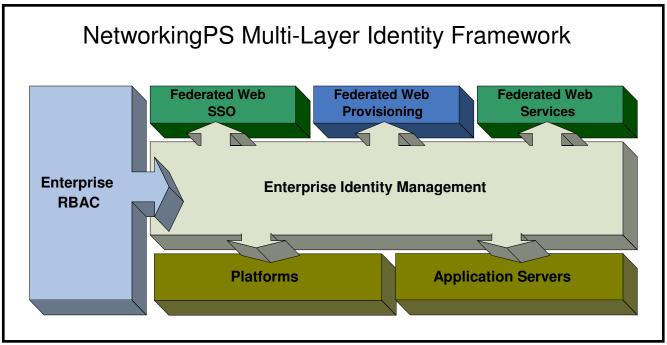# NetworkingPS Role Management Solution
Solutions Overview

OVERVIEW

As the global marketplace continues to expand, new and innovating ways of conducting business are becoming a necessity in order for companies to abide by corporate security practices and remain in compliance with existing governmental regulations. In order to keep sensitive data within the hands of the right people, more and more corporations are seeking out multi-layer identity management solutions that encompass more than basic request-based user provisioning capabilities.

NetworkingPS (NPS) promotes a bottoms-up approach in its product and services offerings that span every aspect of identity management, from basic to more advanced user lifecycle management activities.

NetworkingPS Multi-Layer Identity Framework

Federated Web SSO *Federated Web Provisioning* *Federated Web Services*

Enterprise RBAC *Enterprise Identity Management*

Platforms *Application Servers*

NPS product and services offerings span every layer of identity management, from federated user provisioning and detailed role management activities, to basic user provisioning.

NPS product and service offerings all correspond to this multi-layer model of identity management, from fundamental user provisioning and administrative capabilities to fine-grained application role management. The NPS end-to-end identity management strategy consists of the following elements:

- **USER PROVISIONING**
  - Automated Account Management Activities
  - User Lifecycle Management
  - Federated User Provisioning
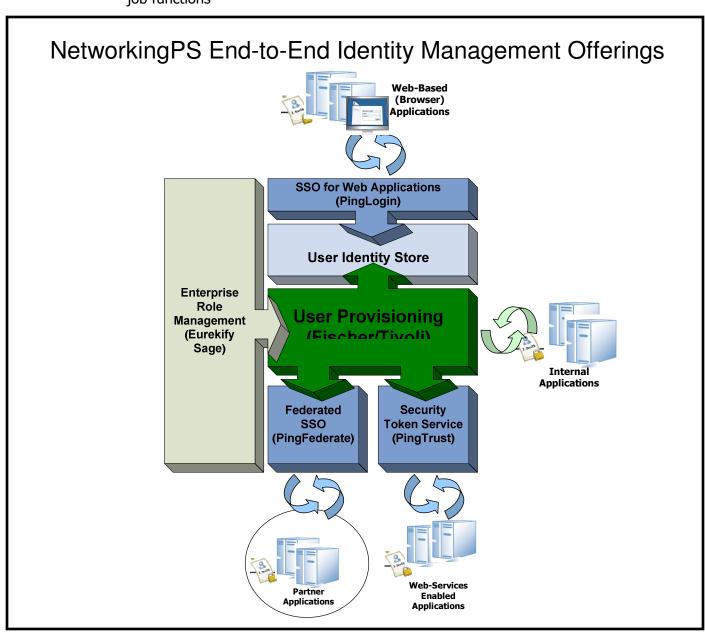 - Real-time Administration of User Privileges and Attributes

- o User Event Logging
- o Password Management
- o Reporting

- **ROLE MANAGEMENT**
  - o Discovery, Definition and Cleanup of Existing Roles through Automated Role Mining
  - o Real-time Enforcement of User Roles
  - o Enterprise-wide management of formal and informal business-level roles
  - o Linkage between business roles and IT roles
  - o Lifecycle Management of Roles: role owner, role changes, role review, role assignment and role retirement
  - o Creating a consistent development process for new roles and tying those roles into an automated role management solution

- **ACCESS MANAGEMENT**
  - o Single Sign On for Web-based Applications and Web Services-Enabled Applications
  - o Token Exchange between Federated and Enterprise Applications
  - o Single Sign On for Federated Applications/Cross-Domain SSO
  - o Defined user access controls based on minimum required necessary to perform job functions

NetworkingPS End-to-End Identity Management Offerings

Web-Based (Browser) Applications

SSO for Web Applications (PingLogin)

User Identity Store

Enterprise Role Management (Eurekify Sage)

User Provisioning (Fischer/Tivoli)

Internal Applications

Federated SSO (PingFederate)

Security Token Service (PingTrust)

Partner Applications

Web-Services Enabled Applications

As in any layered approach to identity management, identity management can extend beyond basic user provisioning activities and incorporate greater access control mechanisms over each provisioned user. This is the concept of role-based access control, more commonly known as RBAC. With an RBAC IdM initiative, users are grouped into business roles that correspond to their IT functions, thus giving them the *minimum required* access to the resources they are entitled to use. NetworkingPS supports a complete RBAC solution through its partnership with the Eurekify**™** Sage ERM product suite.

