Strengthening ERP Security Posture with Semantic AI

Fusion Risk Management Cloud

Speakers

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Hertz

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Agenda

Strengthening Cybersecurity – Sid

Meta Case Study - Dave

Republic Services Case Study - Tara

Hertz Case Study – Joe

Exelon Case Study – Kevin

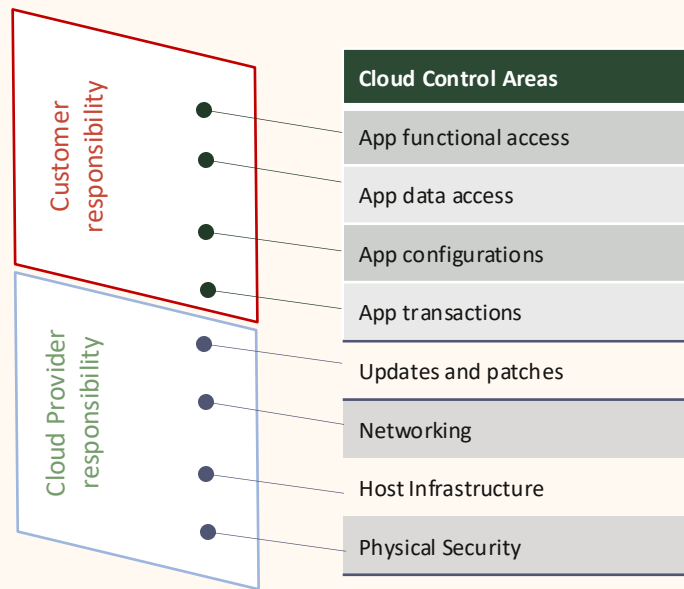Wrap-up

Shift to cloud is reshaping SaaS cybersecurity

Attack surface area focused on the application layer

| On-prem ERP/SCM/HCM | → | Cloud ERP/SCM/HCM |

- More users with a global footprint

- Increased integrations via web services

- Accelerated transaction cycle time

- More setups with frequent updates

Compared to on-prem, Business processes running on the cloud requires a different approach to managing cyber security

Customer responsibility

Cloud Provider responsibility

Cloud Control Areas
App functional access
App data access
App configurations
App transactions
Updates and patches
Networking
Host Infrastructure
Physical Security

Dave Claytor

Director, Enterprise Engineering

Meta - Background

- Cloud Financials, Supply Chain deployed Jan-2021

- Utilized Risk Cloud Application & API extensively, since go live

- Leveraging SoD, Sensitive Access & Advance Configuration capabilities

- Driving compliance across internal applications, third party platforms

Access Management Landscape

∞ Meta

57
SoD Controls Enforced

82
Sensitive Access Controls Monitored

107,000
Users

380,000
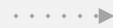Sensitive, SOD Access Requests Analyzed, Jan-2021

28 ⤑ **565**
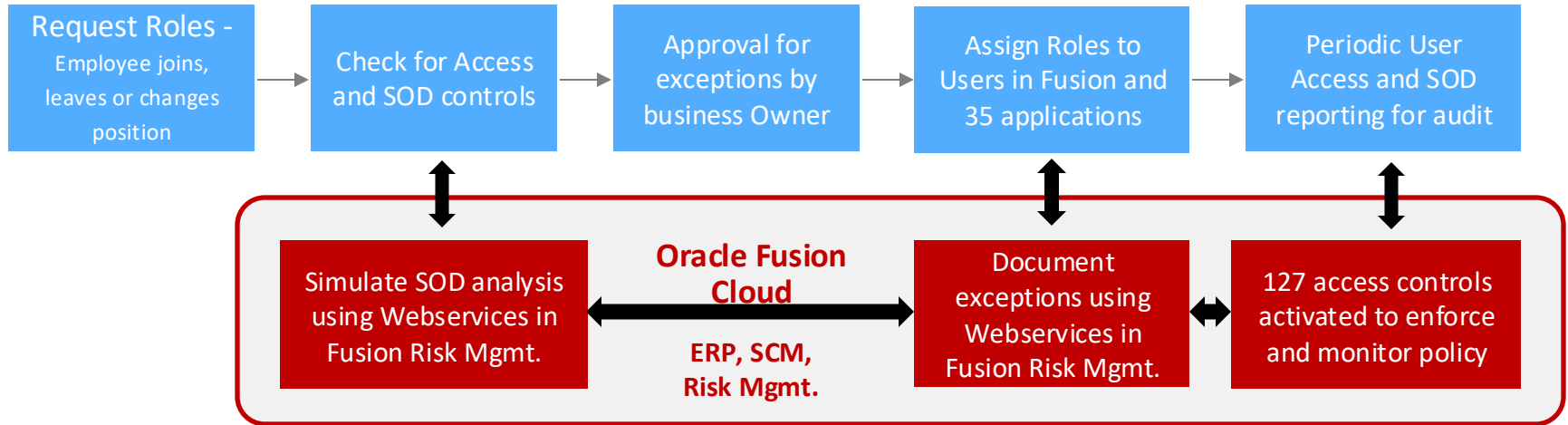Fusion ERP & SCM Modules   Fusion Roles

