APEREO CAS
STATE OF THE PROJECT

Misagh Moayyed
Apereo CAS Project Chairman
DECIDED TO NOT BANKRUPT CHRISTIAN COUSQUER!

CETTE PRÉSENTATION EST EN ANGLAIS!
BEFORE WE BEGIN…

YES SIR. YES MA’AM!
HISTORY
HISTORY

CAS ON GITHUB

- 2179 Stars
- 1358 Forks

Apereo CAS - Enterprise Single Sign On for all  https://apereo.github.io/cas/
PREVIOUSLY ON CAS

- CAS Releases v4.1.10, v4.2.7
- CAS 3.x? You are DEAD to me.
  - Since 2015 really.
- https://apereo.github.io/cas/developer/Maintenance-Policy.html
HISTORY

NEW PMC MEMBERS

Dmitriy Kopylenko
@dima767

Daniel Frett
@frett
Enterprise Single Sign-On

- Java (Spring Webflow/Spring Boot) server component
- Pluggable authentication support (LDAP, Database, X.509, MFA)
- Support for multiple protocols (CAS, SAML, OAuth, OpenID, OIDC)
- Cross-platform client support (Java, .Net, PHP, Perl, Apache, etc)
- Integrates with uPortal, Liferay, BlueSocket, Moodle, Google Apps, etc

CAS provides a friendly open source community that actively supports and contributes to the project. While the project is rooted in higher-ed open source, it has grown to an international audience spanning Fortune 500 companies and small special-purpose installations.

Getting Started

We recommend reading the following documentation in order to plan and execute a CAS deployment.

- Architecture
- Installation Requirements
- Overlay Installation
- Authentication
- Attribute Release

Demo

The CAS web application is available for demo at https://jasigcas.herokuapp.com/cas

https://apereo.github.io/cas
https://apereo.github.io
https://gitter.im/apereo/cas
REMEMBER HOW I SAID CAS 3.X IS DEAD?! 

Which CAS server version are you using?

- 3.x: 53%
- 4.0.x: 14.8%
- 4.1.x: 22.8%
- 4.2.x: Other
- Latest Release Candidate / Snapshot
- Don't know.
Which industry is your CAS deployment in?

- Healthcare: 4 (2.8%)
- Insurance: 5 (3.5%)
- Government: 11 (7.6%)
- Higher Education: 109 (75.7%)
- Finance: 1 (0.7%)
- Travel: 1 (0.7%)
- Gaming: 0 (0%)
- Other: 25 (17.4%)
CAS SURVEY

THE MAJORITY OF YOU

- 78% with CAS 8-10+ years
- 92% AuthN with LDAP
- 47% handle 10K+ users
THANK YOU FOR THE KIND WORDS.
Because your life matters.

CAS 5.0
PREVIOUSLY ON CAS

- web.xml
- applicationContext.xml
- login-webflow.xml
- deployerConfigContext.xml
- cas-servlet.xml
- ticketRegistry.xml
- cas.properties
- uniqueldGenerators.xml

More...!
PLEASE
MAKE IT STOP
LET'S MAKE CAS GREAT... AGAIN!
Express Intent

```
<dependency>
  <groupId>org.apereo.cas</groupId>
  <artifactId>cas-server-support-saml</artifactId>
  <version>${cas.version}</version>
</dependency>
```

Optionally, Configure.

```
# Indicates the SAML response issuer
# cas.saml.response.issuer=localhost
#
# Indicates the skew allowance which controls the issue instant of the SAML response
# cas.saml.response.skewAllowance=0
#
# Indicates the default namespace used for SAML attributes
# cas.saml.attribute.namespace=http://www.ja-sig.org/products/cas/
```
THAT’S IT.
CAS 5.x Executes

java -jar cas.war

CAS Version: 5.1.0-RC2-SNAPSHOT
CAS Commit Id: d93e905db744eb36af4d6e79051e4572a5ca94d8
CAS Build Date/Time: 2017-01-30T21:31:52.255Z
Spring Boot Version: 1.5.0.RC1
Apache Tomcat Version: Apache Tomcat/8.5.9
System Date/Time: 2017-01-30T23:54:13.771
System Temp Directory: C:\Users\misag\AppData\Local\Temp\
Java Home: C:\Program Files\Java\jdk1.8.0_121\jre
Java Vendor: Oracle Corporation
Java Version: 1.8.0_121
JCE Installed: yes
OS Architecture: amd64
OS Name: Windows 10
OS Version: 10.0
DIFFERENCE IN PHILOSOPHY AND VISION.

BUILD PRODUCTS.

NOT PLATFORMS.
THE GOOD STUFF.

CAS 5.X FEATURES
CAS 5.x Features

About 150+ Modules

- OpenID Connect
- SAML2 IdP
- Risk-based Adaptive AuthN
- Multifactor AuthN
  - Duo Security, GAuth, YubiKey,…
- Stateless JWTs
- Administrative UIs
- Configuration Management
  - Git, Vault, MongoDB, Hot Reloads
- SAML2 SP Integrations
  - InCommon, Dropbox, etc
- Password Management
- More...!
Login

Username:

Password:

LOGIN

Links to CAS Resources

- Wiki
- Issue Tracker
- Mailing Lists

For security reasons, please Log Out and Exit your web browser when you are done accessing services that require authentication!
## SSO Sessions Report

<table>
<thead>
<tr>
<th>Principal</th>
<th>Ticket Granting Ticket</th>
<th>Authentication Date</th>
<th>Usage Count</th>
<th>Destroy</th>
</tr>
</thead>
<tbody>
<tr>
<td>casuser</td>
<td>TGT-1-gFRNgynXYybNdKe3SHdalsfxkn1Vjgw1k...</td>
<td>2016-05-24T06:17:18Z</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Ticket Granting Ticket:** TGT-1-gFRNgynXYybNdKe3SHdalsfxkn1Vjgw1k...

