ORACLE FUSION MIDDLEWARE 11g

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Oracle Identity Analytics 11g

Das Compliance Werkzeug für Berechtigungen

Dr. Stephan Hausmann

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Agenda

- Oracle Identity Analytics Overview
- Transparency
  - Consolidate & Correlate
- Identity-based Controls
  - Access Certification
  - Audit Policy
- Role Management & Governance
- Summary
- Q&A

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Oracle Identity Analytics Overview

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What Are We Hearing?

IT Ops & Security

- Manage access control across the enterprise
- Assess and control security risk

Business Managers

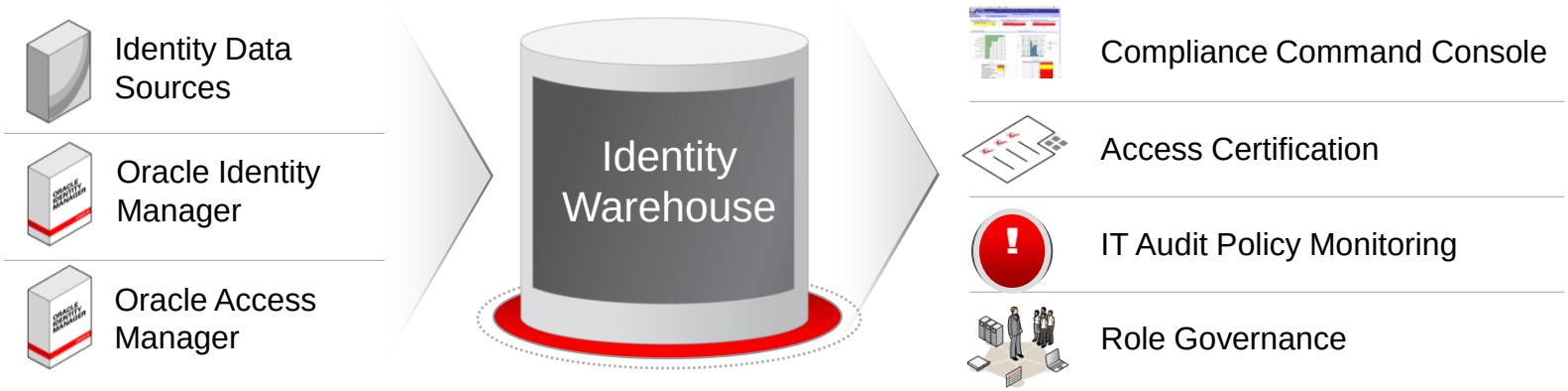
- Understand and attest to user access
- IT Risk and Business Productivity goals don't align

Compliance

- Without automation, compliance is complex, error-prone, inconsistent
- Need to enforce and demonstrate compliance rapidly

Control IT, Security, Compliance Costs

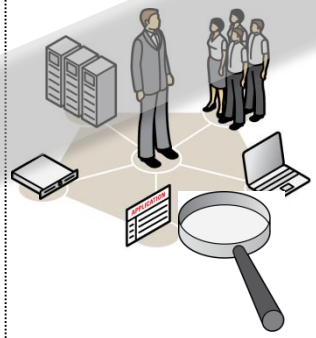
Oracle Identity Analytics 11g

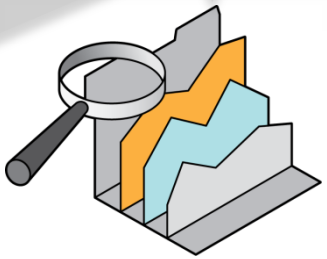


- Compliance Command Console
  - Actionable Dashboards, Business Reports & Comprehensive Analytics
- Accelerated and Sustainable Compliance Automation
  - Access Certification, IT Audit Policy Monitoring, Closed-loop Remediation, Risk based
- Intelligent Role Governance
  - Change Management, Attestation, Consolidation & Audit, Role Mining
- Rich Identity Warehouse
  - Optimized for Analysis, Mining, Correlation, Reporting on Identity, Access and Policy Data

Oracle Identity Analytics

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Consolidate & Correlate Entitlements	Automate Identity-based Controls	Define Enterprise Roles	Assign Access via Roles	Support Business Decisions
Identity Warehouse	Access Certification & Audit Policy	Role Mgmt & Governance	Integration with Provisioning	Reports, Dashboards & Analytics





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Transparency
Consolidate & Correlate

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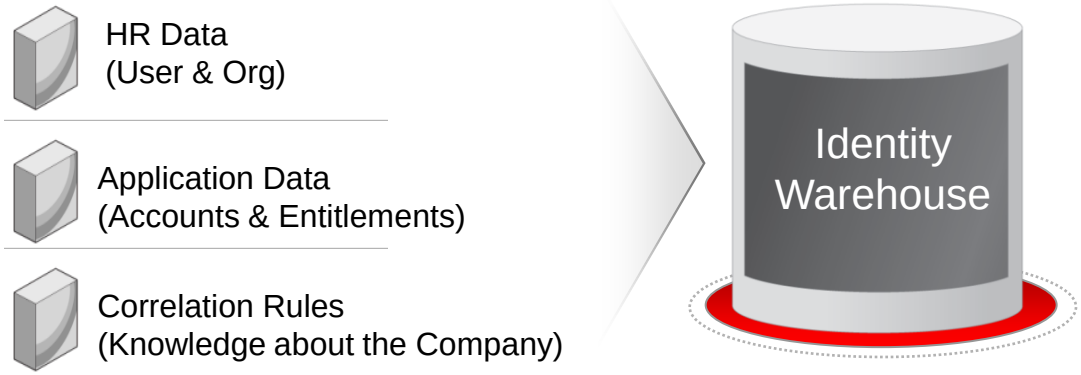
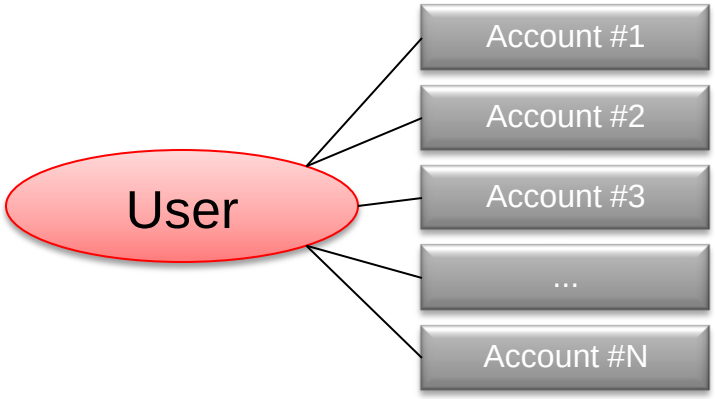
Consolidate & Correlate



