

What's New in Apache Syncope 1.2.0

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— NOVEMBER 17-21, 2014 —



Speaker Introduction



Apache CXF



talend*
*open data solutions



<http://ws.apache.org>

Apache <Web Services /> Project

The background features a dark purple gradient with a silhouette of a large domed building, possibly a cathedral or mosque, with several spires. The text is centered over this image.

Introduction to Apache Syncope



Apache Syncope basics

- Identity Management solution at Apache
- Can retrieve and store users/roles/etc from/in multiple backend resources
- Integrates with a workflow engine
- Functionality exposed via REST API and console



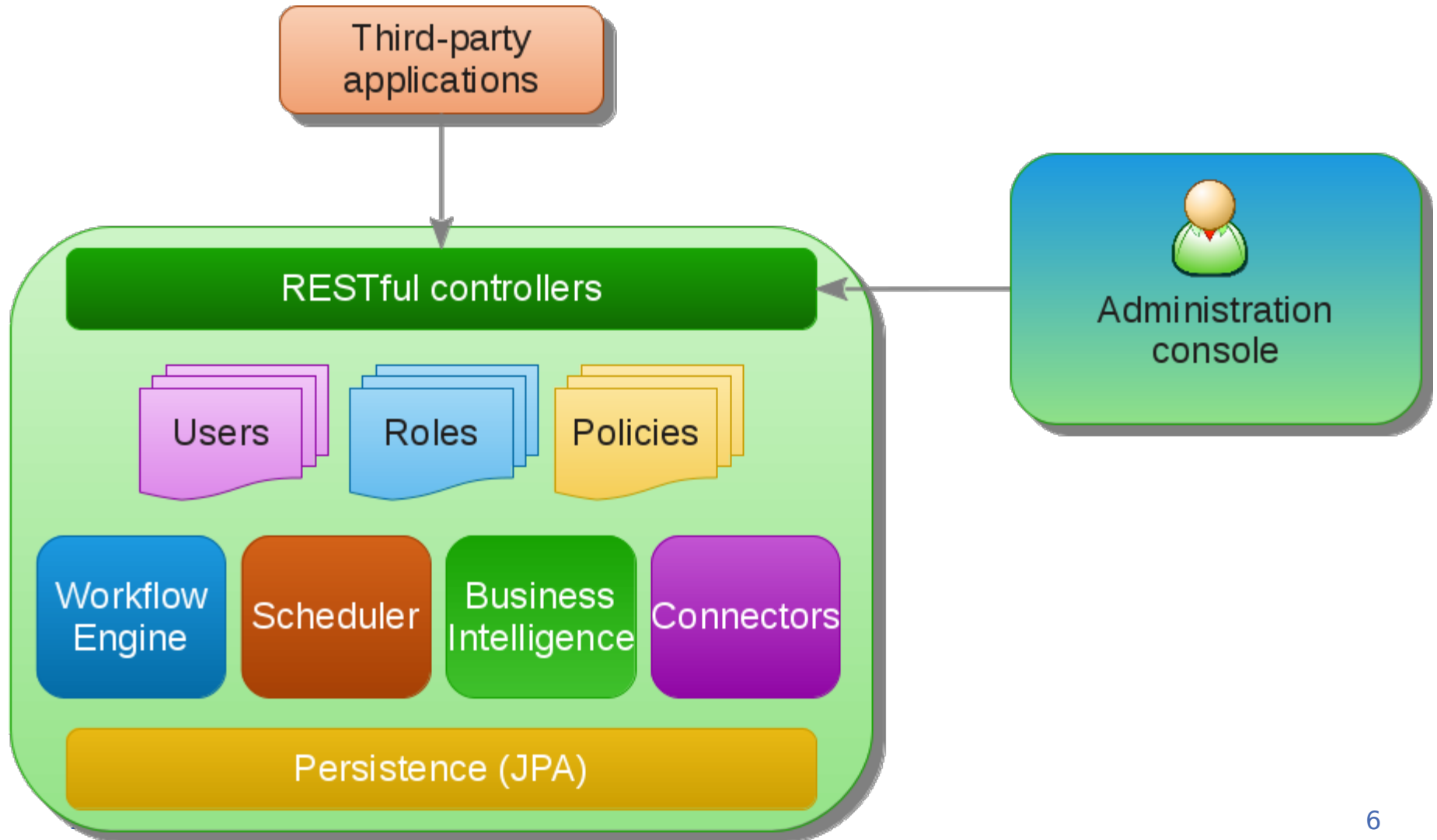
A quick history of Apache Syncope

- Apache TLP since 11/2012
- Current releases: 1.2.0 *Intermezzo*, 1.1.8 *Ad libitum*, 1.0.9 *Espressivo*