219 ⤑ **5,600+**
3rd Party & Internal Applications   Roles

Automated User Provisioning

∞ Meta

| Request Roles - Employee joins, leaves or changes position | → | Check for Access and SOD controls | → | Approval for exceptions by business Owner | → | Assign Roles to Users in Fusion and 35 applications | → | Periodic User Access and SOD reporting for audit |

Oracle Fusion Cloud

ERP, SCM, Risk Mgmt.

| Simulate SOD analysis using Webservices in Fusion Risk Mgmt. | ⟷ | Document exceptions using Webservices in Fusion Risk Mgmt. | ⟷ | 127 access controls activated to enforce and monitor policy |

380,000+ User role requests

57 SOD Controls enforced

82 Sensitive Access Controls monitored

107,000+ Users

565+ Roles across Fusion ERP & SCM

5,600+ Roles across 84 third, 135 first party apps

Access Controls

Requests for SoD and Sensitive Access sent to Fusion Risk Management, using standard and custom SOD policies

Analysis performed down to the security context level, including intra-role and cross application review

Process owner can provide business justification for SOD violation and approve

Compensating control established, reviewed quarterly

Outcome & Plans

Automating the SOD reporting process by investing in checks before a user is provisioned saves a ton of time and reduces risk

Reduction in SOD violations when approval authority and accountability resides with a process owner

Role based mapping and provisioning for Shared Services

Implementing Advanced Configuration Controls to automate configuration change management tracking

Takeaways

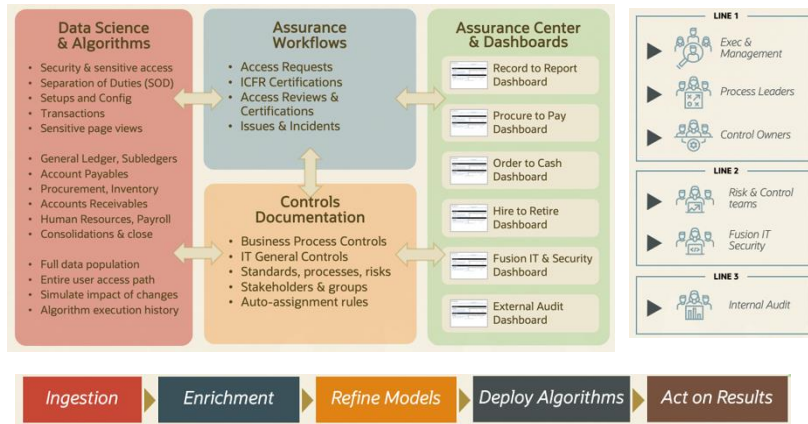Configure Fusion Roles with SOD analysis during ERP and SCM implementation

