

Configuration of IBM HTTP Server (powered by Apache) for LANSA for the Web

When configuring for Apache as the web server, it is not recommended to migrate existing server configurations. This document describes how to create and configure a simple HTTP Server (powered by Apache) to run LANSA for the WEB on the iSeries.

The steps are based on the assumption that Apache is installed successful with the appropriate software, that TCP/IP is working, and LANSA for the Web on iSeries version 9.1 and above is installed.

The installation and setup involves these major steps:

- Starting up the IBM HTTP Admin
- Creating a New HTTP Server (powered by Apache)
- Configuring the HTTP Server (powered by Apache)

Starting the IBM HTTP Admin to configure the HTTP Server

The HTTP SERVER (powered by Apache) can be configured via a browser interface by starting both the ADMIN and ADMINA by using the commands:

- STRTCPSVR SERVER(*HTTP) HTTPSRVR(*ADMIN)
- STRTCPSVR SERVER(*HTTP) HTTPSRVR(ADMINA)

The Apache HTTP Server administration and configuration menu can be accessed using the browser with the URL of your iSeries machine on port 2001.

Select the IBM HTTP Server for AS/400 link to configure the AS/400 HTTP Server. From the menu, select the HTTP Server Configuration and Administration (powered by Apache).

Creating a new HTTP Server (powered by Apache)

1. From the Administration page, select the Create HTTP Server from the menu.
2. The Create HTTP Server wizard is loaded.
Select the HTTP server (powered by Apache). Click Next
3. The server name is the job that appears in the QHTTSPVR subsystem when the instance is running.
Type in a server name, eg MYAPACHE. Click Next
4. Select No to create the server without migrating from an existing one. Click Next
5. The recommended directory by Apache to store your server's configurations and logs are to be kept in /www/<server name>, eg /www/myapache
6. The document root directory by default shall be created by Apache as /www/<server name>/htdocs.
You may wish to alter this if desired. Click Next
7. By default all requests shall listen on all IP addresses on port 80. Change the TCP/IP port settings if required. Click Next
8. The Combined log file is a recommended choice for your HTTP Server. Click Next.
9. This page displays the options you have settled on. Click Finish to proceed with creation of the server.
10. Congratulations, an Apache Type HTTP server named <server name> has been created. Click Next.
11. Click on Configure to configure LANSA for the Web for the Apache server.

Configuring the HTTP Server (powered by Apache)

On the left hand side of the Configuration page is a menu panel detailing which instance configuration is being worked on and in which context.

Ensure that the server name is the same that have just been created otherwise select this from the drop down list. The server type is shown as Apache.

Identify that the context that is being worked on is the global settings of your server. You can tell this because it appears as bold text. Underneath the global settings is the your server's root directory and the documentation root directory that was specified when

This sample will focus on the Global settings of your server rather than individual contexts.

Global Settings

General Settings in the Web Site Definition section

1. Set the General server configuration as suited for your system setup.
2. Check that the Server IP address and port to listen on is set to ALL addresses on your desired port number.
3. In the Options section enable Allow CGI Scripts to be run and Follow symbol links. For the remaining options set it to Inherit.
4. Click OK to accept the settings and return to the main global settings page of your server.

Serve New Directory wizard in the Web Site Definition Section

Use the wizard to either create a new directory or to map to an existing directory on your iSeries for static web pages and files or CGI.

As most websites have a separate images directory, the wizard shall be used to serve these static files and pages. The wizard will also be used to locate the directory where the LANSAWEB CGI program resides.

To create an image directory:

1. From the Serve New Directory wizard, choose the Static web pages and files to server from this directory. Click Next
2. Type in the image directory where you would like to server from, eg: /myimages/ Click Next
3. Type in /images/ as the alias that is used to access your image directory. Click Next
4. Click Finish to allow images to be served from your image directory.
5. Click on the Configuration link located on the top menu.

To locate the LANSAWEB CGI program:

6. From the Serve New Directory wizard, choose CGI as the type of information that is to be served from this directory. Click Next.
7. Type in the CGI directory path that the LANSAWEB.PGM object is located in eg: /qsys.lib/mycgibin.lib. Click Next.
8. Type in /cgi-bin/ as the alias to your CGI directory. Click Next.
9. Click Finish to allow LANSA for the Web to be served from the CGI directory.
10. Click on the Configuration link located on the top menu.

Aliases and Redirection

Check that your mapping is correct. The images and the cgi-bin aliases that have been generated by the Serve New Directory wizard, also the images and cgi-bin directory should be listed in the Configuration structure.

The Script Alias Match directive must be added to allow LANSA for the Web to run.

1. In the section, Map URLs to the host file system, Click Add
2. Set Alias Type: Script Alias Match
3. Type in the URL path as: ^/cgi-bin/lansaweb(.*)
4. Type in the Host directory or file as:
/qsys.lib/<your cgi-bin library>.lib/lansaweb.pgm\$1
5. Click on the Move Up button to move this above the Script Alias for cgi-bin.
6. Click OK to accept the settings and return to the main global settings page of your server.
7. Your HTTP Server (Powered by Apache) configuration is completed. You can start the instance by clicking on the Start button.

Sample Configuration File

```
# Configuration originally created by Apache Setup Wizard
Alias /images /myimages/

ScriptAliasMatch ^/cgi-bin/lansaweb(.*) /qsys.lib/
mycgibin.lib/lansaweb.pgm$1

ScriptAlias /cgi-bin/ /qsys.lib/mycgibin.lib/

Listen 1050

DocumentRoot /www/myapache/htdocs
DefaultType text/plain
Options -Includes -IncludesNOEXEC
ErrorLog logs/basic_error_log
LogLevel warn
UseCanonicalName Off
HostNameLookups off
RuleCaseSense off

DirectoryIndex index.html

LogFormat "%h %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-Agent}i\""
combined
LogFormat "%{User-agent}i" agent
LogFormat "%{Referer}i -> %U" referer
LogFormat "%h %l %u %t \"%r\" %>s %b" common
CustomLog logs/access_log combined

BrowserMatch "Mozilla/2" nokeepalive
BrowserMatch "JDK/1\.0" force-response-1.0
BrowserMatch "Java/1\.0" force-response-1.0
BrowserMatch "RealPlayer 4\.0" force-response-1.0
BrowserMatch "MSIE 4\.0b2;" nokeepalive force-response-1.0

<Directory />
    AllowOverride None
    order deny,allow
    deny from all
</Directory>

<Directory /qsys.lib/ mycgibin.lib>
AllowOverride None
order allow,deny
allow from all
</Directory>

<Directory /myimages>
AllowOverride None
order allow,deny
allow from all
</Directory>

<Directory /www/myapache/htdocs>
    AllowOverride None
    order allow,deny
    allow from all
</Directory>
```