A role-based approach to privileges management is widely considered as a best practice in the deployment of an effective provisioning system. Most organizations believe RBAC is necessary to unlock the full benefits of Identity Management, and that without this change in paradigm, mismanaged user roles will be amplified by the new privileges automation systems. Yet, 81% of IdM project managers find that existing IdM solutions do not provide adequate tools for the creation and ongoing management of a role-based privileges model.

Eurekify**™** provides an integrated approach to Enterprise Role Management (ERM), complementing and extending the functionality of any existing IdM solution with these new and powerful capabilities. Eurekify**™** Sage ERM is the only solution that provides for the full lifecycle of Enterprise Role Management, making many of the difficult processes feasible through the assistance of unique and patented analytics. Eurekify**™** Sage ERM reflects business needs and ongoing changes into IdM provisioning policies and processes.

SAGE ERM OFFERINGS

SAGE SURVEY™

The Sage Survey is a service offering that leverages the entire Eurekify**™** Sage ERM product suite to help customers gain a better understanding of the complexity of their organization's systems and general requirements for an IdM rollout.
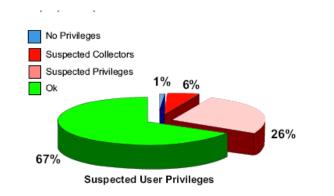
The Sage Survey includes an analysis of the existing privileges that reside within an organization's various systems; a process that provides the following benefits:
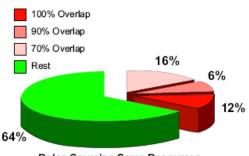
- Evaluating the current user environment
- Assessing and ranking needs/building a solid business case for an IdM
- Using Sage to explore privileges and run various investigative queries
- Identifying and quantifying excessive and out-of-pattern privileges
- Identifying and quantifying duplicate and overlapping group definitions, etc.
- Discovering privileges that result from flawed provisioning processes
- "Reverse engineering" role definitions from patterns in existing privileges
- Reviewing, refining, and optimizing existing role definitions (if existing)
- Identifying key systems and assessing the complexity of the full IdM project
- Automating verification of compliance with policies and regulations, such as SOX, HIPPA, GLBA, etc.

The Offering

A typical Sage Survey project lasts 5-10 days. Eurekify™ and NetworkingPS will review the relevant platforms and privileges with the client, identifying the systems that are key for IdM deployments.

Based on privileges data for a select part of the organization, from 1-2 platforms of choice, we will perform a standard Survey analysis. The analysis is performed offline, so as not to interfere with any production systems. The analysis will identify dead accounts, excessive privileges, and duplicate user groups. We will then map organizational privileges into common business roles, across applications and will demonstrate how they can be used to automate your day to day management. We will also try to quantify the complexity of the systems and of the required role engineering project, in order to provide a factual foundation and ROI analysis for your IdM deployment plans.

Quantifies the quality of privileges assigned to users:

No Privileges - users that do not have any resources (possibly dead accounts, or accounts of users that no longer work for the company)
Suspected Collectors - users that have many suspected resources, possibly associated with a past role
Suspected Privileges - users that do not seem to fit the overall pattern of other users with the same resources.

Quantifies the number of role definitions that have twins in terms of their assigned privileges (100% overlap), or almost twins (90% and 70% respectively).

Such role definitions are likely redundant and could possibly be merged.

Inputs

Inputs to Sage Survey include:

• A complete set of users, resources, and privileges, for a subset of up to 10,000 users, in a specified flat file format.
• A reference, usually a local administrator, to help review and decipher the results of analysis and audit alerts.
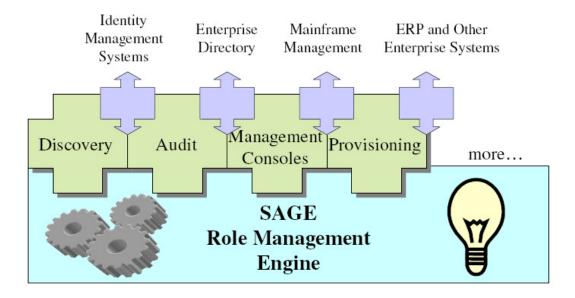
Deliverables

Deliverables of Sage Survey include:

• Identification of few exceptions and deviations.
• Analysis of existing role definitions.
• Role definitions for a few identified roles.
• A partial Sage AuditCard report.
• Some estimates of the complexity of IdM deployment and the role engineering project.