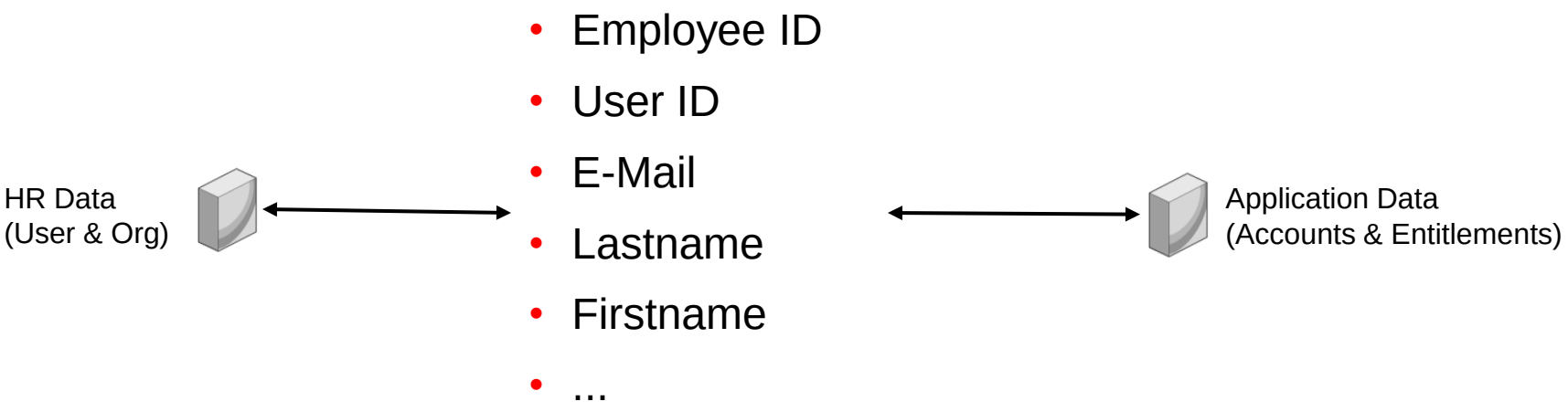
- Consolidate all account data
  - Reporting
  - Who has access to what?
- Identify all uncorrelated account data
  - orphan accounts
  - low data quality
    → manual correlation and/or increase application data quality



Import HR & Application Data

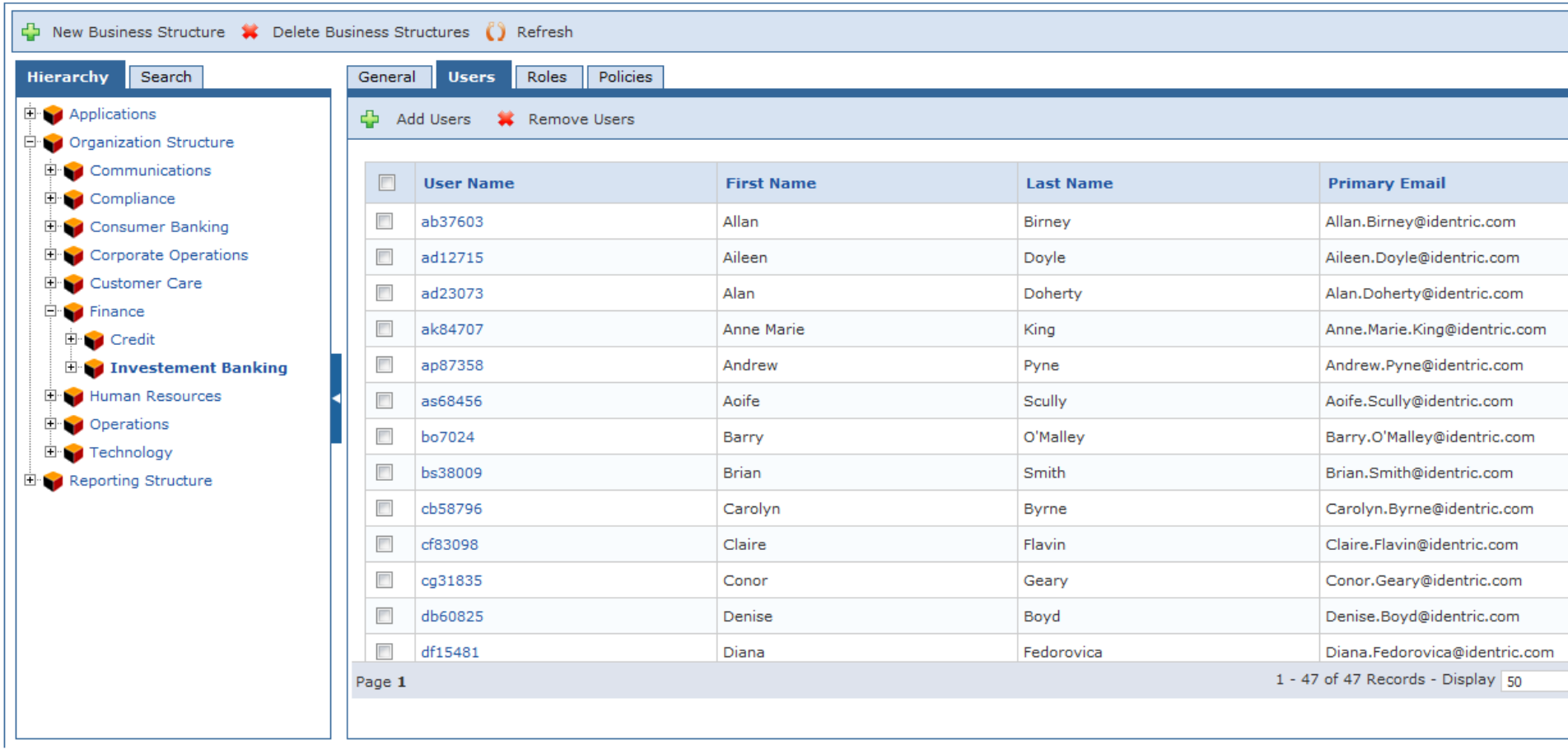
- Organizations
- User
  - Name
  - E-Mail
  - Manager
  - Assigned Organization(s), Assigned Projects, etc.
  - Jobcode, Location
  - Everything which allows a correlation to application accounts
- Application Data
  - Entitlements
  - Everything which allows a correlation to users (HR data)
  - Everything you can get is generally a good idea

Correlation Rules



- Requires knowledge about your company
- Probably different for every application
- Several correlation rules may have to be combined
  (or correlate with different rules and keep existing correlation)

