Configuring Nginx with ColdFusion

Nginx is a free, open-source, high-performance HTTP server and reverse proxy, as well as an IMAP/POP3 proxy server. It can now be configured to serve ColdFusion applications.

The provided binaries are for the Linux 64-bit platform and has been tested on RHEL 7 and Ubuntu 16.04. These connector binaries / utilities are intended for prerelease users, and should not be used in production.

Nginx requires modules to be pre-packaged, unlike Apache, which allows modules to be dynamically loaded post installation. Connector configurations in ColdFusion rely on the AJP connector – a module not provided in Nginx by default. To facilitate seamless configurations, Adobe is providing Nginx binaries in the form of an installer for the Linux 64-bit platform, which includes pre-packaged AJP modules. The installer also bundles the updated connector binary.

The Nginx installer can be download here.

MD5 Checksum: `3c1244af4a473a6e6e67db6b5d42de8a`

Prerequisites

Adobe provides the Nginx web-server with all the dependencies baked in. It can be downloaded, installed and configured with ColdFusion 2016.

Installing Nginx

1. Execute `./nginxinstall.bin` to install Nginx.
2. Enter the installation directory when prompted. The default installation directory is `/opt/nginx.`

   If the specified installation directory coincides with a pre-existing installation of Nginx, the binaries in the sbin directory may be overwritten.
3. Enter the port for Nginx when prompted. The port defaults to the first available free port, starting from port 80.
4. Review the “Pre-Installation Summary”, before proceeding with the installation.
5. The installer automatically starts Nginx post installation. To manually start / stop / reload Nginx use the `<Nginx_Installation_directory>/sbin/nginx.sh` script.

Modifying the ColdFusion installation

Before proceeding to configure Nginx with ColdFusion 2016, follow the steps below to replace the wsconfig.jar at `<CF_Installation_directory>/cfusion/runtime/lib/` with the wsconfig.jar bundled with the Nginx installer.

1. Backup the original wsconfig.jar at the following location:
   `<CF_Installation_directory>/cfusion/runtime/lib/`

2. Copy wsconfig.jar provided with the Nginx installation to the ColdFusion directory:
   `<Nginx_Installation_directory>/wsconfig/wsconfig.jar` to `<CF_Installation_directory>/cfusion/runtime/lib/wsconfig.jar`

Configuring the Connector

The installed Nginx is now ready to be configured with ColdFusion. The steps are listed below and are identical to the steps followed in configuring IIS / Apache connectors.

1. Navigate to `<CF_Installation_directory>/cfusion/runtime/bin/`

2. Execute the following command to configure Nginx:

```
wsconfig -ws nginx -dir <Nginx_Installation_directory>/conf
```

Execute the following command to view other options: `wsconfig -help`

Serving CFM files from Nginx

The configuration is now all setup to serve ColdFusion applications from Nginx.

To test the configuration:

1. Create a CFM file (say, myfile.cfm) in, `<Nginx_Installation_directory>/html`.

2. Open a browser and enter `http://<machine hostname>:<nginx port>/myfile.cfm`. You should now see ColdFusion files being served successfully with Nginx.

Additional Information

The connector configuration files created in the ColdFusion directory is similar to the ones created in IIS / Apache configurations.

The connector configurations are placed at the following directory: `/opt/coldfusion2016/wsconfig/<Magic_Folder_Number>`, and includes the following files:

- **ngx_http_ajp.log –** The connector log file

- **ngx_http_ajp_module.so** –The connector binary
- **ajp_index.conf** – Contains the default document configurations, specifically, index.cfm
- **ajp_load_module.conf** – Contains directives for Nginx to load the connector binary mentioned above
- **ajp_location.conf** - Contains ColdFusion specific URI mappings and rules
- **ajp_location_properties.conf** - Contains logging and AJP specific configurations such as keep-alive and timeout.
- **ajp_upstream.conf –** Contains the location of the configured ColdFusion server. If the connector is configured to work with clusters, the instances associated with the cluster are also listed here.