



Setup Guide for Secure Net-Link

Release 10

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Contents

About this guide	7
Revision History	7
Related documents.....	7
Contacting Infor.....	8
Net-Link WAR file deployment	9
Fully Qualified Domain Names	10
WAR file generation.....	11
Generate WAR file in XA R92	11
Generate WAR file in XA R10	11
Building WAR file	13
WAR file deployment	15
Tomcat (version 7.0 +).....	15
WebSphere (version 8.5).....	15
WebSphere (version 9.x).....	19
WRKSBSJOB QHTTPSVR	19
STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)	19
IDFIONAPI WAR file deployment.....	29
Configuring TLS:	44
Appendix A Port Warning Reset	54
Appendix B Workspace Net-Link URL configuration	59
Appendix C WAR file redeployment	62
WAR file redeployment.....	62
WAR file generation.....	62
Tomcat (version 7.0 +).....	62
WebSphere (version 9.x).....	63
WRKSBSJOB QHTTPSVR	63

STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)	63
Appendix D Configuring SiWA IBMi WAS with single port	69
Configuring all XA web components to use a single HTTP server and port on WebSphere.....	69
Approach	69
SiW Anywhere HTTPD.conf changes	69
SiW Anywhere Admin settings.....	76

About this guide

This document describes the process to set up a secure Net-Link. The guide explains the requirements, WAR file deployment and configuration tasks.

Revision History

This table shows the chapters of the guide:

Version	Date	Author	Comments
0.1	14/Jun/2017	Michael Dillon	Initial Draft
0.2	11/Apr/2019	Singaravizhiyan R	Added Building WAR file and Workspace Net-Link URL configuration
1.0	10/16/2020	Development	WebSphere 9.x Configuration
2.0	06/19/2021	Development	WAR file redeployment
3.0	04/13/2022	Jany Khan Patan	IDFIONAPI WAR file deployment in WebSphere

Related documents

You can find the documents in the product documentation section of the Infor Support Portal, as described in "Contacting Infor" on page 8.

Contacting Infor

If you have questions about Infor products, go to Infor Concierge at <https://concierge.infor.com/> and create a support incident.

The latest documentation is available from docs.infor.com or from the Infor Support Portal. To access documentation on the Infor Support Portal, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

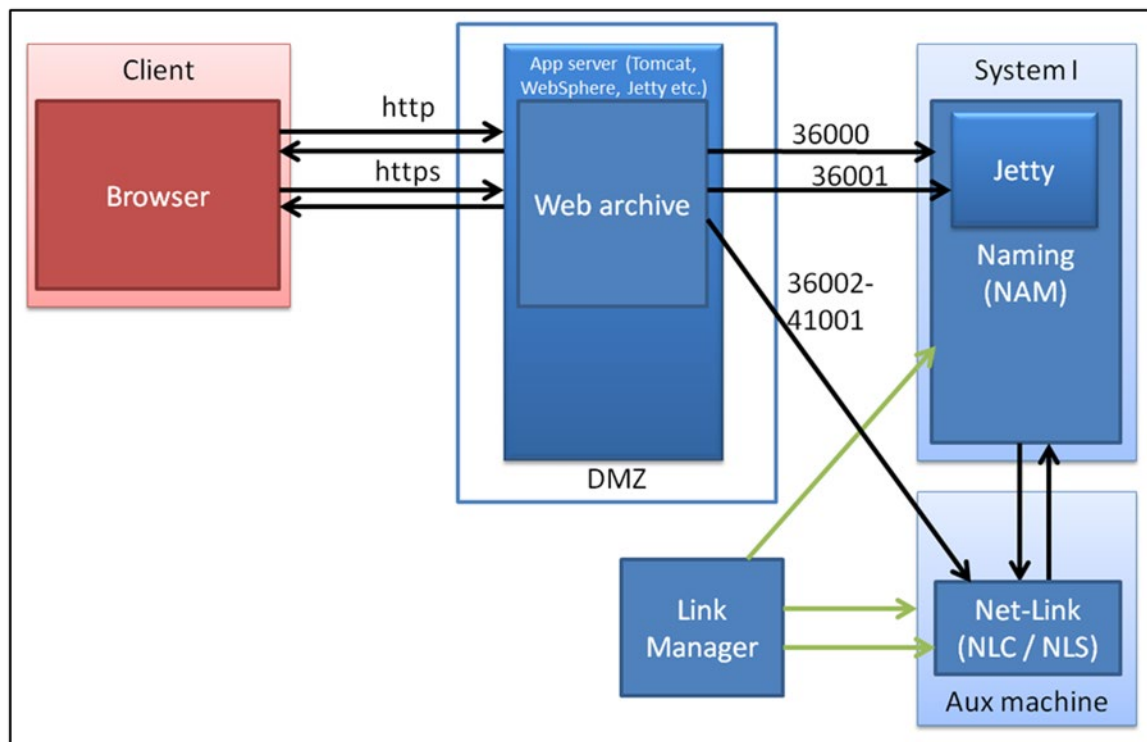
If you have comments about Infor documentation, contact documentation@infor.com.

