A NEW ERA IN HR SECURITY

Presenters:
MHP: Jason Sanders – Speaker
SECUDE: Anne Marie Colombo – Speaker
SECUDE: Michael Kummer – Panelist
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How to Secure HR Data on Premise and in the Cloud

Agenda

• The Landscape: Understanding the Environment
• The Issue: HR Data Security
• Mitigating the Risk: What Can You Do
• Demo
• Q&A Session
THE HR LANDSCAPE

Jason Sanders
The Landscape

• SAP’s HCM Module
  • Data is stored on-premise
  • Accessible by everyone with access to the server

• Success Factors
  • Data is stored in the cloud
  • Data can be shared and manipulated by anyone – no tracking

• Hybrid
  • Data is stored both on-premise and in the cloud
  • Data moves between the two with no protection
The Right Mix

cloud
hosted
on prem
HR Data
• Payroll data
• Social Security Numbers
• State-Issued Identification
• Government forms (I-9, W2, etc.)

Compliance Regulations
• HIPPA
• SOX
• Safe Harbour
HR DATA SECURITY ISSUES

Anne Marie Colombo
• 90% experienced leakage/loss of sensitive documents over 12 months

• In 2013, the average cost of data breach in USA was over $5.4 million

• Most states have “breach laws”
  • Cover specific data, such as SSN, drivers license and credit card numbers

Cost of Data Breach Report | Ponemon Institute 2013

2013 The Risk of Insider Fraud Study, Ponemon Institute
• 743 Individuals
• CIO/CSO or direct report
• 10 avg experience
The Risk is Real

Virginia Tech Job Application
Server Hacked
Personal Data Exposed
August 2013 - Virginia Tech University server in the human resources department was illegally accessed. Hackers got into a database, containing a decedee's worth of applicants data, from 2003 to 2013. Personal data of 114,963 individuals was exposed.

Phoenix-Based Waste Management Company Suffers HR Data Breach
August 2013 - An unencrypted laptop was stolen from a Republic Services' employee's home. The laptop contained names and social security numbers of current and former employees. 82,160 individuals could have been affected.

US Department of Energy Hack Disclosed Employee Data
February 2013 - The U.S. Department of Energy said that personal information about 14,000 employees and contractors was stolen in a mid-January hack. Hackers had gained access to personal information, including Social Security numbers.
HR Data is exported from SAP

- Reporting
- Data crunching
- Analysis

Cloud & Mobility

- Explosion of cloud services and providers
- BYOD: are you losing track of your data?
Where is the data?

- SharePoint
- SkyDrive
- File Server
- Dropbox
- Competitor
- Partner
- Employees
MITIGATING THE RISK

Jason Sanders
Michael Kummer
Protecting Hybrid Environment

• Access on premise by establishing a **secured tunnel** using SAP Cloud Connector (SCC)
• Delegation to a central service (IdP) enables **Single Sign-On (SSO)** between multiple Cloud applications
• Mature and proven **security standards** for integration with IdP
• Enable **federated authentication** supporting the following methods:
  - SAP ID Service – “out-of-the-box” IdP in the Cloud
  - Your own IdP (e.g. in the corporate network)
• Consume **data services** based on rest API’s or gateway services (oDATA)
Protect data inside of SAP

- Roles & Authorizations
  - Check HCM Authorizations in new and existing roles
  - Review PLOG in existing roles
  - Restrict OTYPE
  - Check P_ABAP in existing roles

Extend protection to data leaving SAP

- Authorizations need to be extended to wherever the data goes
Existing Technologies

- **Network**
  - Data Leakage Prevention (DLP)
  - Firewalls
  - Virtual Private Network (VPN)

- **Storage**
  - Full Disk Encryption (FDE)
  - Database Encryption

- **File**
  - Pretty Good Privacy (PGP)
  - Information Rights Management (IRM)
Built on industry leading Microsoft Rights Management technology
Demo: Protecting HR Data Leaving SAP
Where to start?

SECUDE Data Export Auditor for SAP

Display Download Log (100 Entries Found)

- Free tool to monitor all data leaving SAP
- Each and every download is tracked
- Intelligent classification
Potential Next Steps

- Download Data Export Auditor
- Win a free 30 minute consulting session with MHP to help analyze your HR landscape
Thank you for your attention!

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