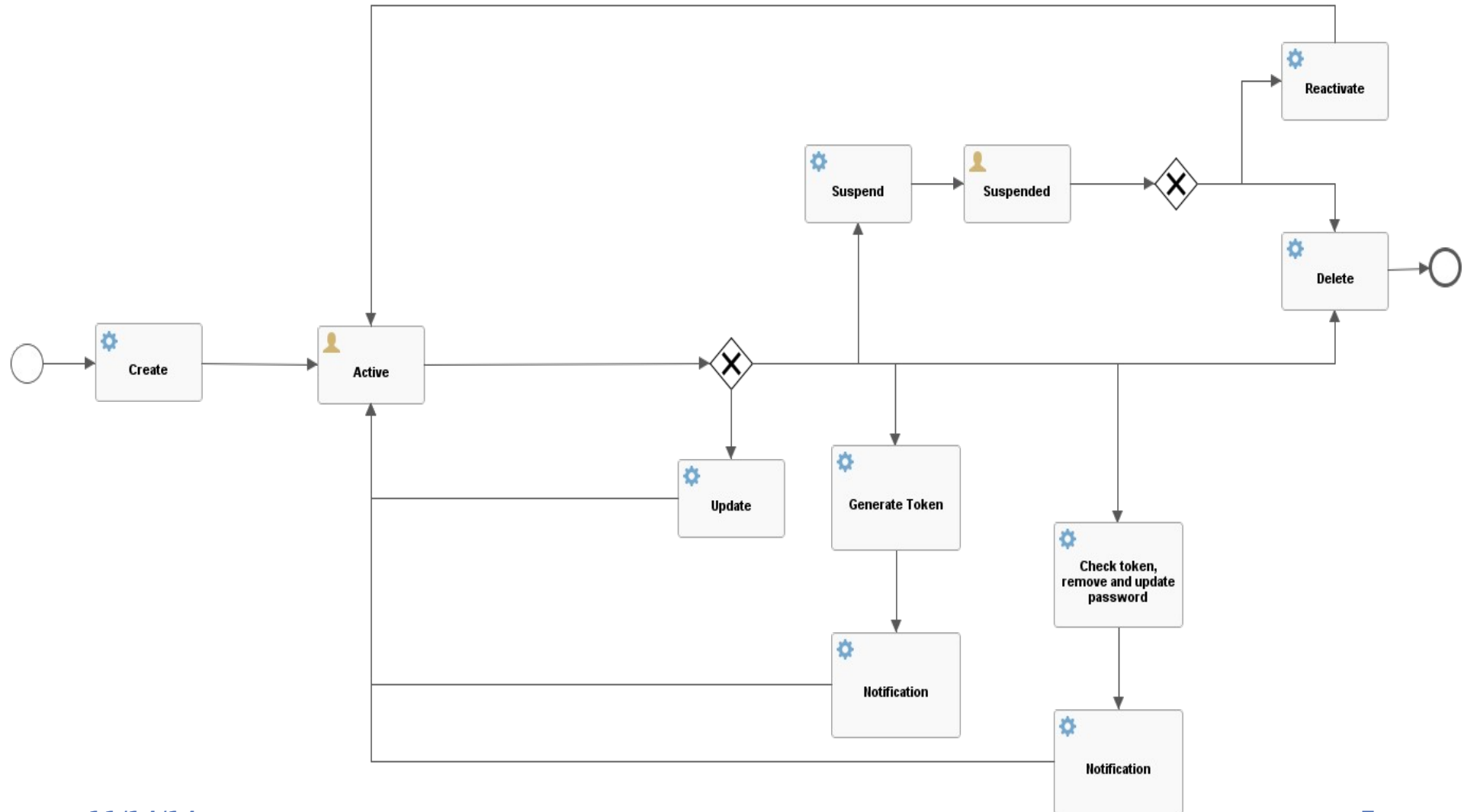


Architecture



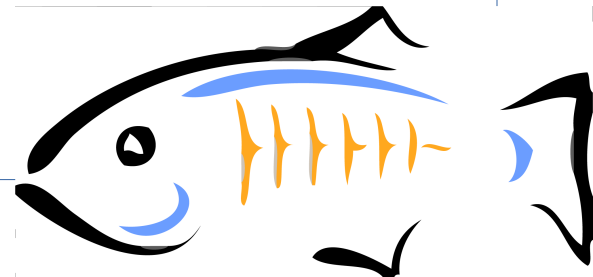
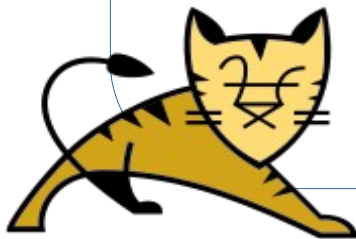


