# NetworkingPS Federated Identity 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.

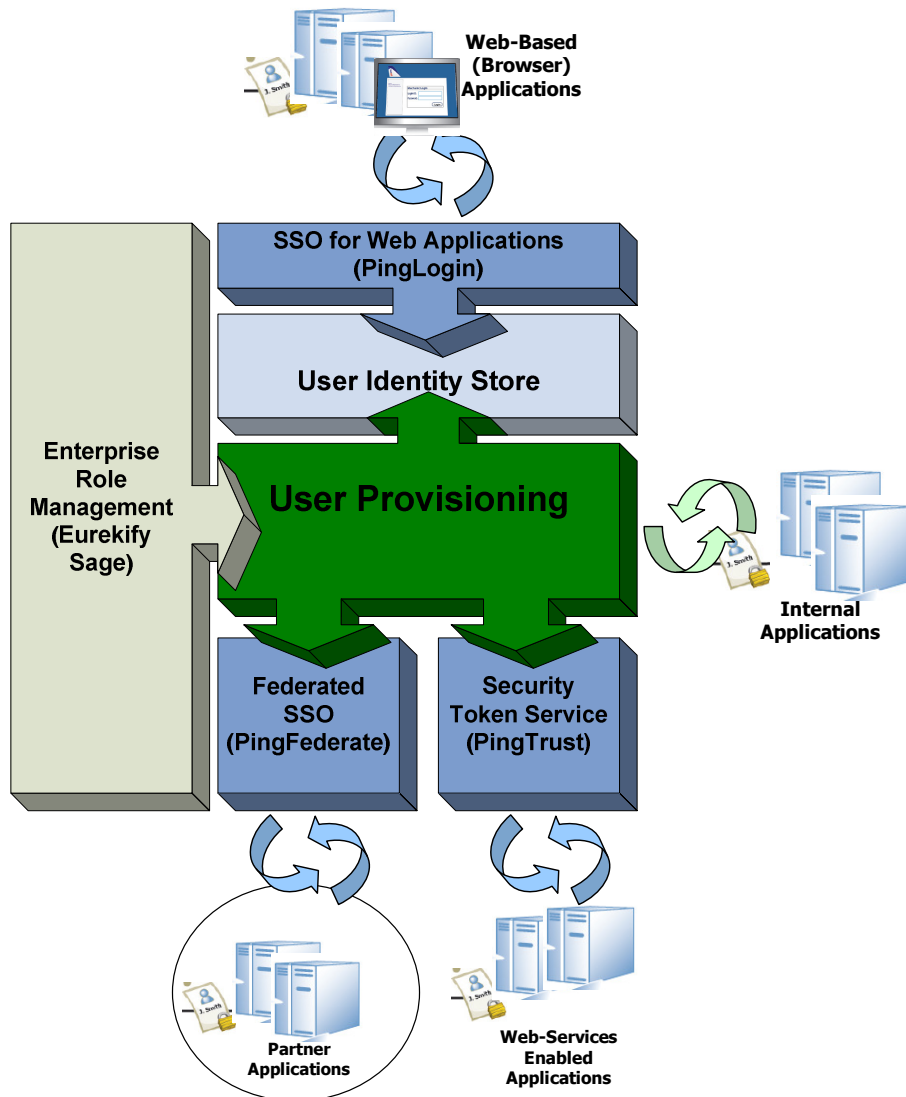**NetworkingPS Multi-Layer Identity Framework**
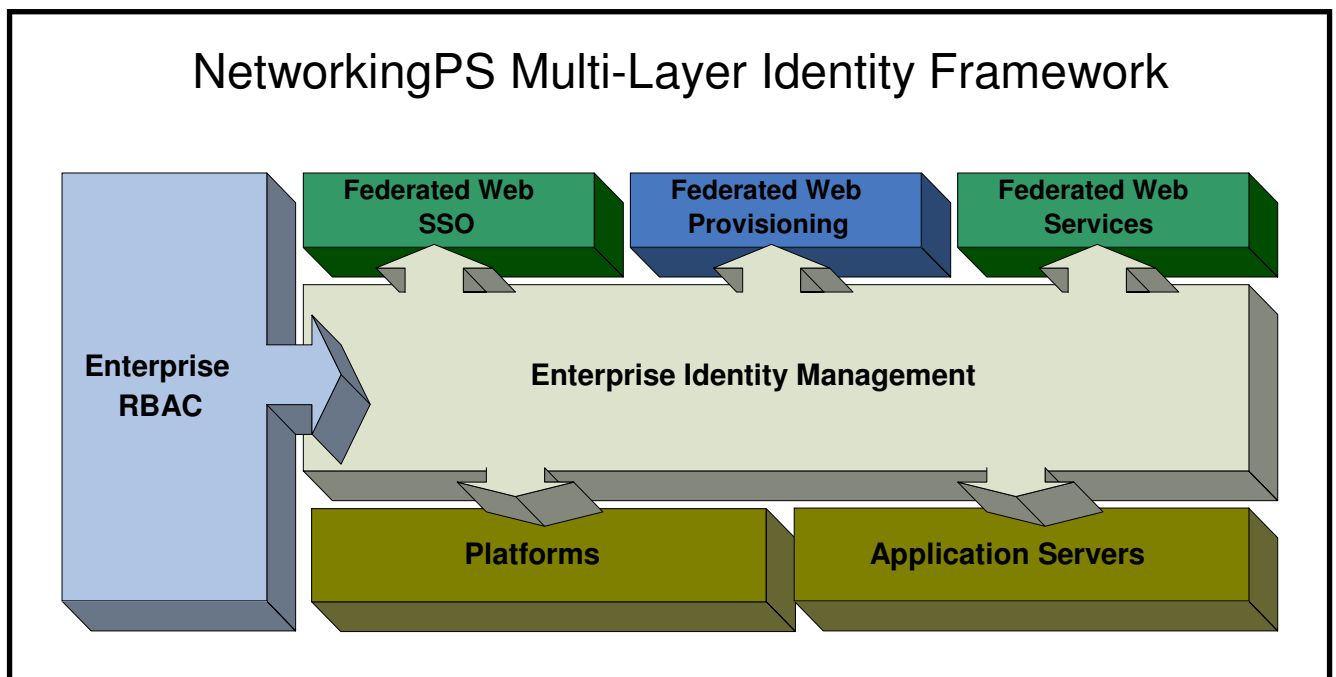
NPS product and services offerings span every layer of identity management, from federated user provisioning and detailed role management activities, to basic user provisioning.