Automate exception approvals by process owner to reduce access violations

Ensure audit readiness with periodic reviews of exceptions

Solutions and Use Cases

Enterprise-wide Assurance

Engage process owners (Line 1) with daily & continuous assurance

One unified system for documentation & data analysis across stakeholders

Automate ICFR including Cybersecurity and SOD with 100% transaction monitoring

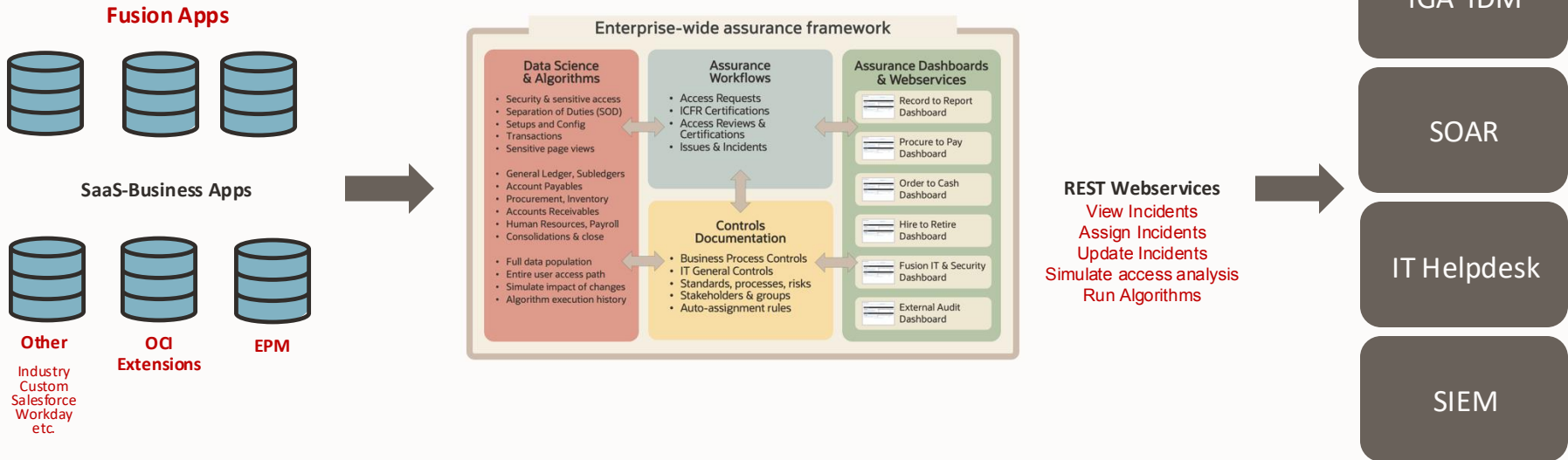| Solution Areas	Key Use Cases
Prevent SOD violations	1. Design Custom Roles without SOD violations 2. Check Access Requests for SOD violations `video`
Monitor User Access	3. Monitor & Report Sensitive (Restricted) Access `video` 4. Monitor & Report Separation of Duties (SOD) `video` 5. Automate User Access Reviews & Certifications `video`
Monitor User Activity	*Monitor Critical Configurations & Transactions:* 6. IT Superuser Assurance `video` 7. Procure to Pay Assurance `video` 8. Record to Report Assurance 9. Order to Cash Assurance 10. Hire to Retire Assurance
Manage Internal Controls	11. Document (RCM), Test & Certify Controls

Videos: www.riskcloud.wiki

Single surface for SaaS posture management (Fusion & non-Fusion)

- Integrated access governance for Fusion and non-Fusion Apps
- Activate one set of access controls, SoD rules and toxic combination policies
- Manage access issues in one place for audit reporting
- Webservices for integration with IGA, SOAR, IT Helpdesk etc.

Fusion Apps

SaaS-Business Apps

Other
Industry
Custom
Salesforce
Workday
etc.

OCI Extensions

EPM

Enterprise-wide assurance framework

Data Science & Algorithms
- Security & sensitive access
- Separation of Duties (SOD)
- Setups and Config
- Transactions
- Sensitive page views

- General Ledger, Subledgers
- Account Payables
- Procurement, Inventory
- Accounts Receivables
- Human Resources, Payroll
- Consolidations & close

- Full data population
- Entire user access path
- Simulate impact of changes
- Algorithm execution history

Assurance Workflows
- Access Requests
- ICFR Certifications
- Access Reviews & Certifications
- Issues & Incidents

Controls Documentation
- Business Process Controls
- IT General Controls
- Standards, processes, risks
- Stakeholders & groups
- Auto-assignment rules

Assurance Dashboards & Webservices
- Record to Report Dashboard
- Procure to Pay Dashboard
- Order to Cash Dashboard
- Hire to Retire Dashboard
- Fusion IT & Security Dashboard
- External Audit Dashboard

REST Webservices
View Incidents
Assign Incidents
Update Incidents
Simulate access analysis
Run Algorithms

IGA IDM

SOAR

IT Helpdesk

SIEM

Summary

Deployment Planning

❑ Activate access controls

❑ Define roles free of access & SOD violations

❑ Assign business owners for roles

❑ Test workflows and simulate potential violations

Continuous Validation

❑ Periodic user review & certifications

❑ Compliant provisioning

❑ Daily monitoring for IT & Admin access

❑ Daily monitoring for users with SOD risk

❑ Daily monitoring for transactions with Access and SOD violations

❑ Daily monitoring for unusual viewing sensitive employee data

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Risk Management Resource Center

News, Events, and Training

☐ **Get acquainted with Risk Management** ⬅

1. Learn what it does: Overview | Use cases 2. See it in action: Introductory videos & case studies Customers' deployments and everyday experiences 3. Learn how it fits …

https://community.oracle.com/customerconnect/categories/erp-rc-risk-management

Get acquainted with Risk Management

1. Learn what it does:

- Overview | Use cases

2. See it in action:

- Introductory videos & case studies
- Customers' deployments and everyday experiences

3. Learn how it fits into the bigger picture:

- Principles of Oracle Fusion Cloud Applications Security
- Fusion Cloud Applications Security, Setups and Transactions: Key Considerations

4. Get started:

- Choose the blueprint that's right for you
- Follow our path to success