

Setup a Syncope cluster

Version Warning

The content below is for Apache Syncope <= 1.2 - for later versions the [Reference Guide](#) is available.

Introduction

Clustering setup heavily depends on the JEE container.

Note: Run [Syncope in real environments](#) is a prerequisite for this page.

Core

OpenJPA Remote Event Notification

When deploying multiple Syncope instances insisting on a single database or database cluster, it is of fundamental importance that the contained OpenJPA instances are correctly configured for [remote event notification](#).

Such configuration, in fact, allows OpenJPA's data cache to remain synchronized when deployed in multiple JVMs, thus enforcing data consistency across all Syncope instances.

The default configuration, in `core/src/main/resources/persistenceContextEMFactory.xml` is

```
<entry key="openjpa.RemoteCommitProvider" value="sjvm" />
```

which is suited for single JVM installations; with multiple instances, more options like as TCP or JMS are available; see [OpenJPA's documentation](#) for reference.

OpenJPA documentation refers to direct configuration under `META-INF/persistence.xml`; for example:

```
<property name="openjpa.RemoteCommitProvider" value="tcp
(Addresses=10.0.1.10;10.0.1.11)" />
```

for usage in `core/src/main/resources/persistenceContextEMFactory.xml` this becomes:

```
<entry key="openjpa.RemoteCommitProvider" value="tcp(Addresses=10.
0.1.10;10.0.1.11)" />
```

Console

Apache Tomcat 7

Having [this](#) as special reference,

1. Add `<distributable>` in `console/src/main/webapp/WEB-INF/web.xml`
2. Be sure that all cluster nodes have time aligned (via NTP or other)
3. Enable [Tomcat 7 clustering](#) (session replication is not needed)

4. Deploy your WAR artifacts to all cluster nodes