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

NPS 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

Internal Applications

Federated SSO (PingFederate)

Security Token Service (PingTrust)

Partner Applications

Web-Services Enabled Applications

As in any layered approach to identity management, solutions cannot be limited to internally-run corporate resources. The process of extending your enterprise's user provisioning and user authentication capabilities beyond your corporate domain is the fundamental driver behind federation. NPS supports a complete federation model through its partnership with the Ping Identity**™** product suite.

PingIdentity™

PRODUCT OFFERINGS

PingFederate 4™

PingFederate™ is the industry-leading federated identity server for enabling single sign-on to online services for employees, customers and business partners. The only standalone federated identity server, PingFederate integrates and coexists with existing Identity Management deployments. As a result, enterprise-wide identity federation is achievable without extensive upgrades to Identity Management systems.
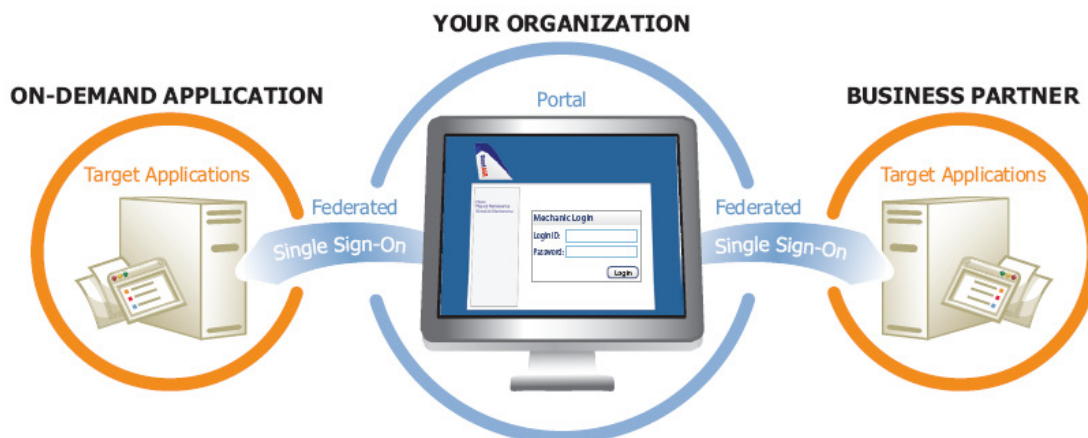
PingFederate 4 reduces complexity, cost, and time-to-production through effortless configuration tools and the broadest range of turnkey integration kits.