Net-Link WAR file deployment

The standard installation process involves accessing the Net-Link through a URL to the IBMi due to which users are confined to a secure network. However, in some circumstances it is necessary to provide access to the users outside of the network. Although the platform is secure, and can be protected via firewall settings, connecting directly to IBMi from the web is not recommended.

Therefore, it is necessary to expose the Net-Link web server components to the web.

An example topology of the IDF components used for Net-Link in a container deployment scenario: The default ports used by IDF for http and https are typically 80 and 443 respectively.



The web components of Net-Link runs in a Servlet container. Examples of such a container are Apache Tomcat and IBM WebSphere. The components are packaged into a Web Archive (WAR)file.

Note: The container used for Systemi Workspace can also be used. This document explains how to obtain the WAR file, and to deploy it to these servers.

Fully Qualified Domain Names

For a Microsoft Windows deployment, we recommend that the Windows Server has a Fully Qualified Domain Name (FQDN) that can be used to address the Windows Server, both externally and internally (i.e. the Windows Server knows itself by this FQDN) within your enterprise.

For either a Microsoft Windows or IBMi deployment, we recommend that the IBMi server also has a FQDN that it can be used to address the Windows Server, both externally and internally (i.e. the IBMi knows itself by this FQDN) within your enterprise.

It is important to have FQDNs in place before you install System i Workspace, otherwise, the URL paths, SSL configuration and other settings created during the installation may be incorrect and cause failures when trying to access or use System i Workspace.

WAR file generation

The WAR file contains configuration details to communicate with the IBMi. Therefore, the file cannot be shipped with the IDF as a component. The file contains components that can change during the builds of IDF. Therefore, it is important to refresh the WAR file when a new build is applied to the global IDF environment.

Generate WAR file in XA R92

The current WAR file can be obtained by navigating to the URL <http://{server}:{port}/NetLink/NetLink.war>.

Caution: The URL is similar to the link used to access Net-Link.

Note:

- An alternative mechanism to obtain the WAR file has been created in XA R10 release. Previously, the war file was generated and downloaded from the server via the URL, as discussed above.
- This still works but as the war file is generated from global the contents are therefore at the build level that is current for the global environment. A new URL has been created that generates it from the environment (and at the build level of the environment)

Error! Hyperlink reference not valid.

