

Atmos:SLURMWeb

From EMVL Wiki

Parent

NOTE: These steps need to be completed on both management nodes!

Contents

- 1 Install PreReqs
 - 1.1 Install PySlurm
 - 1.2 Install bootstrap
 - 1.3 Install bootstrap-tagsinput
 - 1.4 Install bootstrap-typeahead
 - 1.5 Install async
 - 1.6 Install d3
 - 1.7 Install requirejs
 - 1.8 Download jquery
 - 1.9 Download jquery-tablesorter
 - 1.10 Download jquery-flot
 - 1.11 Download handlebars
 - 1.12 Download three
- 2 Install slurm-web
 - 2.1 Make symlinks and base directories
 - 2.2 Install dashboard
 - 2.3 Install restapi
 - 2.4 Install conf-server
 - 2.5 Install configuration files
- 3 Configure slurm-web

Install PreReqs

- Install items available via yum

```
/usr/bin/yum install mod_wsgi httpd-devel python-ldap python-redis dejavu-sans-mono-fonts \
clustershell python-flask Cython npm
```

- Make a directory for javascript in /atmos/www/html

```
/bin/install -d /atmos/www/html/javascript
```

- Change into /atmos/src to download all packages below

```
cd /atmos/src
```

Install PySlurm

- Clone the appropriate PySlurm release

```
/bin/git clone -b 16.05.5 https://github.com/PySlurm/pyslurm.git
```

- Change into the pyslurm directory

```
cd pyslurm
```

- Build PySlurm

```
/bin/python setup.py build --slurm-lib=/usr/local/lib64 --slurm-inc=/usr/local/include
```

- Install PySlurm

```
/bin/python setup.py install
```

Install bootstrap

- Download the latest bootstrap (<http://getbootstrap.com/getting-started/#download>)
- Unzip the downloaded file and change into the directory

```
cd bootstrap-*-dist
```

- Make the needed directory in /atmos/www/html

```
/bin/install -d /atmos/www/html/javascript/bootstrap
```

- Copy the files over to /atmos/www/htmls/javascript/bootstrap

```
/bin/cp -ar * /atmos/www/html/javascript/bootstrap
```

Install bootstrap-tagsinput

- Clone bootstrap-tagsinput

```
/bin/git clone https://github.com/bootstrap-tagsinput/bootstrap-tagsinput.git
```

- Change into bootstrap-tagsinput/dist

```
cd bootstrap-tagsinput/dist
```

- Install all css files into /atmos/www/html/javascript/bootstrap/css

```
/bin/install -m644 *.css /atmos/www/html/javascript/bootstrap/css
```

- Install all js files into /atmos/www/html/javascript/bootstrap/js

```
/bin/install -m644 *.js *.map /atmos/www/html/javascript/bootstrap/js
```

Install bootstrap-typeahead

- Clone bootstrap-typeahead

```
/bin/git clone https://github.com/bassjobsen/Bootstrap-3-Typeahead.git
```

- Change into the directory

```
cd Bootstrap-3-Typeahead
```

- Install bootstrap-typeahead

```
/bin/install -m644 bootstrap3-typeahead.min.js \  
/atmos/www/html/javascript/bootstrap/js/typeahead.jquery.js
```

Install async

- Clone async

```
/bin/git https://github.com/caolan/async.git
```

- Change into async/dist
- Create directory /atmos/www/html/javascript/async

```
/bin/install -d /atmos/www/html/javascript/async
```

- Install async

```
/bin/install -m644 dist/* /atmos/www/html/javascript/async
```

Install d3

- Download the latest version 3 of d3 (<https://github.com/d3/d3/releases?after=v4.0.0>)
- Make a directory to unzip the file based on the version number

```
/bin/mkdir d3-3.5.17
```

- Change into the new directory

```
cd d3-3.5.17
```

- Extract the downloaded zip file
- Make directory /atmos/www/html/javascript/d3

```
/bin/install -d /atmos/www/html/javascript/d3
```