Advanced Features

- *Multi-Protocol Configuration Console*- By providing a single use case-driven configuration console to support all versions of SAML as well as WS-Federation, PingFederate 4 simplifies configuring environments with multiple protocol connections.
- *Hardware Security Module Support*- PingFederate may be integrated with an optional Hardware Security Module for PKI operations to enable compliance with FIPS 140-2 requirements.
- *Off-the-Shelf Integration Kits*- To reduce the cost of integration of single sign-on with your applications and identity management systems, only PingFederate provides an entire suite of pre-built integration kits.

- *Enterprise Deployment Architecture*- Only PingFederate enables you to federate applications residing in multiple domains and manage all partner connections from a single server. Through PingFederate, identity federation is a centralized service available to your entire organization.
- *Role-Based Administration*- Organizations often divide administrative activities across multiple individuals. PingFederate supports role-based access with differing responsibilities: User Admin, Admin, Auditor, and Crypto Admin.
- *Advanced Federation Functionality*- As the most advanced federated identity server available, PingFederate provides a number of features not found in many competitive offerings such as support for multiple Identity Providers, Identity Mapping, User Attribute Management (including X.509 Attribute Sharing Profile) and more.
- *Risk-Free Trial Evaluation*- Download PingFederate today and use it absolutely cost- and risk-free for the first 100,000 transactions or 90 days, whichever comes first.

PingTrust 2™

PingTrust is a Security Token Server that extends Identity Management Systems to Web services. With PingTrust, digital identities are associated with Web service requests to provide enhanced services while simultaneously ensuring appropriate information access and regulatory accountability. PingTrust manages validation and exchange of digital identities between browser-based and browser-less applications and the Web services to which they connect.
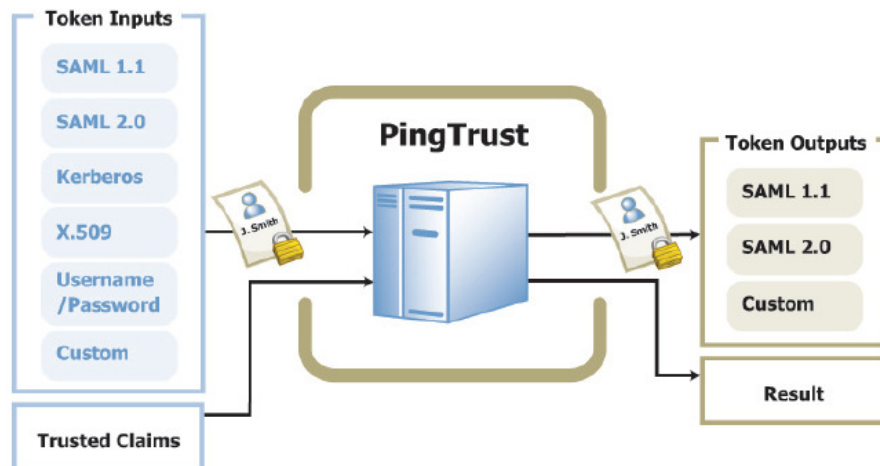
To associate information, such as credentials and user attributes, with Web services, identity information must be packaged into security tokens. PingTrust provides token creation, validation and exchange use cases for both Java and .NET Web Service Clients and Web Service Providers.
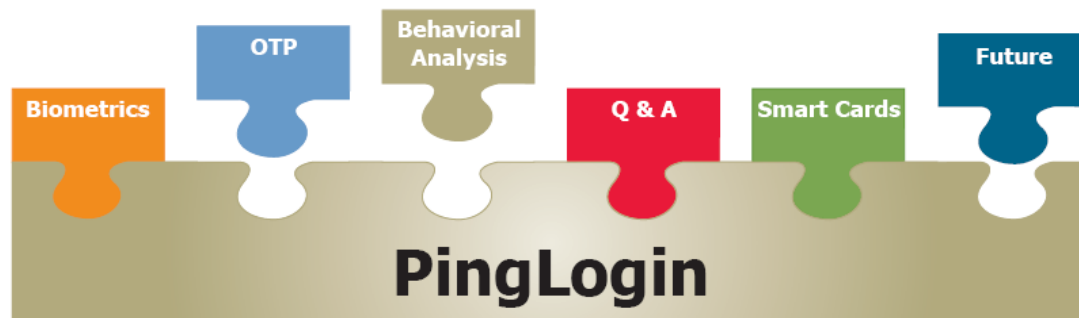
Advanced Features

