susan			
Towne, Joseph			
Gallagher, Kevin			
Nayyar, Sachin		03/14/2008 14:22:32	rbackadmin

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**Policy History** [Show Details](#) | [Collapse](#)

**Owner History** [Show Details](#) | [Collapse](#)

**Attribute History** [Show Details](#) | [Collapse](#)

### 3.4.1 Enhanced Role History

### 3.5 Enhanced Role Versioning

The Role Versioning capability introduced in Role Manager 4.0 has been significantly enhanced with 4.1 by adding the ability to compare between versions and also to revert to an older version of any Role designed in Role Manager. Comparing different versions of Roles allows Role designers to make educated decisions on what attributes associated to each Role Version are similar and could be discarded, and also compares other important Role definition attributes such as Ownership, Business Unit a Role belongs to, provisioning Policies, and Exclusion Roles for Segregation of Duties definition.

General		Ownership	Business Units	Policies	Exclusion Roles
customProperty1					
customProperty10					
customProperty2					
customProperty3					
customProperty4					
customProperty5					
customProperty6					
customProperty7					
customProperty8					
customProperty9					
department					
highPrivileged	false				
jobCode					
parentRoleName					
roleComments	Created by RBACx's Role Mining Engine, Fri Mar 14 15:15:29 PDT 2008				
roleDescription					
roleName	Role : 1::RM-Fri Mar 14 15:15:29 PDT 2008				
serviceDeskTicketNumber					
statusKey	3				
customProperty1					
customProperty10					
customProperty2					
customProperty3					
customProperty4					
customProperty5					
customProperty6					
customProperty7					
customProperty8					
customProperty9					
department					
highPrivileged	false				
jobCode					
parentRoleName					
roleComments	Created by RBACx's Role Mining Engine, Fri Mar 14 15:15:29 PDT 2008				
roleDescription					
roleName	System Analyst				
serviceDeskTicketNumber					
statusKey	1				

Unchanged
  Added
  Modified
  Removed

### 3.6 Rule Based Role Removal

Rules can now be defined in Role Manager 4.1 that extend across the Identity Warehouse to check for conditions to remove Roles from Users. This is particularly helpful in a job transfer or termination scenario where Roles need to be removed from an employee. Based off of changes in a combination of HR attributes for a User record in Role Manager, these rules can be triggered to remove nominated Roles from Users.

### 3.7 Provisioning Policy Lifecycle Management

Enterprise Role lifecycle management capabilities have been extended to provisioning policies with the Role Manager 4.1 release. Provisioning policies are critical components to defining Roles as they

encompass target system entitlements within them, and any policy creation and modifications should be a part of a workflow approval process and versioning. Policy creation and modification workflows can be edited from the Role Manager UI and pre and post approval functions for invoking web services and email integration at each step of the workflow can be easily added.

**Edit Workflow**

Name :

Description :

**Initial Actions :**

Actions	Description
Store Workflow Input	Stores data required for workflow

**Steps :**

Step Name	Link Status	Actions	Assignee Type	Assignee	Operation
Start Workflow		Start Workflow >>Policy Owner Approval			Add Action   Add Step   Delete Step
Policy Owner Approval	Pending Approval	Approve Policy >>Finish Reject Policy >>Discard Policy Auto Approval >>Finish	POLICY_OWNER		Add Action   Add Step   Delete Step
Finish	Active				
Discard Policy	InActive				

```

graph TD
    Start[Start Workflow] --> StartAction[Start Workflow]
    StartAction --> Approval[Policy Owner Approval]
    Approval -- Approve Policy --> ApproveAction[Approve Policy]
    Approval -- Reject Policy --> Discard[Discard Policy]
    Approval -- Auto Approval --> Finish[Finish]
  
```

### 3.7. Policy Life-cycle Management Workflow for Modification of Policies

In addition, the policy lifecycle management adds the concept of Policy Owners and also records Policy History for each provisioning policy managed in the Identity Warehouse.

### 3.8 Mass Modification Workflow

Roles and provisioning policies modified in bulk can now be sent for approvals simultaneously and can be approved together. This helps approvers save time and approve modified Roles or provisioning policies together, rather than approving each modification individually.

### 3.9 Advanced Role Search

Improved Role Search capabilities have been added to the latest version of Role Manager, enabling Role administrators and owners to effectively search for Roles. Roles can now be searched across a combination of any Role attribute, with parameters including which user is assigned to a particular Role, custom Role attribute or a provisioning policy embedded within a Role.

### 3.10 Role Copy

Role Manager 4.1 supports two ways to copy a Role: 1) Create a new Role using another Role as template and 2) Create a new Role from all access a User has in the Identity Warehouse.



#### 3.10.1 Role Copy

## 4.0 Improved Identity Warehouse & Custom Reporting

Several important enhancements have been made to the Identity Warehouse keeping in mind the importance of being able to easily locate and identify users and their entitlements. Identifying orphan accounts for clean up directly from the Role Manager 4.1 UI is a strong addition to a feature rich data warehouse. Role Manager 4.1 also supports custom reporting which allows the inclusion of server side custom reports to be available for view and export through the Role Manager interface.

### 4.1 Account Type

Often times, it is impossible to determine whether an account is an end user account, a service account, system account, provisioning account, etc., across various target systems and applications. The solution now includes an account type attribute that can be optionally associated to each account, which helps to further define any account or entitlement.