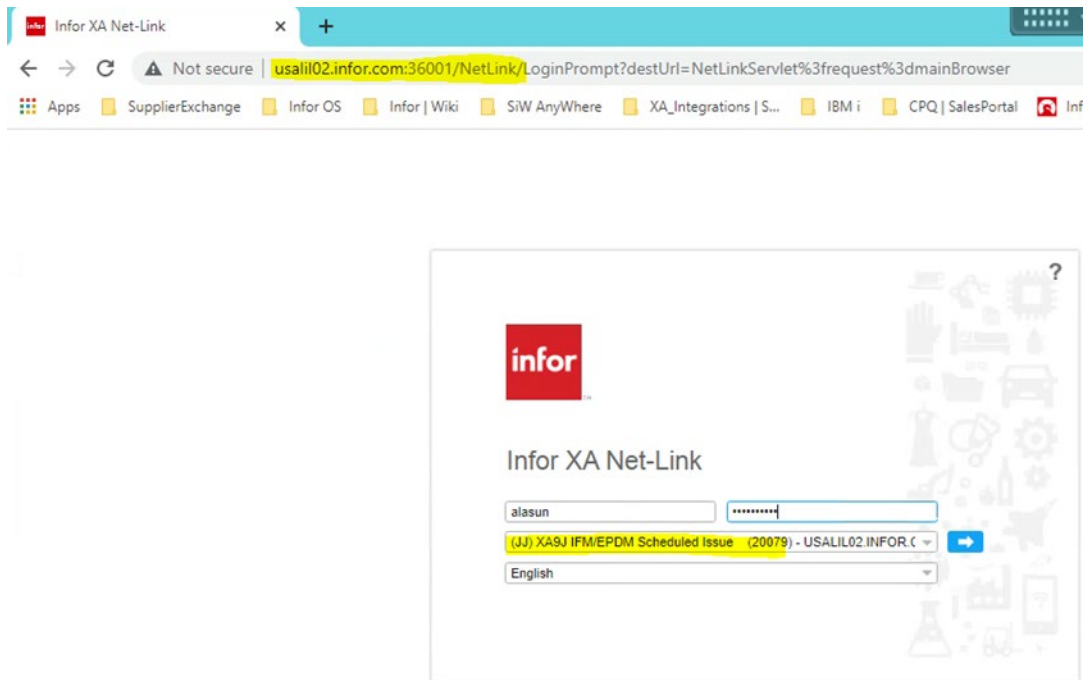
Generate WAR file in XA R10

- 1 The user must be signed in to Net-Link for the environment that has the correct build.
- 2 Navigate to **Error! Hyperlink reference not valid.**

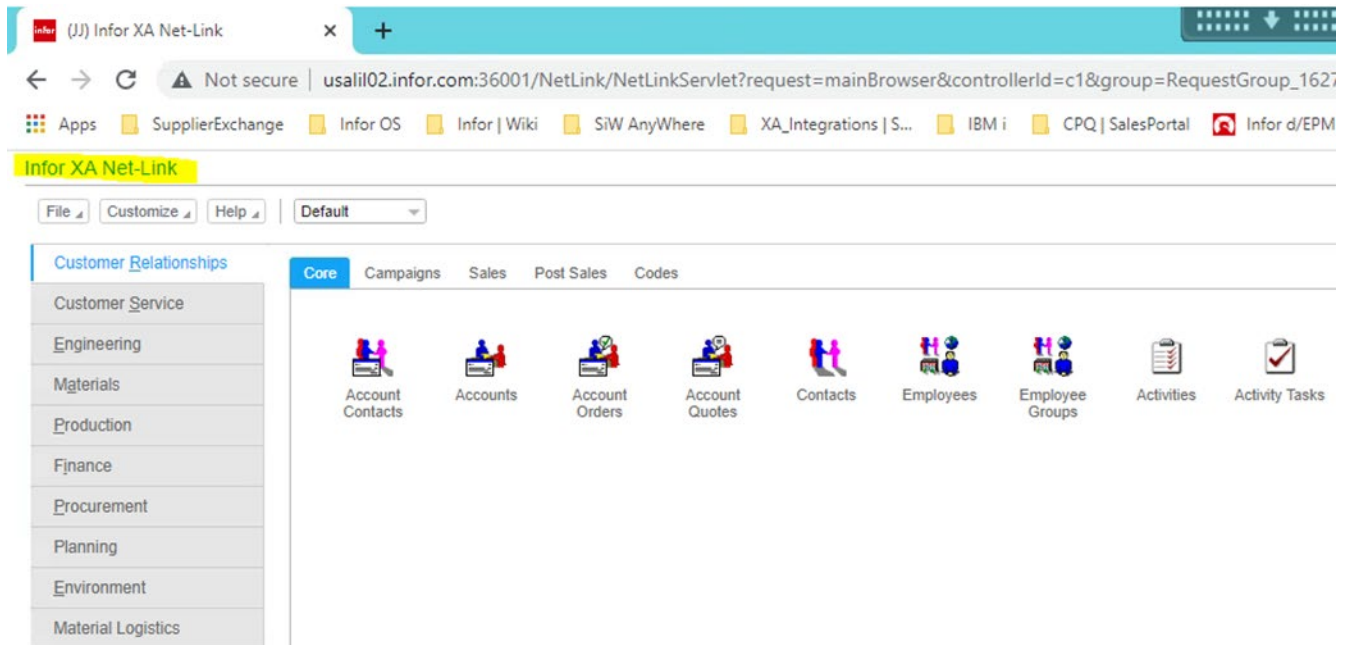
where {server}, is the name of the IBMi which hosts IDF, and {port} is the port used for access to IDF components over HTTP.