SAGE ERM PRODUCT SUITE

The Eurekify™ Sage ERM Product Suite is designed to manage the lifecycle of role definitions for role-based management environments. Sage ERM's functionality includes:

- Bottom-up role engineering, referring to the process of "reverse engineering" an existing set of privileges in order to arrive at role definitions that reflect the current privileges assignment practices
- Top-down role engineering, referring to the process of defining roles from scratch, e.g., based on analysis of business processes, or based on roles that are defined for a part of the organizations, e.g., in a specific platform or application
- Role-based auditing, referring to the process of identifying exceptions and deviations in an existing set of privileges (and role definitions, if existing)
- Compliance, referring to the process of identifying violations of pre-defined policies, each of which defined as a set of rules and constraints on top of the role-based privileges structure.

Sage is applicable to all Identity Management systems, as well as other privileges management systems, e.g., mainframe security systems, enterprise directories, and other enterprise applications.

ERM COMPLIANCE MANAGER

Eurekify™ ERM Compliance Manager (ECM) is used to help enterprises address a variety of compliance needs.

In recent years, enterprises have been struggling with the implications of regulations such as Sarbanes-Oxley (SOX), HIPAA, GLBA, FERC, as well as a variety of requirements in the areas of privacy, competition, etc.

With Eurekify™ Sage ECM, you can leverage Eurekify's outstanding analytical capabilities to quickly automate compliance verification, as well as other business processes such as privileges attestation and recertification. Eurekify™ Sage ECM can be applied to virtually all systems and applications, and in virtually all levels of granularity.
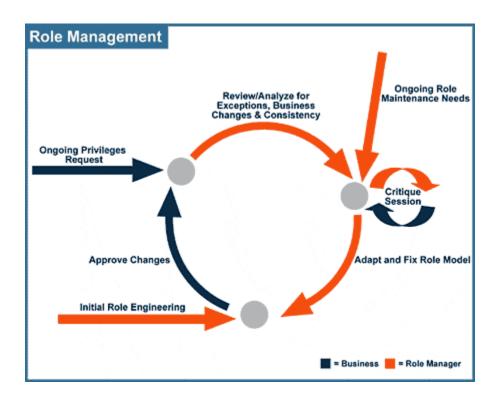
Eurekify™ ERM Compliance Manager is simple to deploy and quick to master, allowing you to:

- Easily browse and click-query privileges and role definitions across systems and applications
- Easily implement and automate verification of policies and regulations across any and all systems and applications.

- Conduct real-time analytical decision support for privileges management processes that take place in an Identity Management system and in other corporate workflow systems
- Quickly deploy privileges attestation and recertification campaigns, in any and all systems and application.
- Effortlessly leverage pattern-based analytics to enable more productive business processes
- Work in any level of privileges granularity

When to use Compliance Manager:

- Use to implement a web-based campaign for privileges attestation and recertification

    - Business managers to approve privileges of users reporting to them
    - Business owners to approve definitions of roles that they own
    - Business and IT owners to approve access to individual privileges on a target platform or application

- Use to implement company policies and regulatory requirements
    - Segregation of duty rules; IT controls; business process rules
    - Automated verification periodically, and/or in real-time

ERM ROLE MANAGER

Eurekify™ ERM Role Manager is used to help enterprises create and maintain a role-based privileges model. For several years, role-based privileges management is considered best practice within systems and applications, as well as across platforms and in Identity Management systems. Role-based privileges management is also mandated in several regulations and company policies and best practices. With Eurekify™ Sage RM, you can leverage Eurekify's proven analytical capabilities to quickly create a role model that best fits

your organization needs and practices. Same technology also provides invaluable support to the analytical and business processes that will keep your role model up to date and in sync with business changes. Eurekify™ Sage RM can also be applied to individual systems to create and maintain a well managed user group structure.

Eurekify™ ERM Role Manager is simple to deploy and quick to master, allowing you to:

- Easily browse and click-query privileges and role definitions across systems and applications
- Effectively construct an enterprise role-based privileges model
- Use analytics to easily review and adapt role model to ongoing business and IT changes
- Quickly set up a web-based collaborative environment for role definition, role approval, and role management processes, supported by Eurekify's pattern-based analytics
- Establish real-time analytical decision support for privileges management processes that take place in an Identity Management system and in other corporate workflow systems
- Integrate role management with virtually any Identity Management suite, and any target system
- Utilize role management in any level of privileges granularity

When to use Role Manager:

- Use to define a role model for Identity Management and automated Provisioning
- Use to review an existing role model within a platform or application
- Use to periodically review and adapt a role model to business changes
- Use to provide real-time analytical support to privileges management processes that occur in Identity Management and other corporate workflow systems.
- Use to implement role approval and privileges recertification campaigns
- Use to implement effective ongoing role management business processes

ERM QUALITY MANAGER

Eurekify™ ERM Quality Manager is used to help enterprises improve and ultimately maintain the quality of privileges across systems and applications. Recent research among large enterprise uses has shown that one of three or four privileges is typically incorrect. Same research has also shown that 20-50% of user groups are redundant, outdated, or otherwise unnecessary. With Eurekify™ ERM Quality Manager, you can harness Eurekify's outstanding analytical capabilities to audit, review, and correct privileges in virtually any system, and in virtually all levels of granularity.

