

## Using NginX for Stream Service Load Balancer

### Resources

- NginX docs: <https://www.nginx.com/resources/wiki/>
- Doc about NginX and web sockets: <http://nginx.org/en/docs/http/websocket.html>

### Outline of the steps required to configure NGINX:

- Install Nginx on the load balancing server
- Enable https on the load balancing server and configure it to use a certificate issued by a trusted 3<sup>rd</sup> party CA (Thawte, VeriSign, DigiCert).
- Configure the proxy server to forward requests to GeoEvent Services. Attached is an example of an Nginx configuration file. You will need to change the following settings:
  - `server_name` <your Web Socket reverse proxy server name>
  - `ssl_certificate` <your CA-cert certificate file>
  - `ssl_certificate_key` <your CA-cert certificate key file>
  - `server` <list of servers that GeoEvent Extension is running on>. In this example, the server names are `dev01014.esri.com`, `dev01015.esri.com`, and `dev01018.esri.com`

*Note: The Web Socket reverse proxy server is set to use HTTPS, but it connects to HTTP on the backend. In the example configuration file, the proxy\_pass for port 443 is set to <http://skivmHTTP>; not <https://skivmHTTP>.*

- In a web browser, navigate to <http://<ServerName>:6080/arcgis/admin> to access the the ArcGIS Server Administrator Directory.
- Login and click system -> properties-> update.
- Enter a property called WebSocketContextURL to point to the Web Socket reverse proxy. For example:

```
{"WebSocketContextURL": "wss://skivm.esri.com"}
```

- In a browser, navigate to:  
<https://<LBMachineName>/<context>/rest/services/<StreamServiceName>/Streamserver/subscribe>.
- Click Subscribe to verify data is streaming. You can also verify data is streaming by navigating to:  
<https://<LBMachineName>/<context>/rest/services/<StreamServicename>/StreamServer?f=json>.