Workflow



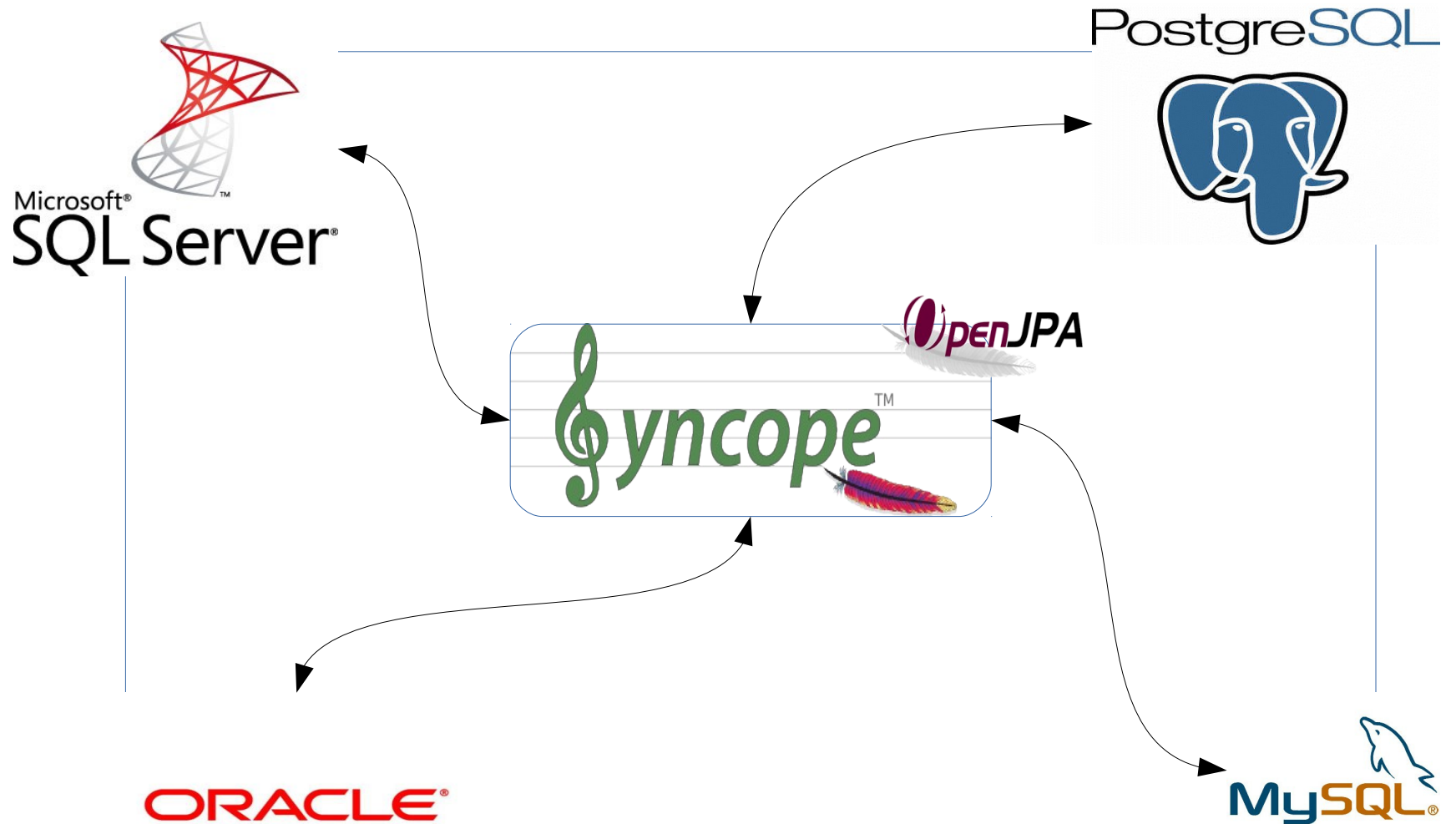


Containers



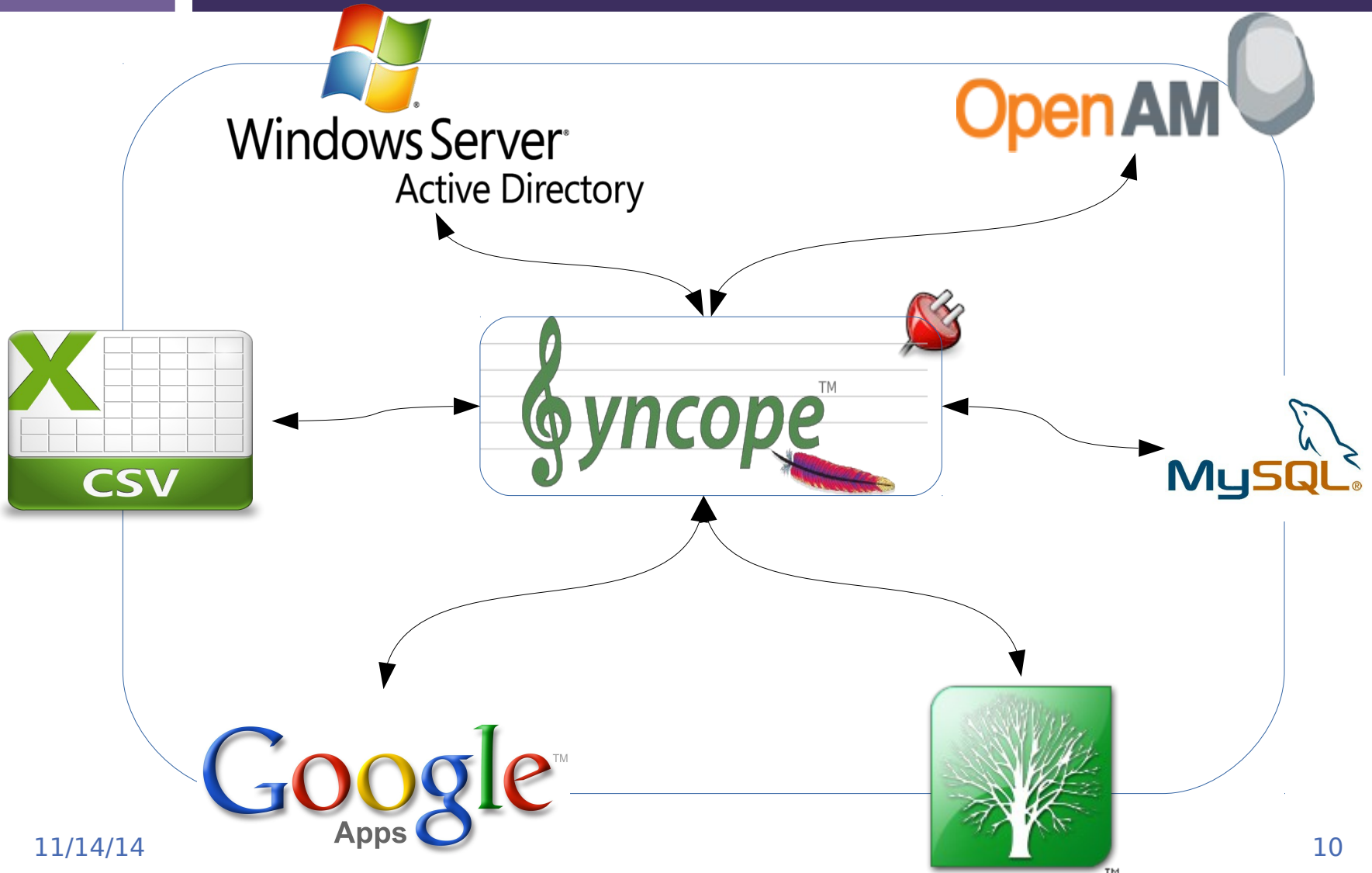


Persistence





Connectors



The background features a dark purple gradient with a subtle grid pattern. In the center, there is a black silhouette of a domed building with several minarets, resembling a mosque or a similar architectural style. The text is centered over this silhouette.