Organizations & Users



User & Accounts

Users > Birney, Allan

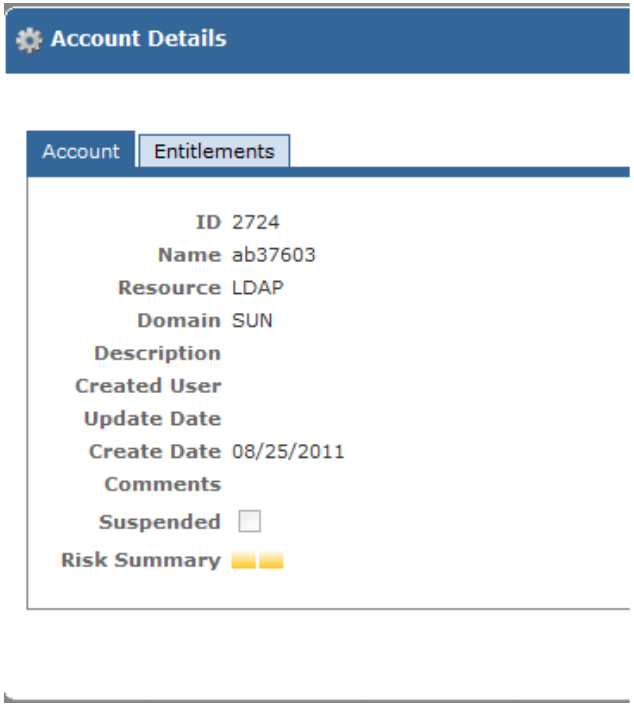
Delete User

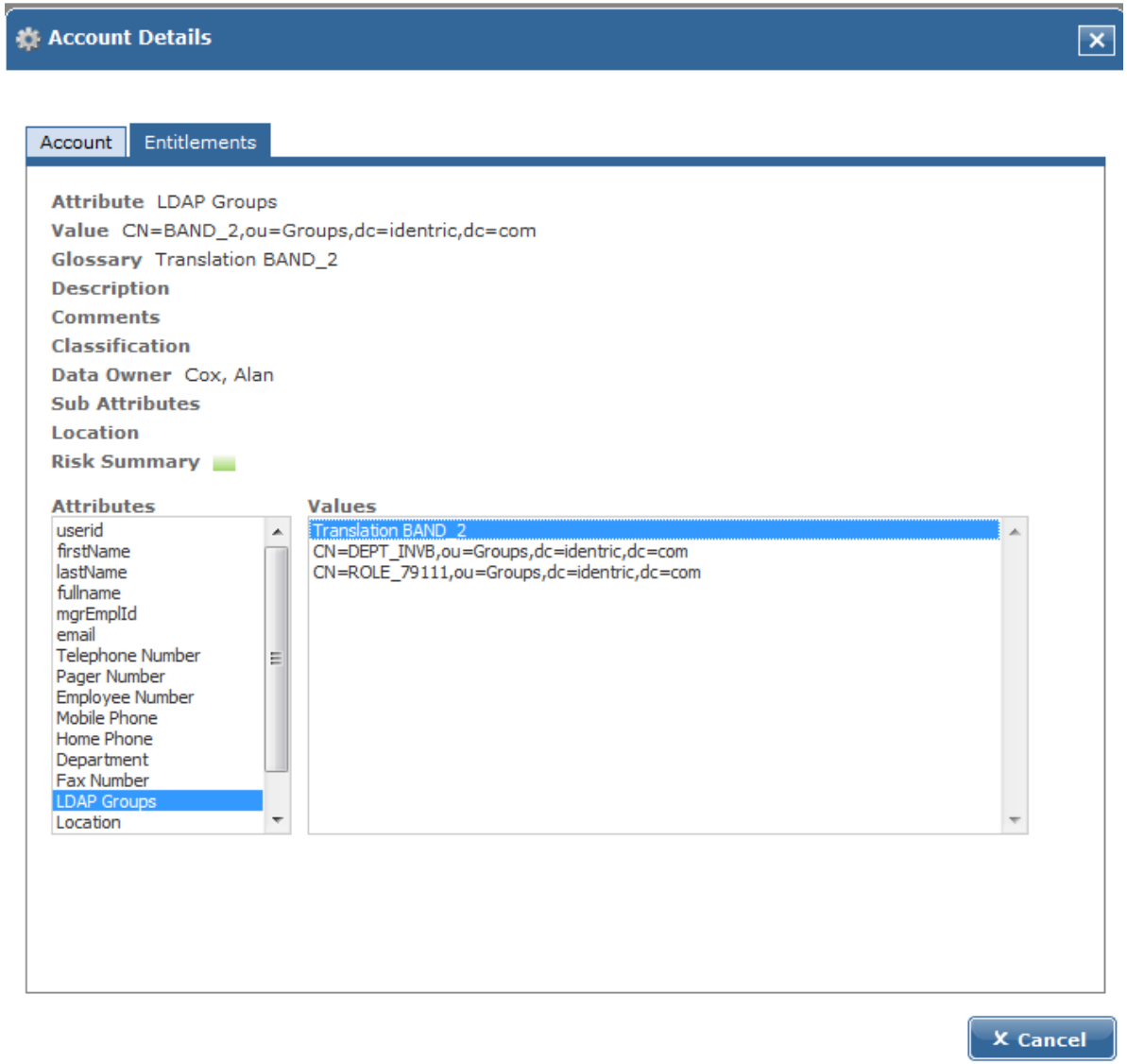
General | **Accounts** | Roles | Business Structures | Custom Properties | Relationship Map

Change Owner Remove Account

Account Name	Account Type	Resource	Domain	Resource Type Name	Create Date
6461143	Provisioning account	AIX	SUN	AIX	08/25/2011
ab37603	Provisioning account	DB2	SUN	DB2 Database	08/25/2011
ab37603	Provisioning account	AD	SUN	Windows Active Directory	08/25/2011
ab37603	Provisioning account	SUN	Oracle	Oracle	08/25/2011
ab37603	Provisioning account	RACF	none	RACF	08/25/2011
ab37603	Provisioning account	LDAP	SUN	LDAP	08/25/2011
ab37603	Provisioning account	MSSQLServer		Microsoft SQL Server	08/25/2011
ab37603	Provisioning account	UNIX	SUN	Red Hat Linux	08/25/2011
ab37603	Provisioning account	SUN	UDB	UDB	08/25/2011

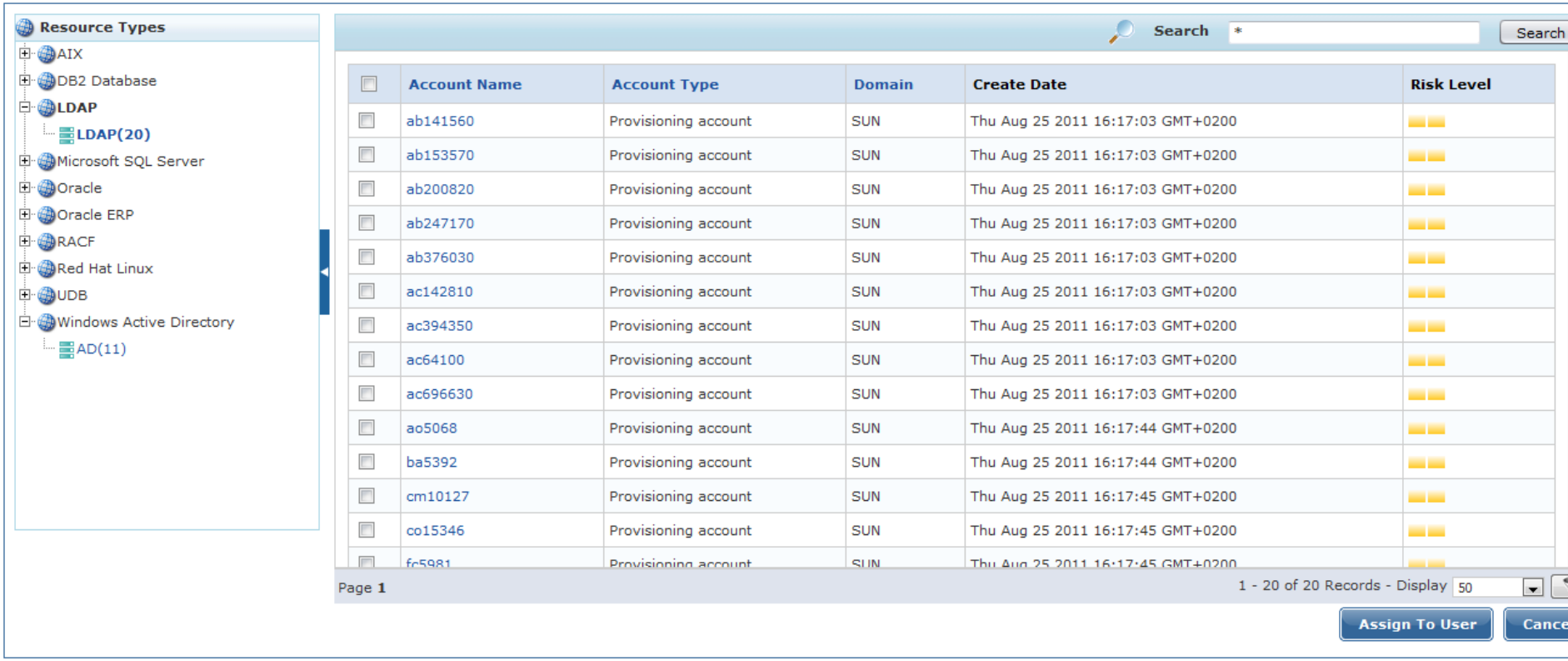
Accounts, Entitlements & Glossary





Orphan Accounts

Users > Orphan Accounts



- Accounts which can‘t be assigned automatically have to be assigned once manually
- Identify orphan accounts

Customer Example

Ressource	#Accounts	Correlated	Unmatched
Corporate LDAP	17404	17404	0
Applikation #1	6727	6495	232
Applikation #2	9851	9567	284
Applikation #3	12865	12679	186
Application #4	2003	1280	723
Application #5	3857	1757	2100
Application #6	2358	1514	844

3745 accounts deactivated in the Corporate LDAP, but 358 corrosponding accounts on the others systems still active

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Identity-based Controls
Access Certification

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Attestation Overview

- Complete Attestation Coverage
  - User Entitlement
  - Role Owner
  - Resource Entitlement
  - Data Owner
- Consolidated, correlated, granular identity data
- Flexible scheduling options and escalation workflows
- Configurable Sign-Off options and Business friendly UI
- Entitlement Glossaries
- Risk based

Access Certification Flow

1 Set Up Periodic Review

What Is Reviewed?

