Ping Identity CORPORATION

PingDeploy

SAML Conformance & Security Testing

The Road To Interoperability

As identity federation gains in popularity, a growing number of vendor products are integrating SAML 1.1 functionality to enable secure identity authentication and attribute exchange. Because vendor interpretations of the SAML protocol may vary, the result is a marketplace of products that do not interoperate, or require significant work and testing to validate. To make matters even more complex, most organizations that implement federation using standardized vendor products do so with proprietary customizations that must be tested prior to production deployment.

When ensuring consistent SAML interpretation, a significant amount of work is often required – resulting in higher costs and deployment timelines – *until now.*

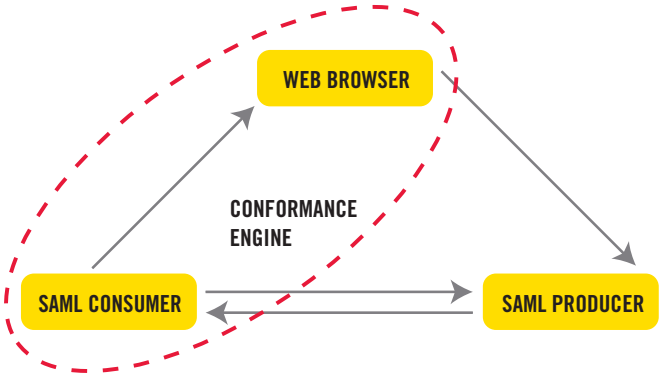
Introducing PingDeploy SAML Conformance

PingDeploy SAML Conformance & Security Testing is the first service to enable remote testing for the SAML 1.1 specification. PingDeploy allows organizations to test a baseline level of SAML 1.1 conformance. It is designed to help you ensure security and interoperability – reducing deployment time, cost and complexity.

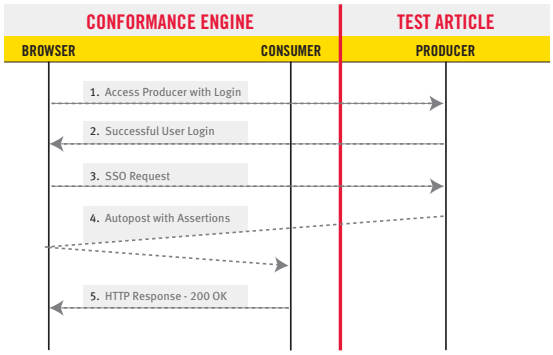
As a mediated web application, PingDeploy is easy to use and implement. No software is required, and the service can be set up in minutes. Leveraging PingDeploy is accomplished through the use of the Conformance Engine and interaction with a certified Ping Identity engineer.

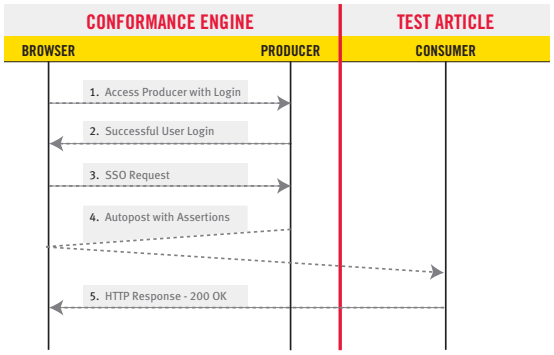
How It Works

The Conformance Engine works by acting as a live federation node, taking on the role of the "other party" in a SAML interaction.



For example, to test that an implementation can correctly perform in the role of the "producer" in a single sign-on interaction, the Conformance Engine acts as both the "consumer" and the Web browser.





Example SAML Browser/POST Profile Interactions

Features

In addition to complete coverage of the test cases outlined in the SAML 1.1 conformance specification, the Conformance Engine also tests negative, or "errant," test conditions to verify proper handling of boundary conditions, poorly formed XML, and bad signatures.

A Ping Identity engineer facilitates the testing process at each stage. First, the engineer will configure the Conformance Engine and work with the organization's representative to ensure that their identity federation implementation has been configured properly. The engineer will then coordinate the test execution with the organization's representative, working to diagnose and resolve any issues that are identified. When testing is complete, the engineer will analyze all logs and create a summary report outlining the results of all test findings.

Supported SAML 1.1 Conformance Profiles

- Browser Artifact Profile – Producer
- Browser Artifact Profile – Consumer
- Browser Post Profile – Producer
- Browser Post Profile – Consumer
- All Single Sign On Profiles
- Authentication Responder
- Attribute Responder
- Authorization Responder

Complete Test Coverage

- Basic course test cases for each test case described in the SAML 1.1 Conformance Specification
- Errant condition checking, including handling of invalid messages, poorly formed XML, errant data, and boundary conditions
- Test cases that check for conditions that inhibit interoperability based on experience