Apache Syncope 1.2.0



Introducing Apache Syncope 1.2.0

- **1.2.0 *Intermezzo* release 10/2014**
- **New features:**
 - New UI Installer + .deb files
 - REST API powered by Apache CXF
 - WADL + FIQL support
 - Non-cleartext password support
 - Passthrough authentication
 - Support for new attribute types
 - Support for Activiti Modeler



Options to install Apache Syncope

- Maven archetype
- Standalone
- New .deb files
- New UI installer

Maven

Maven home directory:

GroupId:

ArtifactId:

SecretKey:

Anonymous Key:

Conf directory name:

Log directory name:

Bundle directory name:

Syncope Version:

(Made with IzPack - <http://izpack.org>)

Step 5 of 12



REST API powered by Apache CXF

- Apache Syncope features a rich REST API
- Syncope 1.1.x featured a REST API based on Spring, and a new refactored API based on CXF
- Syncope 1.2.0 has dropped the Spring API. CXF API available via “/syncope/rest” URI.



REST API powered by Apache CXF

- Sample HTTP GET requests:
 - `syncope/rest/users.json` - get a list of all users in JSON format
 - `syncope/rest/users` - get a list of all users in an XML format
 - `syncope/rest/users/self` - get the authenticated user



REST API powered by Apache CXF

```
<syncope:user xmlns:syncope="http://syncope.apache.org/1.2">
  <creationDate>2014-10-22T15:05:07.757+01:00</creationDate>
  <creator>admin</creator>
  <lastChangeDate>2014-10-22T15:05:23.419+01:00</lastChangeDate>
  <lastModifier>unauthenticated</lastModifier>
  ▼ <attributes>
    ▼ <attribute>
      <readonly>false</readonly>
      <schema>surname</schema>
      ▼ <values>
        <value>yellow</value>
      </values>
    </attribute>
  </attributes>
  <derivedAttributes/>
  <id>204</id>
  <virtualAttributes/>
  <propagationStatuses/>
  <resources/>
  <failedLogins>0</failedLogins>
  <lastLoginDate>2014-10-22T15:05:23.416+01:00</lastLoginDate>
  <memberships/>
  <password>8EEC7BC461808E0B8A28783D0BEC1A3A22EB0821</password>
  <status>active</status>
  <username>dave</username>
1</syncope:user>
```




WADL support

- Apache Syncope 1.2 uses the WADL generation of capabilities of Apache CXF to expose the REST API as a WADL document.
- Accessible via the URI "syncope/rest/?_wadl".
- WADL2HTML: `"/syncope/rest/doc/"`



FIQL support

- We can search for users or roles in Syncope 1.2 using FIQL expressions.
- For example:
 - `syncope/rest/users/search?_s=lastLoginDate=ge=2014-11-13`
 - `syncope/rest/users/search?_s=surname==smith`



Non-cleartext password support

- Previously, passwords imported from resources were hashed according to a global policy
- Syncope 1.2.0 now allows importing hashed passwords from LDAP/DB backends
- Non-cleartext password propagation also possible



Passthrough Authentication

- When authenticating via the REST API, the submitted password is compared with the password of the associated user in internal storage
- Syncope 1.2.0 features “passthrough authentication”, where an authentication password is validated against the backend resource.



Support for new Attribute types

- A new “Binary” attribute type is available in the Schema
- Each binary attribute is associated with a MIME type
- Binary attributes allow us to associate X.509 certs or images with users
- A new “Encrypted” attribute type is also available



Support for Activiti Modeler

- Previously workflow could only be edited via an XML editor
- Now Apache Syncope 1.2 supports a new graphical editor to create a workflow via Activiti Modeler.



JAAS LoginModule for Syncope

- A new JAAS LoginModule for Syncope is now available
- Developed for Apache Karaf
- Authenticates a Username + Password to Syncope via REST API
- Retrieves roles as well



Resources

- <http://syncope.apache.org/>
- <https://twitter.com/syncopeidm>
- <https://github.com/apache/syncope>
- <http://syncopedemo.tirasa.net>
- <http://coheigea.blogspot.ie/>



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