

FreeBSD Administration - Support #647

Install JSbin On FreeBSD

08/28/2015 09:33 PM - Daniel Curtis

Status:	Closed	Start date:	08/28/2015
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Web Server	Estimated time:	2.00 hours
Target version:	FreeBSD 10	Spent time:	7.50 hours

Description

This is a guide on installing JSbin on FreeBSD.

~~**NOTE:** After working on getting JSbin to install on FreeBSD for many hours, I was unable to get it working.~~

UPDATE: I found that JSbin works on node v0.10, the default nodejs version for FreeBSD is ~~v0.12~~. Once I installed the older version JSbin installed correctly.

~~**UPDATE:** This guide has been updated for FreeBSD 10.~~

WARNING: JSbin will only run on nodejs 0.10; as of 1 Oct. 2016 the ports tree does not have www/node010; so an older snapshot of the ports tree must be used. JSbin will not run on FreeBSD 10 otherwise.

Prepare the system

- Make sure the system is up to date and ports tree is installed:

```
pkg update && pkg upgrade
```

- Use the version of the ports tree with node010:

```
svn checkout svn://svn.freebsd.org/ports/branches/2016Q3 /usr/ports/
```

- Add the following to the make.conf file to use nginx while compiling passenger:

```
echo 'OPTIONS_UNSET+= DOCS NLS X11 EXAMPLES' >> /etc/make.conf  
echo 'OPTIONS_SET+= NODE010' >> /etc/make.conf
```

- Install a few dependencies:

```
pkg install portmaster libzmq2 nasm git sqlite3 pkgconf autoconf python gmake
```

- Install node010 and npm2 from the ports tree:

```
portmaster www/node010 www/npm2
```

- Install grunt-cli globally using npm:

```
npm install -g grunt grunt-cli
```

- Add a jsbin user to separate privileges:

```
pw add user -n jsbin -m -s /bin/sh -c "JSbin"
```

Install JSbin

- Install jsbin globally:

```
npm install --sqlite=/usr/local -g jsbin
```

- Create a new config file and edit it as necessary:

```
cp /usr/local/lib/node_modules/jsbin/config.default.json /usr/local/lib/node_modules/jsbin/config.local.json
```

- Edit the jsbin config file:

```
vi /usr/local/lib/node_modules/jsbin/config.local.json
```

- Modify the env, timezone, and url settings:

```
"env": "production",
"timezone": "PST",
"url": {
  "host": "jsbin.example.com",
  "prefix": "/",
  "ssl": true,
  "static": false,
  "runner": false
},
"session": {
  "secret": "v09sfyka2e32vdx9k297d1"
},
"store": {
  "adapter": "sqlite",
  "sqlite": {
    "location": "jsbin.sqlite"
  },
},
},
```

- Build the production environment files:

```
cd /usr/local/lib/node_modules/jsbin
npm install grunt-contrib-uglify grunt-contrib-jshint grunt-contrib-concat
grunt build
```

- Change the ownership of the jsbin site to the jsbin user:

```
chown -R jsbin /usr/local/lib/node_modules/jsbin
```

- Test JSbin:

```
su - jsbin
```

```
jsbin
```

NOTE: Press Ctrl+C to kill the test server when finished.

- Go to <http://jsbin.example.com:3000> in a web browser
- Exit from the jsbin user:

```
exit
```

Running JSbin with PM2

- Install pm2 globally:

```
npm install -g pm2
```

- Switch to the jsbin user:

```
su - jsbin
```

- Start jsbin using pm2:

```
pm2 start /usr/local/lib/node_modules/jsbin/bin/jsbin  
exit
```

JSbin Init Script

- Create a jsbin FreeBSD init script:

```
vi /usr/local/etc/rc.d/jsbin
```

- and add the following

```
#!/bin/sh
```

```
# PROVIDE: jsbin
```

```
# KEYWORD: shutdown
```

```
. /etc/rc.subr
```

```
name="jsbin"
```

```
jsbin_port="3000"
```

```
jsbin_proxy="off"
```

```
start_cmd="${name}_start"
```

```
stop_cmd="${name}_stop"
```

```
jsbin_start() {
```

```
    echo "pm2 starting"
```

```
    su - jsbin -c "cd /usr/local/lib/node_modules/jsbin; /usr/bin/env PORT=${jsbin_port} JS  
BIN_PROXY=${jsbin_proxy} /usr/local/bin/pm2 --name ${name} start /usr/local/lib/node_modul  
es/jsbin/bin/jsbin; exit"
```

```
}
```

```
jsbin_stop() {
```

```
    echo "pm2 stopping"
    su - jsbin -c "/usr/local/bin/pm2 delete ${name}; exit"
}

run_rc_command "$1"
```

- And make it executable:

```
chmod +x /usr/local/etc/rc.d/jsbin
```

- Start and enable jsbin at boot

```
echo 'jsbin_enable="YES"' >> /etc/rc.conf
echo 'jsbin_proxy="on"' >> /etc/rc.conf
service jsbin start
```