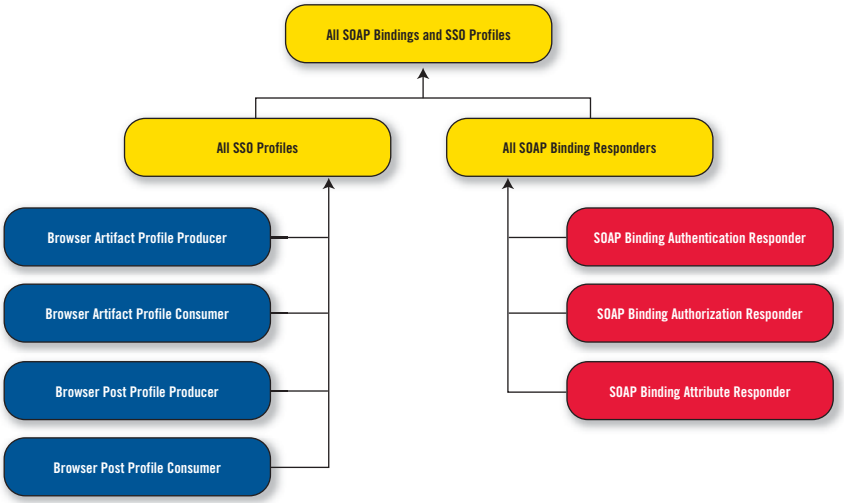


FIGURE: AVAILABLE CONFORMANCE PROFILES

Protocol Coverage

PingDeploy SAML Conformance defines all eight conformance profiles that represent subsets of the SAML specification. This enables organizations to test conformance to specific areas of the SAML specification without having to implement non-applicable profiles.

Packet-Level Monitoring

Utilities are provided to allow inspection of the SAML protocol interactions at the TCP-IP protocol level. This enables an in-depth analysis of protocol errors and diagnosis of network-level issues.

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Remote Access & Web Administration

Web-based administration enables your organization to monitor what the Ping Identity engineer sees during test execution. Using a standard web browser, the organization's representative can view the console output from the Conformance Engine, as well as all related logs. Remote access features result in efficient communication and decreased setup and testing.

- Select which SAML conformance profiles to test (including custom tests which are federation specific).
- Support for configuration data uploading.
- Automatic generation of credentials and certificates to be used in the testing.

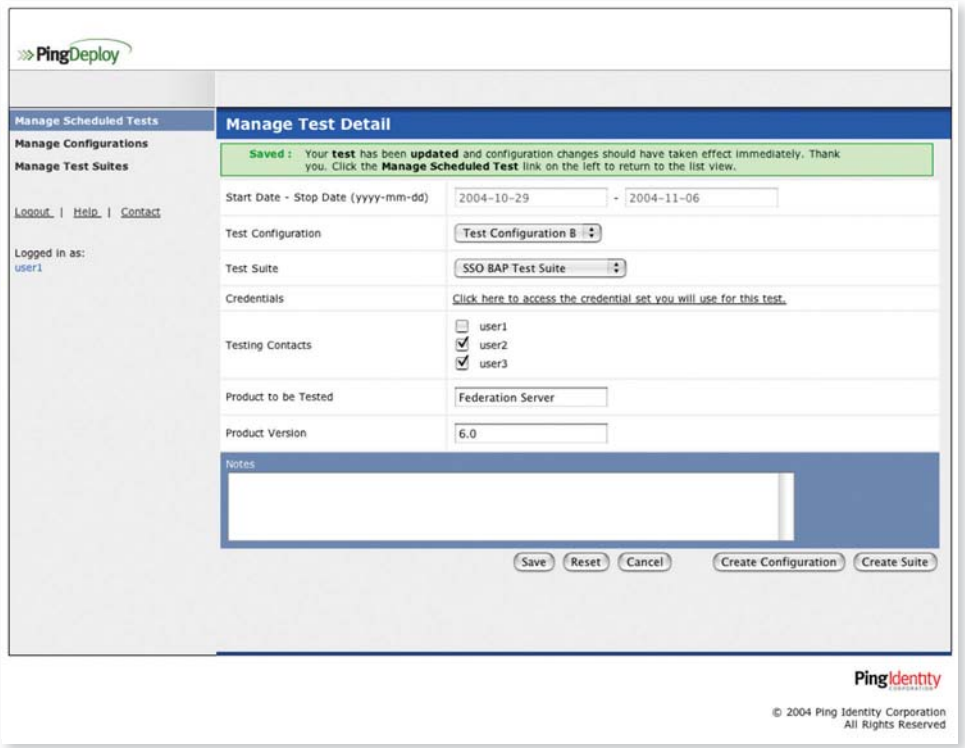

FIGURE: EASY CONFIGURATION OF ONLINE TESTING

Benefits

- Improved interoperability
- Faster time to market
- Lower deployment costs
- Higher assurance of quality, security and robustness
- Errant condition testing ensures future stability and security

About Ping Identity Corporation

Ping Identity Corporation (www.pingidentity.com) develops enterprise-class software and services for simplified and scalable identity federation. Ping's products focus exclusively on open standards (SAML, Liberty, WS-Federation). In addition to Ping's commercial multi-protocol federation servers and accelerated deployment services, Ping is also the proud sponsor of the leading open source project for identity federation – SourceID (www.sourceid.org).

Contact Ping

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