Who Reviews It?

Start When? How Often?

2 Reviewer Is Notified Goes to Self Service

Reviewer Selections

Certify

Reject

Decline

Delegate

Comments

3 Automated Action is taken based on Periodic Review

Email Result to User

Automatically Terminate User

Notify the Process Owner

Notify Delegated Reviewer

4 Report Built And Results Stored in DB

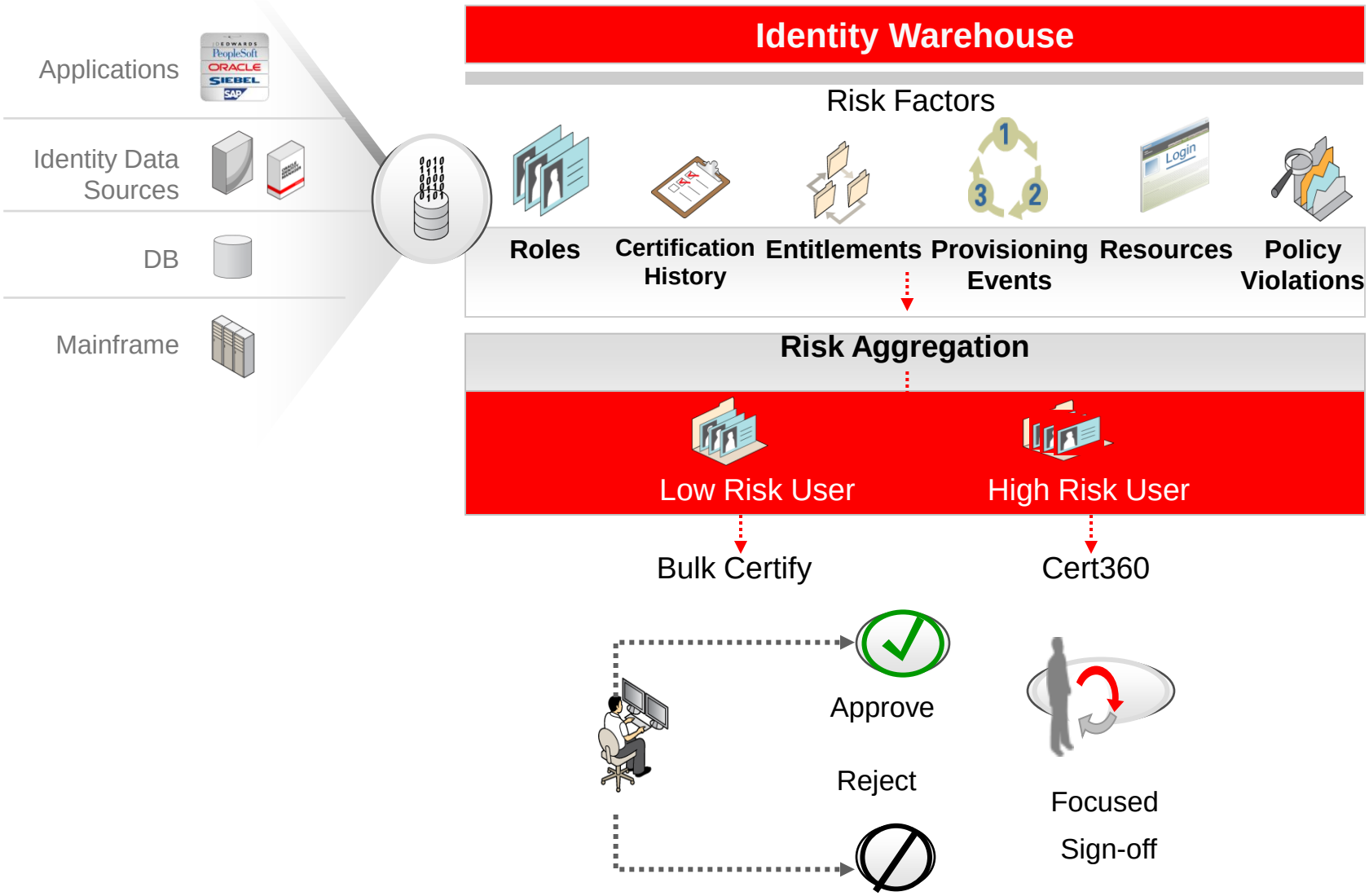
Archive

Attested Data

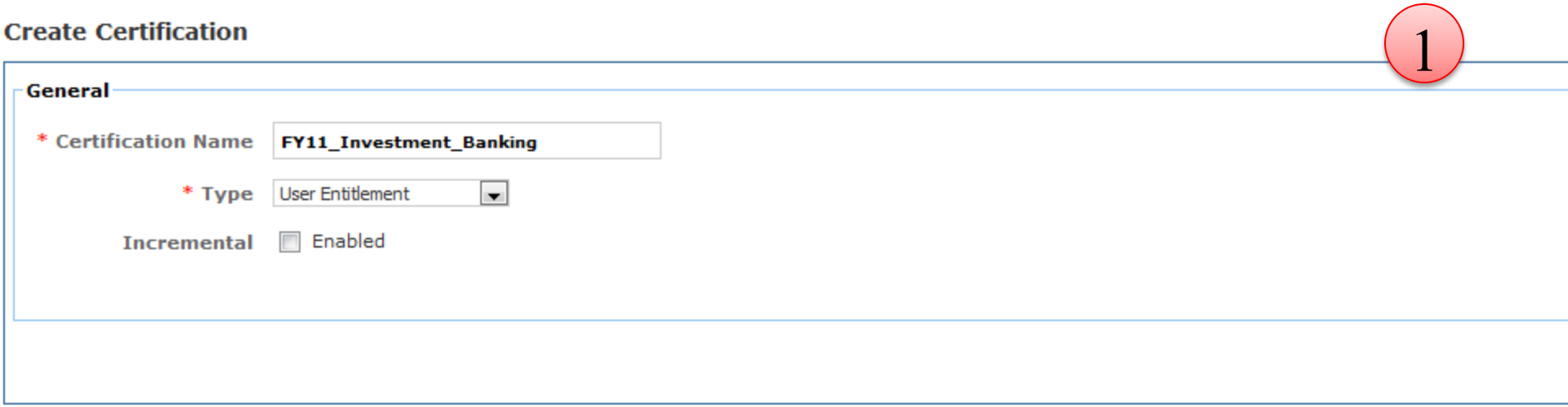
Attestation Actions

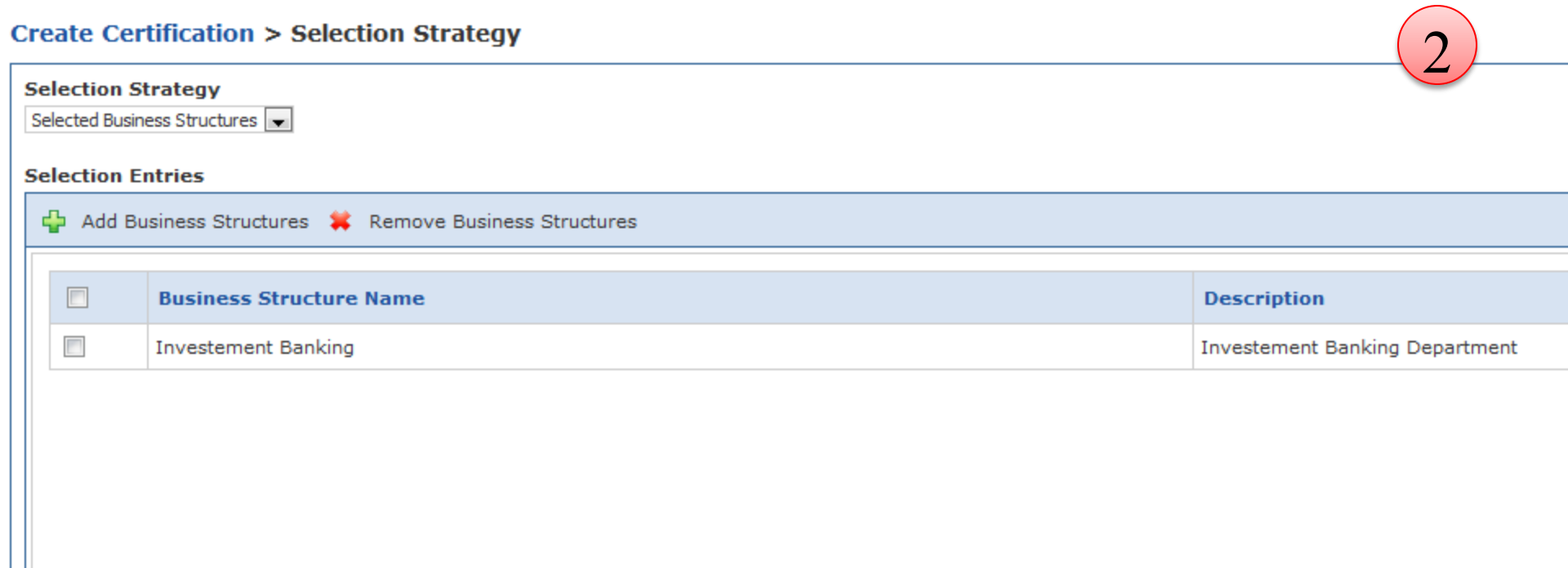
Delegation Paths

Risk Based Certifications

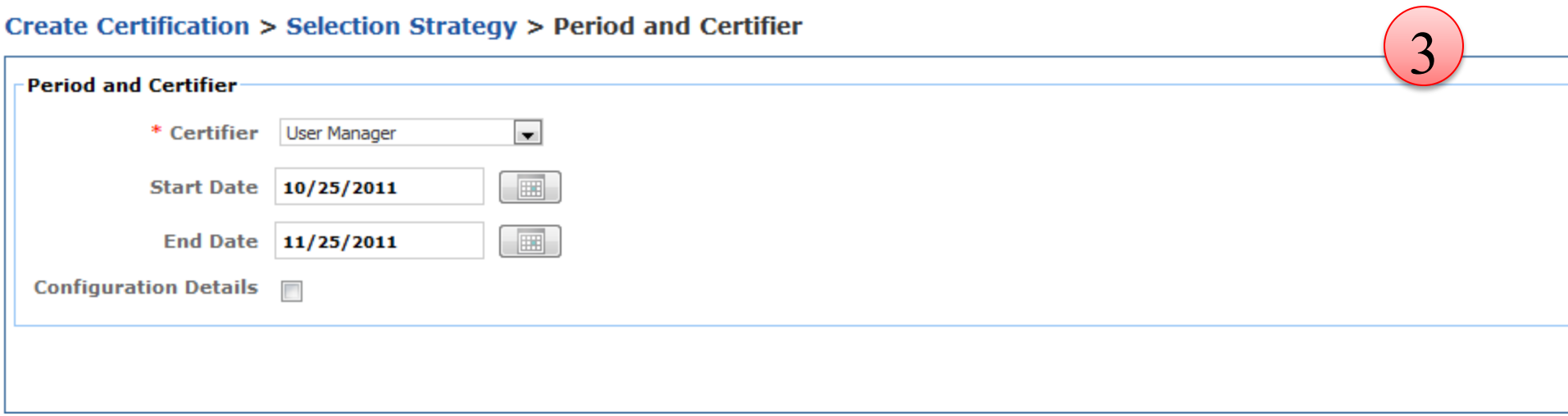


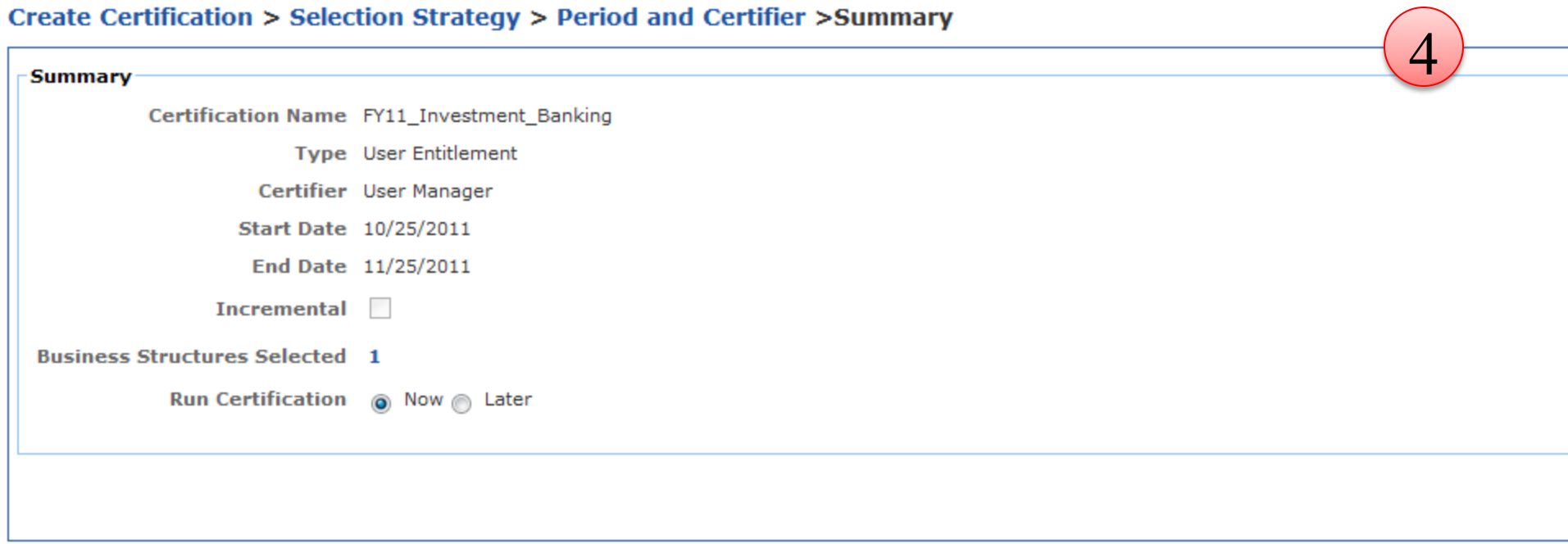
Create Certifications





Create Certifications

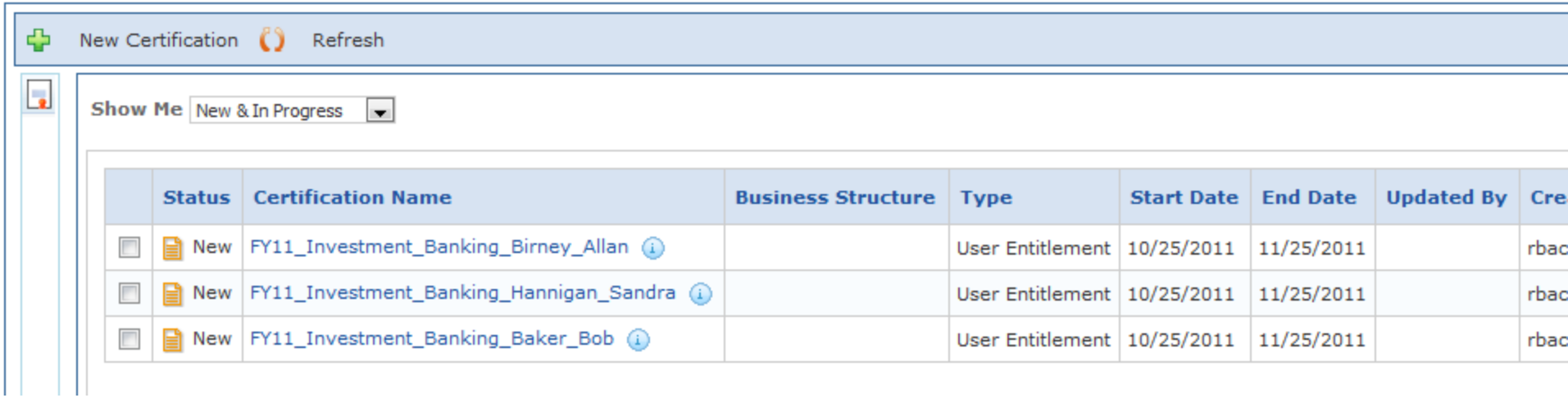