Install Nginx

- Install Nginx

```
pkg install nginx
```

- Start and enable nginx at boot:

```
echo 'nginx_enable="YES"' >> /etc/rc.conf
service nginx start
```

- Create a configuration directory to make managing individual server blocks easier

```
mkdir /usr/local/etc/nginx/conf.d
```

- Edit the main nginx config file:

```
vi /usr/local/etc/nginx/nginx.conf
```

- And strip down the config file and add the include statement at the end to make it easier to handle various server blocks:

```
worker_processes 1;
error_log /var/log/nginx-error.log;

events {
    worker_connections 1024;
}

http {
    include mime.types;
    default_type application/octet-stream;
    sendfile on;
    keepalive_timeout 65;

    # Load config files from the /etc/nginx/conf.d directory
    include /usr/local/etc/nginx/conf.d/*.conf;
}
```

- Add a default site server block:

```
vi /usr/local/etc/nginx/conf.d/www.example.com.conf
```

- Add the following:

```
server {
    listen 80;
    server_name jsbin.example.com;
    root /usr/local/lib/node_modules/jsbin/public;
    index index.html;

    location @jsbin {
        proxy_pass http://localhost:3000;
        proxy_set_header Host $host;
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_redirect off;
        proxy_set_header X-Accel-Buffering no;
        proxy_set_header Connection '';
        proxy_http_version 1.1;
        proxy_buffering off;
        proxy_cache off;
        proxy_set_header X-Forwarded-Proto https;
    }

    location / {
        add_header Pragma "public";
        add_header Cache-Control "public, must-revalidate, proxy-revalidate";
        add_header Last-Modified $sent_http_Expires;
        add_header Access-Control-Allow-Origin *;
        try_files $uri $uri/ @jsbin;
    }
}
```

- And restart nginx:

```
service nginx restart
```

Resources

- <https://github.com/jsbin/jsbin>
- <https://jsbin.com/help/running-a-local-copy-of-jsbin>
- <https://github.com/jsbin/jsbin/blob/master/docs/running-your-own-jsbin.md>

History

#1 - 08/29/2015 12:11 AM - Daniel Curtis

- Description updated

#2 - 08/29/2015 10:26 AM - Daniel Curtis

- Description updated

- Status changed from New to Rejected

#3 - 08/31/2015 03:43 PM - Daniel Curtis

- Description updated

- Status changed from Rejected to In Progress

- % Done changed from 0 to 50

#4 - 08/31/2015 05:31 PM - Daniel Curtis

- Description updated

- % Done changed from 50 to 80

#5 - 08/31/2015 05:38 PM - Daniel Curtis

- Description updated

#6 - 09/04/2015 11:50 PM - Daniel Curtis

- Status changed from In Progress to Resolved

- % Done changed from 80 to 100

#7 - 09/11/2015 05:23 PM - Daniel Curtis

- Status changed from Resolved to Closed

#8 - 02/12/2016 11:59 AM - Daniel Curtis

- Description updated

#9 - 02/12/2016 10:38 PM - Daniel Curtis

- Description updated

#10 - 02/13/2016 08:01 PM - Daniel Curtis

- Description updated

#11 - 02/13/2016 10:03 PM - Daniel Curtis

- Description updated

#12 - 02/14/2016 11:45 AM - Daniel Curtis

- Description updated

#13 - 02/14/2016 08:38 PM - Daniel Curtis

- Description updated

#14 - 02/14/2016 10:40 PM - Daniel Curtis

- Description updated

#15 - 02/15/2016 05:11 PM - Daniel Curtis

- Description updated

#16 - 02/15/2016 05:35 PM - Daniel Curtis

- Description updated

#17 - 02/16/2016 06:56 AM - Daniel Curtis

- Description updated

#18 - 02/17/2016 07:42 AM - Daniel Curtis

- Description updated

#19 - 02/18/2016 10:38 PM - Daniel Curtis

- Description updated

#20 - 02/19/2016 08:29 PM - Daniel Curtis

- Description updated

#21 - 10/20/2016 06:33 PM - Daniel Curtis

- Description updated

- Target version changed from FreeBSD 9 to FreeBSD 10

#22 - 10/20/2016 09:12 PM - Daniel Curtis

- Description updated

#23 - 10/20/2016 10:38 PM - Daniel Curtis

- Description updated

#24 - 10/22/2016 06:06 PM - Daniel Curtis

- Description updated

#25 - 10/24/2016 03:38 PM - Daniel Curtis

- Description updated

#26 - 10/25/2016 04:07 PM - Daniel Curtis

- Description updated

#27 - 10/26/2016 05:49 PM - Daniel Curtis

- Description updated

#28 - 10/26/2016 09:53 PM - Daniel Curtis

- Description updated