Eurekify™ ERM Quality Manager is simple to deploy and quick to master, allowing you to:

- Easily browse and click-query privileges and role definitions across systems and applications
- Quickly audit, review, and correct privileges in any and all systems
- Apply quality management to any computing platform, enterprise application or identity management system (including homegrown and legacy applications)

When to use Quality Manager:

- Use to periodically assess and quantify the current quality of privileges
- Use in privileges cleanup projects
- Use to prepare for Identity Management deployment
- Use regularly to address audit points related to privileges quality
- Use periodically in privileges attestation projects

- Use in compliance efforts, together with Eurekify Sage Compliance Manager
- Use in role engineering and role management efforts, with Eurekify Sage Role Manager

Single Platform Solutions

Organizations need to manage privileges and access rights according to their business needs while making sure they are aligned with security requirements as well as internal policies and external regulations. The challenge is enormous when addressing frequent business changes and piles of wrong assignments that have been gathered through the years. Sage ERM also offers many out-of-the-box single platform modules to implement role-based management on virtually all major enterprise platforms and applications.

Sage Single Platform provides out-of-the-box solutions for the following systems:

- RACF, ACF2, Top Secret, ERP, Unix, MS Active Directory, LDAP, DB2, Lotus Notes, Oracle, Novel eDirectory, iPlanet (Sun One)
- OS 400, Linux, Adabas, Sybase, SQL Server, Siebel, Billing systems, SAP, PeopleSoft

*Custom platform solutions are also available

Access data cleanup

Sage ERM identifies exceptions and deviations in privileges, allowing rapid clean up of wrong assignment data. Sage identifies group duplications and overlaps as well as optimizes group definitions.

Role-based privileges management

Sage ERM creates group definitions that reflect business practices as well as updates and optimizes existing group definitions, easing privileges administration and improving IT responsiveness.

Role-based compliance

Sage ERM provides automated verification of IT controls and segregation of duty rules as well as automated privileges certification by business managers. Hence, facilitates demonstrating compliance with policies and regulations, e.g., Sarbanes-Oxley, HIPAA, FERC and Basel II.

ABOUT EUREKIFY™

Eurekify™ is the leading provider of software solutions for role-based management in large enterprises, with over 30 customers worldwide. Eurekify's Enterprise Role Manager (ERM) software uses advanced analytics technology to provide solutions for the design, implementation, ongoing management, and auditing of role-based privileges in Identity Management, as well as on specific platforms and applications.

Eurekify™ was founded by Dr. Ron Rymon in 2002 to address the growing need for effective tools to help the deployment of role-based security in Identity Management projects. This need, clearly expressed by end-customers, vendors, and system integrators alike is the main driver in Eurekify's growth and success.

Eurekify™ is managed by Mr. Azi Cohen, a veteran enterprise software executive. With its team of accomplished and highly skilled employees, and guided by a fabulous team of advisors and partners, Eurekify is now developing the next generation of role-based management solutions.

Eurekify™ embraces its business partner relationships, with over 25 partnerships worldwide, including IBM, HP, and BMC for Identity Management, and KPMG, PwC and Deloitte for Auditing. In addition to these strategic partnerships, Eurekify™ has many global and regional approved IdM resellers and SI's.

In November 2008 Eurekify™ was acquired by CA Technologies, Inc.

NetworkingPS is a mid-sized Information Technology professional services firm based in Bridgewater, NJ, specializing in a wide variety of managed security services offerings. Leveraging their highly-skilled staff of professional consultants, NetworkingPS has earned a reputation for their proficiency in planning, designing, assessing, implementing and supporting systems, applications, networks and operations activities for their nationwide, cross-industry client base. Industry research shows that clients today want an open computing environment in conjunction with an open marketplace with alternate channels of distribution. In addition, organizations wish to integrate new technology into their existing systems, as well as have both their computing resources and user base managed and supported in a cost-effective manner that will support their business priorities.

NPS is responding to these customer requirements by focusing its resources on helping customers plan, build, implement and maintain the business information systems, networks, and operations they need to compete in today's changing business environment. Building on its core competencies in software, systems, networks, and services, NetworkingPS provides a complete range of information processing solutions.

For more information about the Eurekify™ Sage Solutions or other NPS offerings, please contact NPS at: http://www.networkingps.com