

# Add-ons

## Introduction

Add-ons for HUBzero are available here. Currently these consist of a couple projects that have not yet been fully integrated into the the HUBzero packaging and installation process.

[Hubgraph](#) - Alternate Search Engine

[Shibboleth/InCommon](#) - Authentication Plug-In

# Separate execution host setup

## Intro

Our standard open source install sets up a web server and execution host on a single machine. For smaller hubs, this is an adequate setup, however on hubs with greater needs, often separate (and sometimes multiple) execution hosts are required for an installation. The following is a set of directions for setting up an execution host.

Note, these directions are not complete step by step directions, but more of a guideline for setting up an execution host. A user should have a very thorough understanding of hub architecture before attempting to setup an additional execution host.

## Setup steps

1. Do standard debian OS install
2. Configure hostname and `/etc/sources.list` appropriately
3. Setup standard hub through the openldap step
4. Install `openvz` kernel
5. Install `hubzero mw-service` on execution host `'apt-get install -y hubzero-mw-service'`
6. Run `'mkvztemplate amd64 wheezy diego'`
7. run `'hzcms configure mw-service --enable'`
8. configure `/etc/nslcd.conf` and restart. `/etc/nslcd.conf` will need the following modifications:
  - URI - modified to point to the ldap on the web host
  - binddn - set to the search user dn on the webserver (do a `'slapcat | grep search'` to get the DN for the search user on the web server)
  - bindpw - set to the value contained for the LDAP-SEARCHPW in the `/etc/hubzero.secrets` file on the web server
9. Install `hubzero mw-client` and configure on execution host
10. copy `/etc/mw-client/maxwell.key.pub` from web host to `/root/.ssh/authorized keys` file on execution host
11. On web server, add execution host to tools component
  - login to webserver admin section (`webserver/administrator`)
  - select components->tools
  - on host tab click on + sign in upper right to add an execution host
  - When you are returned to the list of hosts, you should see two, one for the web server, likely called localhost and the IP for your execution host
  - Under the provisions section, click on `pubnet`, `sessions`, and `workspace` for the new execution host
  - Under the provisions section, uncheck everything but `fileserver` for your web server
12. Setup nfs server on web server
  - `'apt-get install nfs-kernel-server'`

edit /etc/exports to export /home and /apps, something similar to this:

```
/home executionhost.ip.address(rw,no_subtree_check)
```

```
/apps executionhost.ip.address(rw,no_subtree_check)
```

### 13. Setup nfs client on execution host

```
apt-get install nfs-common
```

```
mount -t nfs webserver:/home /home
```

```
mount -t nfs webserver:/apps /apps
```

NOTE: user will want to add appropriate sections in the /etc/fstab file to remount these locations after a reboot. Something similar to:

```
your.webserver.org:/apps /apps nfs vers=3,rw 0 0
```

```
your.webserver.org:/home /home nfs vers=3,rw 0 0
```