

# CAS 6.0 Update

# Changes in CAS 6.0

## Tomcat Upgrade

- Upgrade from 8.5 to 9.0.17

## Java JDK Update

- Upgrade from JDK 1.8 to JDK 11

## CAS Dependencies

- Spring Boot 2
- Spring v5

# New Features

- ▶ OAuth/OIDC Protocols Supported
- ▶ Stage Environment
- ▶ Ability to revoke SSO sessions and OAuth Tokens
- ▶ Removed Annual Renewal
- ▶ Stage to Production promotion

# Stage Environment

- ▶ New domain `stage.cas.ucdavis.edu`
  - ▶ Same Service Registry as CAS Production
  - ▶ Stable, only changes for production deployment
  - ▶ Requires service to be registered (No localhost)
- ▶ Dev Environment
  - ▶ New domain `dev.cas.ucdavis.edu` domain
  - ▶ Old `ssodev.ucdavis.edu` will remain.

# OAuth/OIDC Protocols

- ▶ Supported Flows
  - ▶ Auth Code – response\_type=code
  - ▶ Token/Implicit - response\_type=token
  - ▶ Resource Owner – grant\_type=password
    - ▶ Limited use to most likely only departmental accounts
  - ▶ Client Credentials - grant\_type=client\_credentials
    - ▶ Useful for machine to machine auth
  - ▶ Refresh Tokens
  - ▶ OIDC IdToken – response\_type=id\_token
- ▶ <https://apereo.github.io/cas/6.0.x/installation/OAuth-OpenId-Authentication.html>

# JWTs

- ▶ CAS 6.0
  - ▶ Use OIDC IdToken for JWT Authentication
- ▶ CAS 6.1
  - ▶ Will be able to return Access Token as a JWT
  - ▶ Checkbox in CAS Management config screen.

# Registering OAuth/OIDC Services

- ▶ New /oauth endpoint in CAS Management
  - ▶ Requires a service to be registered, does not work with wildcard
  - ▶ New services added to "stage" first
  - ▶ Once verified, promoted to "production"

# CAS Management Updates

- ▶ Revoke TGTs
  - ▶ Ability to revoke individual, bulk and all SSO Sessions
  - ▶ Revoking TGT will attempt SLO to CAS clients
- ▶ Revoke OAuth Tokens
  - ▶ Ability to revoke individual, bulk and all OAuth Tokens
  - ▶ Revoking Token will not delete SSO Sessions
- ▶ Use base / context – <https://casmgr.ucdavis.edu>

# CAS Management

- ▶ Annual renewal requirement removed
  - ▶ New process will monitor last time used
  - ▶ After a period of non-use email sent to service owners
  - ▶ Logging into service once resets timer
- ▶ Request Service be promoted to production
  - ▶ Probably only used for OAuth/OIDC
  - ▶ CAS Services can be "staged" and "promoted", but not required

# CAS 6.1

- ▶ Late Summer/Early Fall
- ▶ JWT Access Tokens
- ▶ OAuth/OIDC Certified
- ▶ SAML Support
  - ▶ CAS handle SAML 2.0 requests
  - ▶ CAS Management used to upload and manage metadata