Introducing Jasig Central Authentication Service 4.0

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Who am I?

- Architecture & Engineering Team

- Identity Management Team

- B.S., M.S. in Computer Science

- Lead Architect, Jasig CAS since 2004

- Open Source Fanatic: Spring Security, JaValid, Inspektr, CAS, uPortal, OpenRegistry

- Likes to run…a lot

Agenda

- What is CAS?

- Historical Evolution

- Recent Achievements

- CAS4

- Who's Working on This?

- How can YOU help?

- Conclusion

What is CAS?

JA-SIG CAS is an

enterprise-level single

sign on service for the Web

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What is CAS?

- A trusted intermediary

- Proxy Authenticator

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Historical Evolution

- Yale CAS 1.0
- Yale CAS 2.0
- Jasig CAS 3.0
- Jasig CAS 3.1
- Jasig CAS 3.2
- Jasig CAS 3.3

Recent Achievements

- Introduction of CAS Steering Committee

- Introduction of RFC Process

- Steering Committee Stewardship of CAS Protocol

- New Web Site & Logo

- Migrated Mailing Lists to jasig.org

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What We're Keeping

- Authentication Flexibility

- Simplicity

- Java! (sorry, Ruby fans)

- Extensibility Goals

- JPA, Memcached, Terracotta

- CAS1, CAS2 protocols

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What We're Chucking!

- The Old Architecture (for the most part)

- Legacy Authentication (for the one person that used it)

- BerkeleyDB Storage

- Jboss Cache Storage*

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Where are We Going?!?

- Advanced Services Management Tool

- Easier Configuration

- Enhanced Extension Points & Feature Set

- New Architecture

- SAML2

- Better Internationalization

- Improved End User Documentation

- More Hardened System

- Runtime Server Information

- Updated Web UI

- Standards!

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Services Management Tool

- Capture & Maintain More Information

- Reduce deployer maintenance burden

- Ease integrator work effort

- High Availability

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Configuration Streamlining

- Reduce XML "hell"

- Add configuration vs. modify configuration

- Maven2 "standardization"

- Maven Tomcat Plugin

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Enhanced Extension Points

- Pre, Post Authentication Plugins
  - Messages, CAPTCHA, etc.

- Spring Web Flow 2

- Enhanced Authentication Mechanisms

- Service Matchers

- Heavy Usage of Interfaces & Factories

- MVC Architecture

- JMX, Performance Metrics, Auditing

New Architecture

- Cleaner separation of concerns

- Ability to relay more information

- Support for multiple protocols

- Better Integration with Services Management

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SAML2

- Web SSO Profiles

- ECP Profile

- Assertion Query/Request Profile

- Delegation Profile*

- Single Logout

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Internationalization

- UI messages

- Service Management Messages

- Log Messages

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End User Documentation

- Writing documentation as we go along

- Provide sample Maven Overlays

- Get Modules into Public Repositories

- Better linking of documentation from source & web site

Identity Management

More Hardened System

- CAPTCHA Support / Throttling

- Changing of Session Identifiers per Request

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Runtime Server Information

- Looking at Perf4J

- Include Inspektr integration

- Looking at integration with other management systems

- What can we expose via JMX that would help?

Identity Management

Web UI

Identity Management

Standards

- Leveraging javax.security (but don't worry, not JAAS)

- SAML, OpenId, CAS

- JPA over Hibernate

- Java EE over Spring

- (all of this, of course, where possible)

Identity Management

Who's Working on This?

- Its not just me this time (really!)

- International Server Team:
    – Marvin Addison
    – Jan "Velpi" Van der Velpin
    – Many Internationalization contributors

- International Client Team:
    – Pascal Aubry
    – Matt Smith
    – Phillip Ames
    – Brad Cupit

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Current Tasks

- Service Management Tool

- SAML2

- LDAP Error Mapping

- Example UI

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How can YOU help?

- Update our Documentation

- Provide Requirements, Feedback, etc.

- "Own" a module

- UI, testing assistance

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Other Information

- Source Code:
  - http://www.ja-sig.org/svn/cas4/trunk

- Continuous Integration:
  - http://developer.jasig.org/bamboo/

- My Blog
  - http://www.scottbattaglia.com

- Wiki
  - http://www.ja-sig.org/wiki

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Conclusion

- Release 4 is not just about the software

- Emphasis on full-solution, not just the SSO portion

- Release this year!

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Questions?