**Principal Attributes:**
- uid
- cn
- affiliation
- displayName

**Authenticated Services:**

Showing 1 to 1 of 1 entries

[Refresh]
Statistics View

Ticket Statistics

- Unexpired TGTs: 1
- Unexpired STs: 0
- Expired TGTs: 0
- Expired STs: 0

JVM Server Statistics

- 60% Total JVM Memory
- 35% Max Memory

Server Info

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server</td>
<td>mmoayyed.union.net fe80:0:0:0:d1a5:54dc:f707:199b%10</td>
</tr>
<tr>
<td>CAS Ticket Suffix</td>
<td>cas01.example.org</td>
</tr>
<tr>
<td>Uptime</td>
<td>0 days 0 hours 2 minutes 25 seconds 751 milliseconds</td>
</tr>
<tr>
<td>Memory</td>
<td>501.5331802368164 MB free, 1259.5 MB total</td>
</tr>
<tr>
<td>Maximum Memory</td>
<td>3609.0 MB</td>
</tr>
<tr>
<td>Available Processors</td>
<td>8</td>
</tr>
<tr>
<td>Key</td>
<td>Value</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>applicationConfig.accept.authn.users</td>
<td>casuser::Mellon</td>
</tr>
<tr>
<td>applicationConfig.attributeRepository</td>
<td>StubAttributeRepository</td>
</tr>
<tr>
<td>applicationConfig.auditTrailManager</td>
<td>slf4jAuditTrailManager</td>
</tr>
<tr>
<td>applicationConfig.authenticationPolicy</td>
<td>anyAuthenticationPolicy</td>
</tr>
<tr>
<td>applicationConfig.authenticationPolicyFactory</td>
<td>acceptAnyAuthenticationPolicyFactory</td>
</tr>
<tr>
<td>applicationConfig.authenticationThrottle</td>
<td>neverThrottle</td>
</tr>
<tr>
<td>applicationConfig.authenticationTransactionManager</td>
<td>defaultAuthenticationTransactionManager</td>
</tr>
<tr>
<td>applicationConfig.cas.attrs.resolve.affiliation</td>
<td>groupMembership</td>
</tr>
<tr>
<td>applicationConfig.cas.attrs.resolve.cn</td>
<td>commonName</td>
</tr>
<tr>
<td>applicationConfig.cas.attrs.resolve.displayName</td>
<td>displayName</td>
</tr>
</tbody>
</table>

Showing 1 to 10 of 248 entries
## Manage Services

Search by Service ID, Name or Description

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Service ID</th>
<th>Service Description</th>
<th>Edit</th>
<th>Duplicate</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apereo</td>
<td>^<a href="https://www.apereo.org">https://www.apereo.org</a></td>
<td>Apereo foundation sample service</td>
<td><img src="edit.png" alt="Edit" /></td>
<td><img src="duplicate.png" alt="Duplicate" /></td>
<td><img src="delete.png" alt="Delete" /></td>
</tr>
<tr>
<td>Services Management Web Application</td>
<td><a href="http://localhost:8080/cas-management/callback">http://localhost:8080/cas-management/callback</a></td>
<td>Services Management Web Application</td>
<td><img src="edit.png" alt="Edit" /></td>
<td><img src="duplicate.png" alt="Duplicate" /></td>
<td><img src="delete.png" alt="Delete" /></td>
</tr>
<tr>
<td>HTTPS and IMAPS</td>
<td>^{https*}</td>
<td>This service definition authorized all application urls ...</td>
<td><img src="edit.png" alt="Edit" /></td>
<td><img src="duplicate.png" alt="Duplicate" /></td>
<td><img src="delete.png" alt="Delete" /></td>
</tr>
</tbody>
</table>

**Full Description**: This service definition authorized all application urls that support HTTPS and IMAPS protocols.

- **Proxy Policy**: REFUSE
- **Attribute Policy Option**: NONE
- **Release Credential**: X
- **Release Proxy ID**: X

[Add New Service](#)
IS IT STABLE? IS IT SAFE?

AS MUCH AS YOU CAN REPORT BACK!
CAS FUTURE

PROJECT ROADMAP

- **CAS 5.0.x release**
  - *Patch releases every 30 days*

- **CAS 5.1.0 work in progress**
  - *Available by Open Apereo 2017*

- *Keep an eye on the blog: [https://apereo.github.io](https://apereo.github.io)*
CAS FUTURE

CAS 5.1.X

- Documentation. Documentation. Documentation
- SAML2 ECP
- Microsoft Azure Multifactor AuthN
- MongoDB, Redis Ticket Registry
- OpenID Connect Dynamic Registration
- SCIM provisioning
- LinkedIn Delegated AuthN
- Attribute Consent
- WS-* Protocol Support
Dear <INSERT-NAME>,

All things are possible in open source.

4000 hours.

Regards,

The CAS Project
BEFORE YOU ASK QUESTIONS:

YES SIR. YES MA’AM!

Misagh Moayyed
mmoayyed@unicon.net