

# Configure Nginx as SSL Reverse Proxy

## Configuring Nginx on windows, using Pfx Files

1. Install Chocolatey (if not installed already)
2. Install OpenSSL
  1. Command: `choco install openssl`
3. Install Nginx
  1. Command: `choco install nginx --params "/installLocation: C:\Program Files\McRoberts Technologies\McTechProxy /serviceName: McTechProxy"`
4. Copy the SSL Certificate PFX file to an easy to access location (C:\temp works for now)
5. Open the OpenSSL Command prompt (Start > All Programs > OpenSSL > Win64 OpenSSL Command Prompt)
6. Navigate to the directory where the pfx file is located (C:\temp) - `cd c:\temp`
7. Extract the SSL Certificate Key from the PFX File
  1. **Command:** `openssl pkcs12 -in <PFX_file> -nocerts -nodes -out mychild.<domain_name>.key.pem`
8. Extract the "crt" file from the PFX file
  1. **Command:** `openssl pkcs12 -in <PFX_file> -clcerts -nokeys -out mychild.<domain_name>.certs.pem`
9. Copy the \*.pem files from the temporary location, to a permnate home
  1. **Recommended Location:** C:\Program Files\McRoberts Technologies\McTechProxy\nginx-<version>\conf\ssl
10. Edit the nginx.conf in the McTechProxy\conf folder, use Template 1 as an example, changing server\_name & certificates locations as needed

Note: When setting file locations in the nginx config you **\*MUST\*** use the format c:/path/to/certificates paying attention to use ONE / (forward slash) in place of the back slashes ( \ )

#####

# Start of Template 1 - nginx.conf #

#####

#user nobody;

worker\_processes 1;

events {

worker\_connections 1024;

}

http {

include mime.types;

default\_type application/octet-stream;

```

    sendfile      on;
    keepalive_timeout 65;
map $http_connection $connection_upgrade {
    "~*Upgrade" $http_connection;
default keep-alive;
}

server {
    listen      80;
listen 443 ssl;
    server_name mychild.domain.org;
ssl_certificate "C:/Program Files/McRoberts
Technologies/RtIsProxy/conf/ssl/certs.mychild.domain.org.pem";
ssl_certificate_key "C:/Program Files/McRoberts
Technologies/RtIsProxy/conf/ssl/key.mychild.domain.org.pem";
    proxy_buffer_size 128k;
    proxy_buffers 4 256k;
    proxy_busy_buffers_size 256k;
    large_client_header_buffers 4 16k;
    location / {
    proxy_http_version 1.1;
    proxy_set_header    Upgrade $http_upgrade;
    proxy_set_header    Connection $connection_upgrade;
    proxy_set_header    Host $host;
    proxy_cache_bypass $http_upgrade;
    proxy_set_header    X-Forwarded-Scheme $scheme;
    proxy_set_header    X-Forwarded-Proto $scheme;
    proxy_set_header    X-Forwarded-For $remote_addr;
    proxy_set_header    X-Real-IP $remote_addr;
    proxy_pass          http://localhost:9982;
    }
    # redirect server error pages to the static page /50x.html
    error_page 500 502 503 504 /50x.html;
    location = /50x.html {
        root html;
    }
}
}

#####
# End of Template 1 - nginx.conf #
#####

```

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