- Install d3.min.js

```
/bin/install -m644 d3.min.js /atmos/www/html/javascript/d3
```

Install requirejs

- Create /atmos/www/html/javascript/requirejs

```
/bin/install -d /atmos/www/html/javascript/requirejs
```

- From the requirejs download page, download the following packages (<http://requirejs.org/docs/download.html>)

```
require.js  
text.js
```

- Rename the downloaded files to <NAME>.min.js and install them into /atmos/www/html/javascript/requirejs

Download jquery

NOTE: Only use jquery version 2, version 3 is not supported

- Download latest **compressed** production jQuery 2 (<http://jquery.com/download/>)
- Create /atmos/www/html/javascript/jquery

```
/bin/install -d /atmos/www/html/javascript/jquery
```

- Install the downloaded jquery file as jquery.min.js

Download jquery-tablesorter

- Download the latest version of jquery-tablesorter (<http://tablesorter.com/docs/#Download>)
- Make a directory to unzip the file into and change into it
- Unzip the jquery-tablesorter zip file
- Create /atmos/www/html/javascript/jquery-tablesorter

```
/bin/install -d /atmos/www/html/javascript/jquery-tablesorter
```

- Install jquery-tablesorter

```
/bin/install -m644 jquery.tablesorter.min.js /atmos/www/html/javascript/jquery-tablesorter
```

Download jquery-flot

- Download the latest jquery-flot (<http://www.flotcharts.org/>)
- Unzip the jquery-flot zip file
- Create /atmos/www/html/javascript/jquery-flot

```
/bin/install -d /atmos/www/html/javascript/jquery-flot
```

- Install jquery-flot

```
/bin/install -m644 jquery.flot*.min.js /atmos/www/html/javascript/jquery-flot
```

Download handlebars

- Download the latest handlebars (<http://handlebarsjs.com/installation.html>)
- Create /atmos/www/html/javascript/handlebars

```
/bin/install -d /atmos/www/html/javascript/handlebars
```

- Install the downloaded handlebars file as handlebars.min.js

Download three

- Download the latest three (<https://threejs.org/>)
- Create /atmos/www/html/javascript/three

```
/bin/install -d /atmos/www/html/javascript/three
```

- Install the file `build/three.min.js` into `/atmos/www/html/javascript/three`

Install slurm-web

- Clone `slurm-web`

```
/bin/git clone https://github.com/edf-hpc/slurm-web.git
```

- Change into the `slurm-web` directory

```
cd slurm-web
```

Make symlinks and base directories

- Create base directory for `/atmos/www/html/slurm-web`

```
/bin/install -d /atmos/www/html/slurm-web
```

- Create base directory for `/atmos/etc/slurm-web`

```
/bin/install -d /atmos/etc/slurm-web
```

- Setup symlink for `/usr/share/slurm-web`

```
(cd /usr/share; /bin/ln -s /atmos/www/html/slurm-web)
```

- Setup symlink for `/etc/slurm-web`

```
(cd /etc; /bin/ln -s /atmos/etc/slurm-web)
```

Install dashboard

- Make directories for dashboard

```
/bin/install -d \  
  /usr/share/slurm-web/dashboard/js \  
  /usr/share/slurm-web/dashboard/css \  
  /usr/share/slurm-web/dashboard/static
```

- Copy the needed dashboard files

```
/bin/cp -ar dashboard/html/* /usr/share/slurm-web/dashboard  
/bin/cp -ar dashboard/js/* /usr/share/slurm-web/dashboard/js  
/bin/cp -ar dashboard/css/* /usr/share/slurm-web/dashboard/css  
/bin/cp -ar dashboard/static/* /usr/share/slurm-web/dashboard/static
```

Install restapi

- Create directories for restapi

```
/bin/install -d /usr/share/slurm-web/restapi/schema/dtd
```