Created Certifications

My Certifications

New certifications will require a complete review of the users, roles, or entitlements. Pending certifications have had some review but the process has not been comple
certifications are stored here for revisions or review purposes. Expired certifications are past their allocated certification period but may be useful for review. Click on
Mouse-over the information icon to view a summary of the certification.



Certification: Users

My Certifications > FY11_Investment_Banking_Birney_Allan

User Entitlement Certification

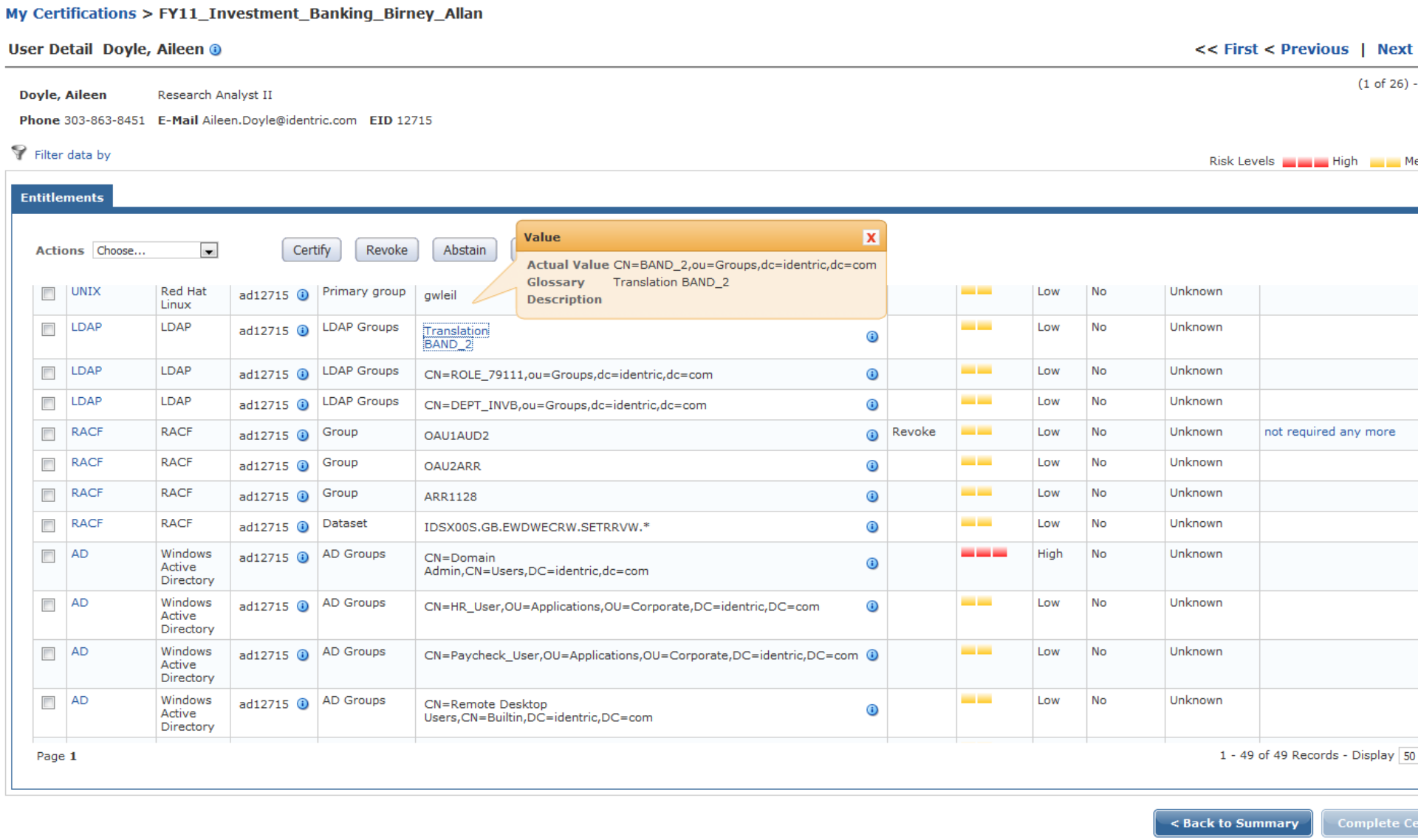
Filter data by

Actions Choose... Claim Decline Delegate Disclaim Complete User

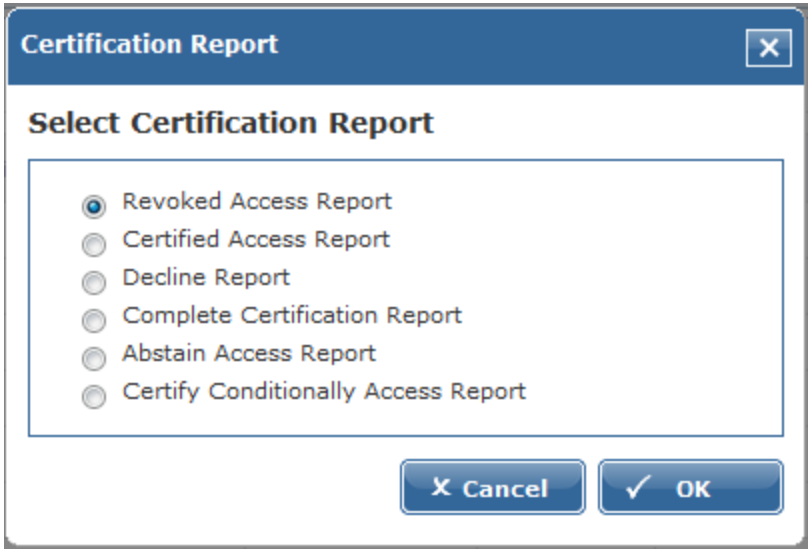
User Name	First Name	Last Name	Primary Email	Status	Risk Summary	Accounts	Entitlements	Certification Comments
ad12715	Aileen	Doyle	Aileen.Doyle@identric.com	0%		9	40	
ad23073	Alan	Doherty	Alan.Doherty@identric.com	Decline		8	28	does not work for me
bs38009	Brian	Smith	Brian.Smith@identric.com	0%		8	29	
cg31835	Conor	Geary	Conor.Geary@identric.com	0%		10	26	
dl67518	David	Lock	David.Lock@identric.com	0%		8	25	
dw39309	Deirdre	Worthington	Deirdre.Worthington@identric.com	Decline		8	27	retired 4 weeks ago
el14716	Emma	Leahy	Emma.Leahy@identric.com	0%		8	23	
eo58821	Edward	O'Toole	Edward.O'Toole@identric.com	0%		8	24	
ew58570	Edward	Ward	Edward.Ward@identric.com	0%		9	45	
hm63573	Hannah	Mulhall	Hannah.Mulhall@identric.com	0%		8	27	

