1 Introduction

You are about to setup the OpenStack as Serice provider. This is going to enable you to make a single sign-on service and log users to the Horizon, the OpenStack dashboard in a seamless way.

Estimated deployment duration: **10-25 minutes** (depends on many factors)

1.1 The module functionality

Basically, the module works like this:

1. Present the user with the available Identity providers. Let the user choose one.

2. If user doesn't yet have an account in Keystone, register it. Map the user to the appropriate tenant, depending on the auth source and IdP attributes. This enables you, for example, to give demo accounts to random facebook users and full-fledged accounts to the people listed in your company's LDAP, etc...

3. Seamlessly login the user to the Horizon web dashboard.

2 Deployment at SimpleSamlPHP side

1. First, you have to extract the `ssp.tar.gz` archive to a location which is publicly accessible via your web server of choice. A good example might be `/var/www/login`, but you can chose anything.

2. Next, you have to open the `config.php` file, where all configurable options reside.

   - The first and most important config option is `sspPath`, this is the relative (or absolute) path to the `lib/_autoload.php` file in **your SSP installation.**

     ```
     const sspPath = '../simplesamlphp-1.11.0/lib/_autoload.php';
     ```

   - The module also has to know about the ***user*** and ***admin*** **Keystone API endpoints**. They usually reside on the different ports on the same host.

     ```
     const adminUrl = 'http://localhost:35357/v2.0/';
     const userUrl = 'http://localhost:5000/v2.0/';
     ```

   - Point the module to the Horizon dashboard. The redirect and auto-login will be made to this URL.

     ```
     const horizon = 'http://localhost/auth/login/';
     ```

   - Last but not least, you have to supply the *Keystone AUTH token secret*. You can find it in keystone's configuration file.

     ```
     const secret = '65e005728156f456cf20';
     ```

3. As you probably noticed, not only **Config** class resides in `config.php`. There is also a **Mapper** class, which contains functions, named by the auth sources. Using these function, you can decide how you want to map IdP attributes to user names.

   Functions accept one parameter (IdP attribute hash) and return a 3-**tuple** in the form (`username`, `email`, `default tenant`). Example you might use for LDAP is below:

   ```
   function example_ldap($attr) {
       return [ $attr['uid'][0], $attr['mail'][0], 'admin' ];
   }
   ```

4. Lastly, you are free to modify `index.php` to your liking. You can customise it with your company's logo or give it a design overhaul, if you wish.

3 Deployment at the Horizon side

1. Overwrite the `/usr/lib/python2.7/dist-packages/openstack_auth/views.py` with the file provided in our archive. It is advised to keep the backup of the old file, if you want to restore old functionality.

2. Append the logout callback url to the `openstack_dashboard/settings.py` configuration file.

   ```
   SSP_LOGOUT_URL = 'http://localhost/login/logout.php'
   ```