- Copy *.py

```
/bin/cp -ar rest/*.py rest/*.wsgi /usr/share/slurm-web/restapi
```

- Install schema

```
/bin/cp -ar schema/racks.dtd /usr/share/slurm-web/restapi/schema/dtd
```

Install conf-server

- Create directory for conf-server

```
/bin/install -d /usr/share/slurm-web/conf-server
```

- Install conf-server files

```
/bin/cp -ar conf/dashboard/* /usr/share/slurm-web/conf-server  
/bin/cp -ar dashboard/backend/* /usr/share/slurm-web/conf-server
```

- Install slurmwebconf.py and slurm-web-conf.wsgi

```
/bin/install -m644 \  
dashboard/backend/slurmwebconf.py dashboard/backend/slurm-web-conf.wsgi \  
/usr/share/slurm-web/conf-server
```

Install configuration files

- Install racks.xml

```
/bin/install -m644 conf/racks.xml /etc/slurm-web
```

- Install restapi.conf

```
/bin/install -m644 conf/restapi.conf /etc/slurm-web
```

Configure slurm-web

- Setup /etc/httpd/conf.d/slurm-web.conf

```

/bin/cat > /etc/httpd/conf.d/slurm-web.conf << EOF
#
# /slurm (Dashboard)
#
Alias /slurm /usr/share/slurm-web/dashboard

<Directory /usr/share/slurm-web/dashboard>
    Options FollowSymLinks
    Require all granted
</Directory>

#
# /slurm-restapi
#
WSGIDaemonProcess slurm-web-restapi user=apache group=apache threads=5
WSGIScriptAlias /slurm-restapi /usr/share/slurm-web/restapi/slurm-web-restapi.wsgi
WSGIPassAuthorization On

<Directory /usr/share/slurm-web/restapi>
    WSGIProcessGroup slurm-web-restapi
    WSGIApplicationGroup %{GLOBAL}
    Options FollowSymLinks
    Require all granted
</Directory>

#
# /slurm-web-conf
#
WSGIDaemonProcess slurm-web-conf user=apache group=apache threads=2
WSGIScriptAlias /slurm-web-conf /usr/share/slurm-web/conf-server/slurm-web-conf.wsgi
Alias /slurm-web-conf /usr/share/slurm-web/conf-server

<Directory /usr/share/slurm-web/conf-server>
    WSGIProcessGroup slurm-web-conf
    WSGIApplicationGroup %{GLOBAL}
    Options FollowSymLinks
    Require all granted
</Directory>
EOF

```

■ Create /etc/httpd/conf.d/javascript.conf

```

/bin/cat > /etc/httpd/conf.d/javascript.conf << EOF
Alias /javascript /atmos/www/html/javascript

<Directory /atmos/www/html/javascript>
    Require all granted
</Directory>
EOF

```

■ Create /atmos/etc/slurm-web/secret.key

```

/bin/head -c 64 /dev/urandom > /atmos/etc/slurm-web/secret.key
/bin/chown apache.apache /atmos/etc/slurm-web/secret.key
/bin/chmod 0400 /atmos/etc/slurm-web/secret.key

```

■ Disable authentication in /etc/slurm-web/restapi.conf

```

/bin/sed -r -i 's/^(authentication\s*=\s*).*/\1/' /etc/slurm-web/restapi.conf

```


■ Setup config.json

```
/bin/cat > /usr/share/slurm-web/conf-server/config.json << EOF
{
  "STARTPAGE": "jobsmap",
  "REFRESH": 30000,
  "MAXNODESLENGTH": 25,
  "AUTOLOGIN": false,
  "LOGOURL": "static/logo.png"
}
EOF
```

■ Restart httpd

```
/usr/bin/systemctl restart httpd
```

Retrieved from "<https://iris1.rtpnc.epa.gov/wiki/index.php?title=Atmos:SLURMWeb&oldid=6878>"

■ This page was last modified on 20 July 2017, at 14:32.