Page 1

Certification: Entitlements



Certification: Reports



Revoked Access Report

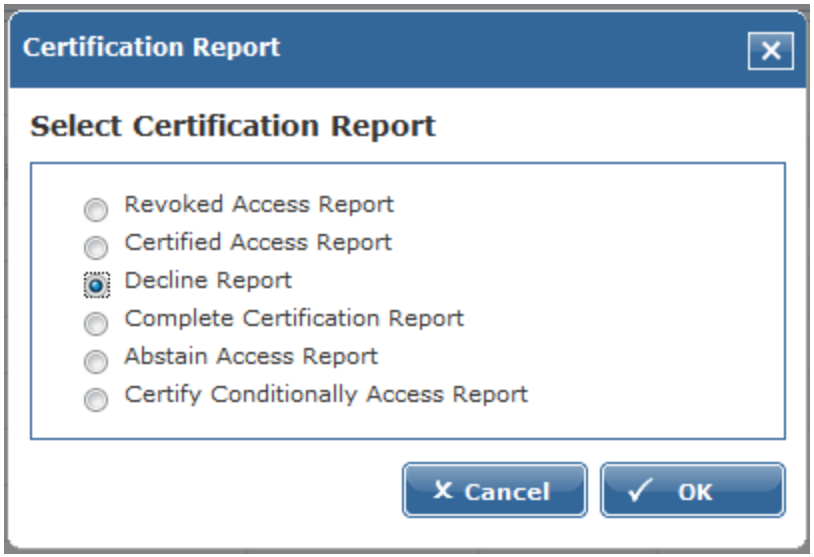
Certification Name: FY11_Investment_Banking_Birney_Allan
Business Structure:
Signed Off By: rbacxadmin
Signed Off On: 10/25/11 3:43 PM

Doyle, Aileen- [ad12715]

Account Name	Resource	Comments	De-provisioning Steps	Last Update Date
RACF				
ad12715	RACF			

Attribute Name	Attribute Value	Comments	Last Update Date	Update
Group	OAU1AUD2	not required any more	10/25/11 3:41 PM	rbacxad

Certification: Reports



Declined Users Report 10/25/11 3:45 PM

Certification: FY11_Investment_Banking_Birney_Allan
Business Structure:
Signed Off By: rbacxadmin
Signed Off On: 10/25/11 3:43 PM

User ID	Last Name	First Name	Title	Email	Status	Comments
ad23073	Doherty	Alan	Research Analyst I	Alan.Doherty@identric.com	Declined	does not work for me
dw39309	Worthington	Deirdre	Research Analyst I	Deirdre.Worthington@identric.com	Declined	retired 4 weeks ago

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Identity-based Controls Audit Policy

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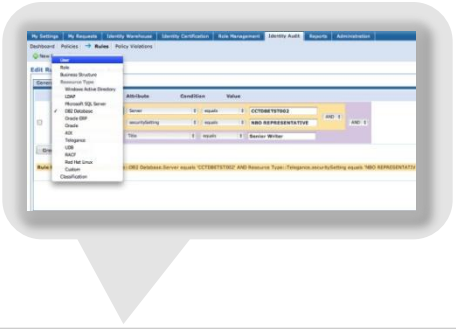
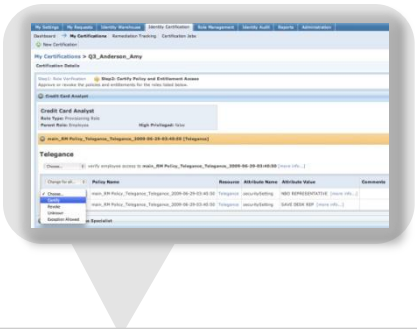
IT Audit Policy Monitoring



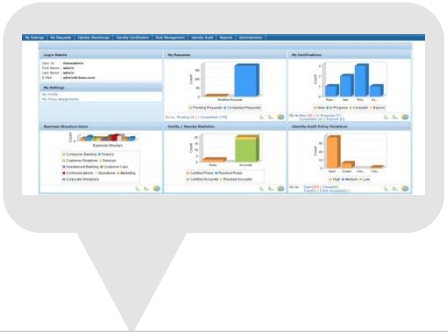
IT Audit Policies

- Across Entitlements & Roles
- Within Application or Cross-Applications
- Preventative & Detective Remediation



Role Exceptions

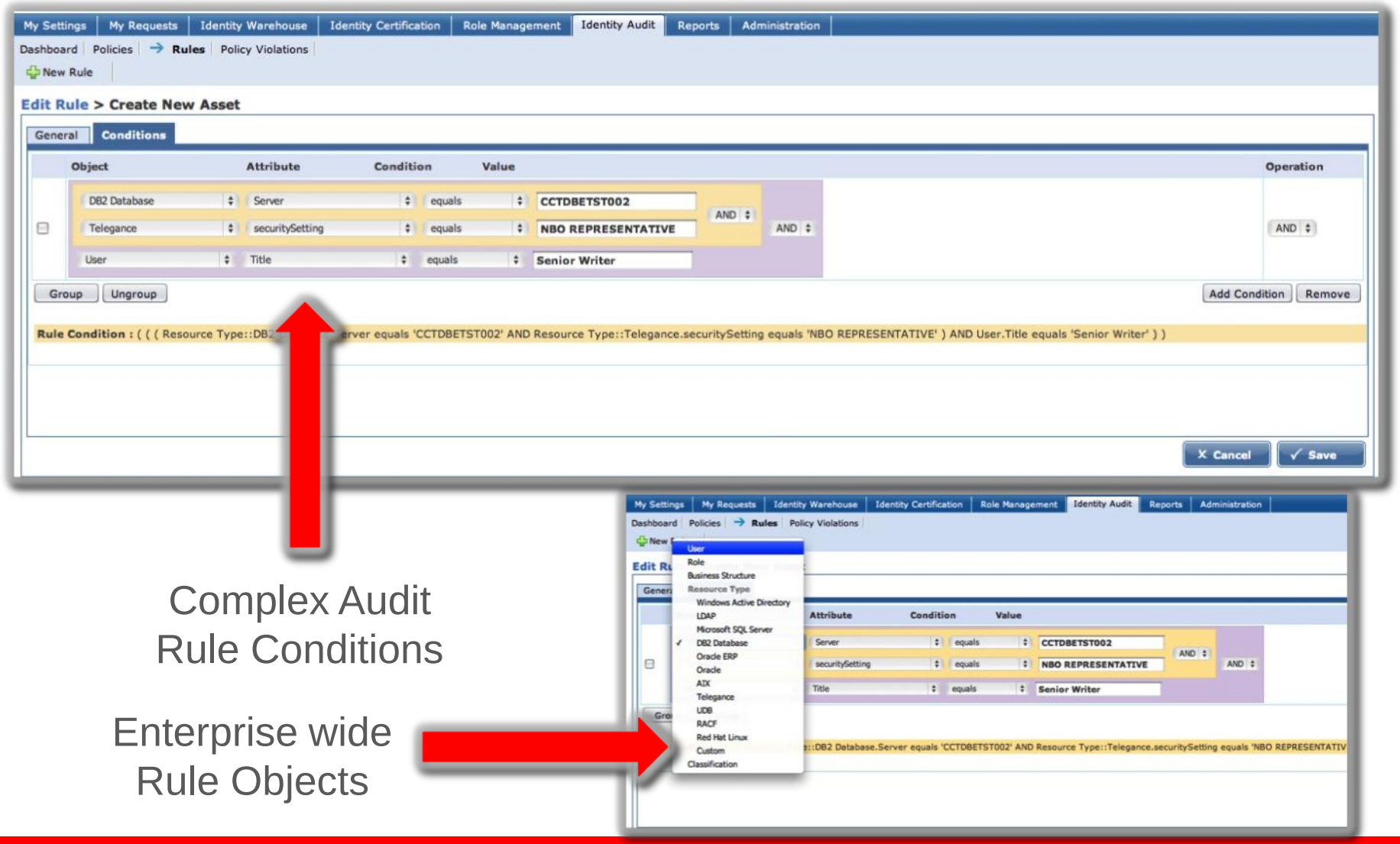
- Roles Vs. Actuals
- Entitlements Outside Roles
- Mitigating Controls
- Manager Signoff for Audit Exceptions