- *Token Generation*: SAML 1.1, SAML 2.0, Custom Tokens via SDK
- *Token Validation*: SAML 1.1, SAML 2.0, Kerberos v5, X.509 Username Tokens, SSO Tokens, Custom Tokens via SDK
- *Flexible Deployment Options*: Web Service Clients, Web Service Providers, Web Clients , .NET Clients, IWA Environments, Internal and Cross-Organization, Gateway Independent
- *WS Security Interceptors*: PingTrust includes interceptors that handle WS Security processing for Java-based Web Service Clients and Web Service Providers. Interceptors simplify configuration and deployment by effectively eliminating the need for customers to develop their own WS Security processing code.

- *Java and .NET Integration Libraries*: SDKs enable easy integration of PingTrust functionality into both Java and .NET applications (even integrating .NET clients with Java services).
- *User Attribute Sharing*: Attribute Retrieval, Subject, role & attribute mapping
- *High Performance and Availability*: Multiple clustered servers managed by a single console enable high availability and near-linear scalability.
- *Authentication/Identification*: Requestors authenticate to PingTrust with a Username token (with password) in a WSS header or IWA via Kerberos. Requestors can be identified (without being authenticated) with a User ID token (without password) in a WSS header, and PingTrust enforces the policy.
- *Intuitive Administration*: A Web-based configuration console provides requestor management, credential generation and management, X.509 Certificate management and a policy-based metaphor to configure large numbers of requestors

---

PingLogin™

PingLogin is a next-generation user authentication and single sign-on framework for online services and Web applications. With a focus on flexibility and extensibility, PingLogin provides a foundation for organizations to re-factor their approach to consumer authentication by centralizing authentication and eliminating vendor lock-in while reducing integration and on-going maintenance costs.

PingLogin provides centralized authentication and session management for application single sign-on and simplifies integration of authentication mechanisms across multiple applications.

Advanced Features
- *Open and Standards-Based*: Wherever possible PingLogin supports open standards instead of proprietary protocols. Additionally, certain product modules are available through shared source and open source licenses.
- *Extensible and Flexible*" A flexible set of APIs gives customers a robust framework for integrating PingLogin into existing Web applications and environments. As business and security requirements change, organizations should be free to add or modify functionality and not be bound to the release cycles of the product.
- *High Performance*: Consumer applications authenticate millions of users daily. Consequently, lightweight mechanisms to support authentication, session management and single-sign on are critical to meet consumers' expectations for response time and performance.
- *Focus on Authentication*: As a best-of-breed solution for consumer authentication, PingLogin retains a separation between authentication and application authorization.
- *Web Services Integration*: While LDAP binding is supported, the PingLogin architecture assumes that Web services will be one of the primary mechanisms used by customers to

integrate with external authentication providers and identity stores. Therefore, an extensive API set is provided for accessing identity stores and performing user attribute retrieval.

- *Simplicity*: Throughout the product, there is always a simple implementation model for basic use cases that can be built upon as necessary to address differing (and sometimes opposing) business and technical requirements.
- *Risk-Free Trial Evaluation*: Download PingLogin today and use it absolutely cost- and risk-free for the first 100,000 transactions or 90 days, whichever comes first.

ABOUT PING IDENTITY™

Ping Identity™ was founded in 2002 by industry veterans committed to simplifying the way in which digital identities are used and managed. The company has emerged as a market leader in the Identity Management industry through its unique dedication to delivering technologies and services that enable organizations to improve security, expand collaboration with trading partners and reduce the burden of regulatory compliance.

The Ping Identity product family enables a full array of authentication services, including federated single sign-on, identity verification, and access control for a broad variety of both internal and external web applications and web services.

The identity federation technology provided by the Ping Identity product suite is designed to improve customer security, enable easier collaboration with trading partners, and reduce the burden of regulatory compliance. Because of the highly disparate security requirements of the various components that make up distributed application architectures, a new approach is required for managing user identity verification, authentication and access control.

Ping Identity's technologies and services deliver results that exceed the expectations of some of the most admired companies in the world, including American Express, Boeing, Cisco, New York Life and Pulte Homes.
.

NetworkingPS is a mid-sized Information Technology professional services firm based in Piscataway, NJ, specializing in a wide variety of managed security services offerings. Leveraging their highly-skilled staff of professional consultants, NPS 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 Ping Identity™ Product Suite or other NPS offerings, please contact NPS at: http://www.networkingps.com or call us at our toll-free number, (888) 717-4010.