Users » Tomkins, Amanda

<input type="checkbox"/> General <input type="checkbox"/> Workflow <input checked="" type="checkbox"/> Accounts <input type="checkbox"/> Roles <input type="checkbox"/> Business Unit <input type="checkbox"/> Custom Properties <input type="checkbox"/> Relationship Map			
<input type="checkbox"/>	Account Name	Account Type	Endpoint
<input type="checkbox"/>	aTomkins	Provisioning account	Vaau Active Directory 00-10
<input type="checkbox"/>	aTomkins	Provisioning account	SAP-Productiton-300
<input type="checkbox"/>	aTomkins	Provisioning account	RACF
<input type="checkbox"/>	aTomkins	Provisioning account	Prod-01-1500
<input type="checkbox"/>	aTomkins	Provisioning account	FND
<input type="checkbox"/>	aTomkins	Provisioning account	OFS

### 4.1.1 Account Type

## 4.2 Manual Correlation

Role Manager 4.1 provides a new Manual Correlation module, which houses orphan or non-correlated accounts and can be used to manually correlate them to the correct owners or users. One of the major advantages of using this module is that it buckets orphan accounts on the basis of their namespaces (e.g. Active Directory) and subsequently their endpoints (e.g. Active Directory domain Sun Microsystems – West Region). This really makes it easier to search for the appropriate non-correlated account and assign it to the correct user, directly from the Role Manager UI.

Users >> Orphan Accounts

Namespaces				
ActiveDirectory				
Vaau Active Directory 00-10				
rMcDonald				
hGreen				
bbartow				
Vaau Active Directory 00-59				
SAP R3				
SAP-Productiton-300				
SAP-Productiton-100				
hGreen				
capsc				
bbartow				
ACF2				
RACF				

<input type="checkbox"/>	Account Name	Account Type	Domain	Create Date
<input type="checkbox"/>	hGreen		VAAUIT	

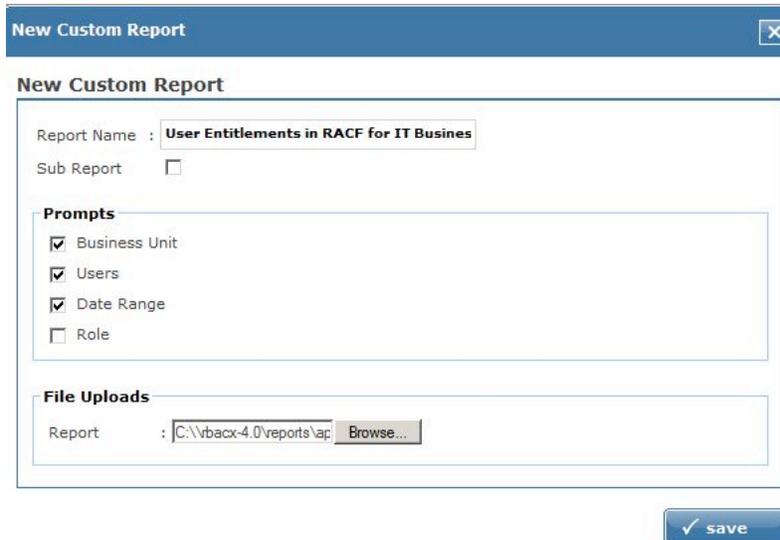
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### 4.2.1 Manual Correlation of Orphan Accounts

## 4.3 Custom Reporting

Custom Reporting allows administrators and report designers to create custom reports by leveraging the Jasper iReport designer and subsequently adding these reports to the Reporting module with minimum effort. These reports are then treated like any other out of box reports and can be scheduled for electronic sign off or exported in various formats.



### 4.3.1 Upload Custom Report to Role Manager UI

## 5.0 Improved Integration with Sun Identity Manager

Enhancing the performance of integration between Role Manager 4.1 and all supported versions of Sun Identity Manager has been the primary goal for the Role Manager 4.1 release. In addition, Role Manager 4.1 also leverages some of the latest enhancements in Sun Identity Manager 8.0 around Business/IT Roles and the Data Exporter to enable a more efficient exchange of data with improved performance. The two major enhancements surrounding the integration of Role Manager 8.1 and Sun Identity Manager are as follows:

- 1) Enhanced performance and efficiency of user and account loading from Identity Manager to Role Manager:** Role Manager 4.1 provides enhanced performance and efficiency when integrated with Sun Identity Manager, promoted by the ability to import only new or modified users and user entitlements from Sun Identity Manager to Role manager via an enhanced SPML configuration.



**2) Enhanced Role Provisioning:** Provides a stronger, more robust integration with Sun Identity Manager leveraging SPML. Role Manager 4.1 also exports the metadata surrounding Roles designed in Role Manager to Identity Manager for provisioning. Role Manager 4.1 also takes advantage of the concept of Business/IT Roles introduced in Sun Identity Manager 8.0, designed to be a stronger consumer of Roles, and exports them appropriately to Identity Manager.

For more information on these enhancements, please refer to the latest version of the ***Sun Role Manager-Sun Identity Manager Integration Guide***.

## 6.0 Extended API Support

Role Manager 4.1 provides extensive API support by means of Web services where several important tasks are supported by Web services such as:

- 1) Assigning and removing User to a given Role with Auto Approval
- 2) Evaluating Audit Policies in the Role Manager Identity Audit module
- 3) Checking SOD Exception for Roles
- 4) Create and Update User with Rule Based Role Assignment
- 5) Fetch Business Structures associated to a given User
- 6) Remove all Roles from a given User

## 7.0 MySQL Support

Role Manager 4.1 now adds support for MySQL deployed in both Windows and UNIX environments, a major addition to its existing support of MS SQL, Oracle and DB2. Role Manager is able to fully exploit the potential of automating table and index reorganization in MySQL, eliminating fragmented data to improve data access performance.