Monitoring

- 50+ Reports
- Compliance Dashboards
- Compliance Metrics Monitoring
- Historical Trend Analysis
- Remediation Tracking

IT Audit Policy Monitoring



Complex Audit Rule Conditions

Enterprise wide Rule Objects

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Role Management & Governance

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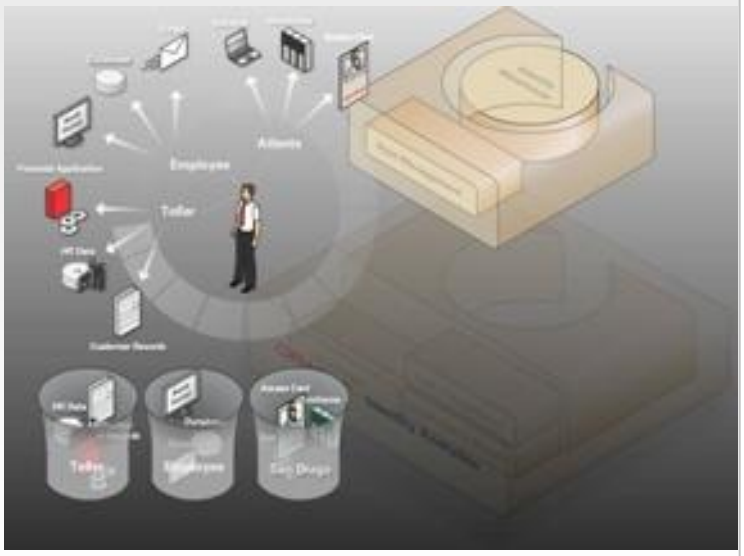
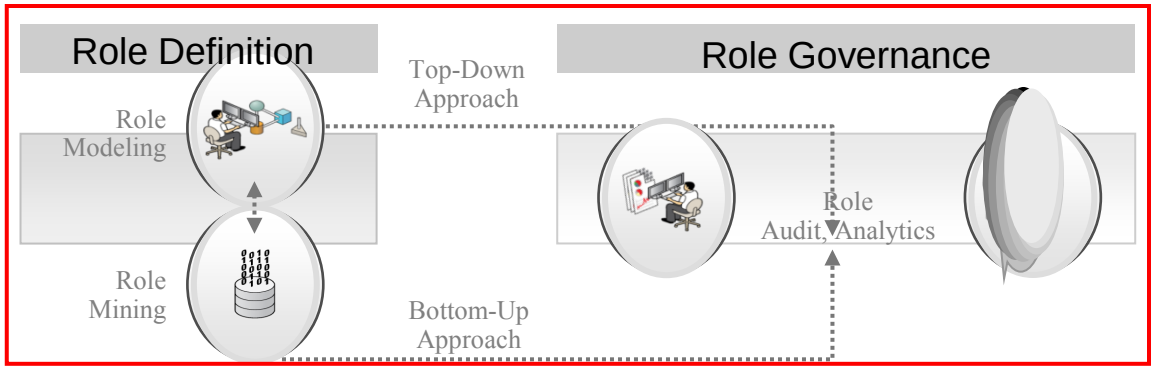
Role Mining

Intelligent Role Discovery Engine

- Comprehensive Role Discovery using Hybrid Approach:
  - Bottom Up (User Entitlements)
  - Top Down (User HR Attributes)
- Flexible User Population Selection
- Mining Results Dashboard
  - Statistics & Analytics
  - Graphical Representations
- Incremental Role Mining
  - Role Entitlement Discovery to mine new applications based on existing roles



Define and Govern User Roles



Change Mgmt

- Role Change Approvals
- Role Versioning
- Rollbacks & Comparison
- Role Change Impact Analysis
- Rule Management

Role Audit

- Role –Entitlement Mapping History
- Role Membership History
- Approvals History
- Role Ownership History

Governance

- Role Definition Attestation
- Role Membership Attestation
- Role Consolidation
- Role Mining

Compliance Command Console

Presentation of Identity Data in Business-Friendly Format

- Actionable dashboards
  - Reliable risk analysis
  - Compliance Dashboards
- 50+ OOTB Reports
- Publicly available schema
- Comprehensive cross-referenced presentable data
  - Enable complete Identity Governance
- Advanced analytics

Summary

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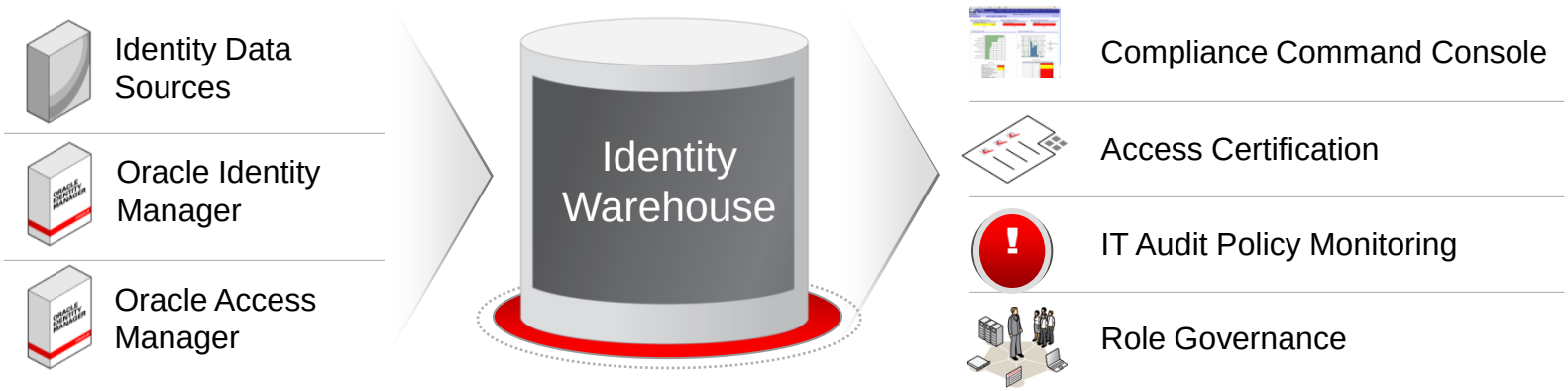

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Summary

- **Oracle Identity Analytics**
  - Is comprehensive and proven
  - Offers rich set of identity governance features including risk based attestation, continuous SoD monitoring, role governance, dashboards & reporting
  - Is available for download today
- **For More Information**
  - www.oracle.com/identity
  - www.identigov.wordpress.com

Q&A

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