(For example: <http://usalil02.infor.com:36001/NetLink/>)

- 3 The Net-Link login prompt should be shown as below, then Sign into Net-Link for the correct environment using respective IBMi userID.

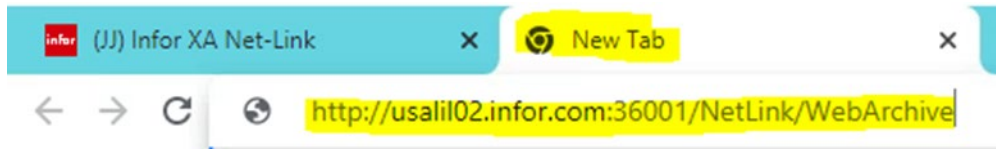


4 The Main Browser should display as below.

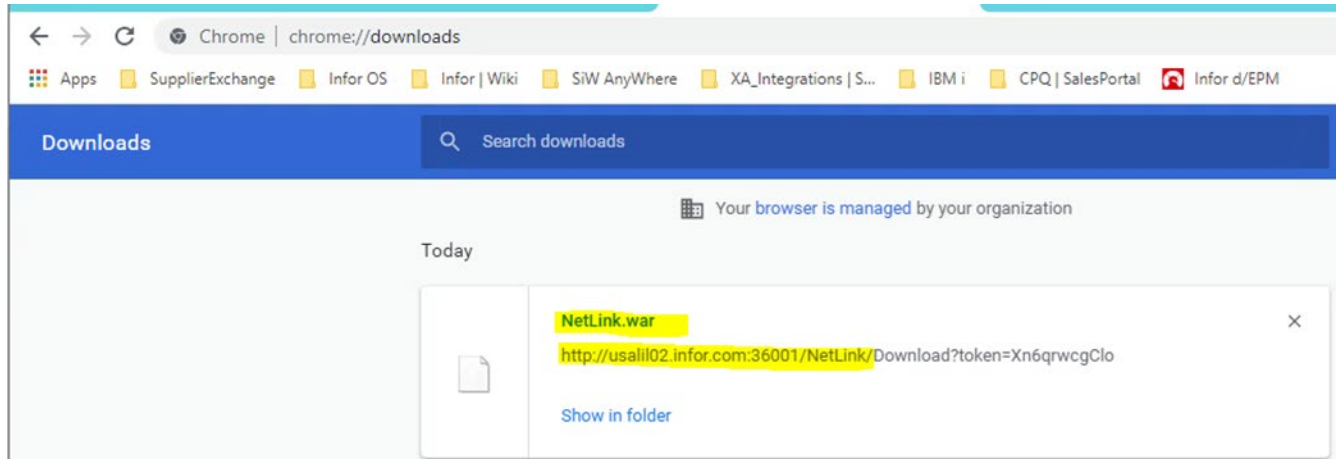


5 Either in a new tab (the browser session is shared between tabs), or in the current tab, navigate to **Error! Hyperlink reference not valid.**

where {server}, is the name of the IBMi which hosts IDF, and {port} is the port used for access to IDF components over HTTP.



6 The NetLink.war file should be generated and downloaded.



Building WAR file

The Net-Link WAR file generation code is present only in Version 9.2 and 10. The **Exception Encountered** error message is displayed a previous version, the WAR file must be manually built.



NetLink.war.

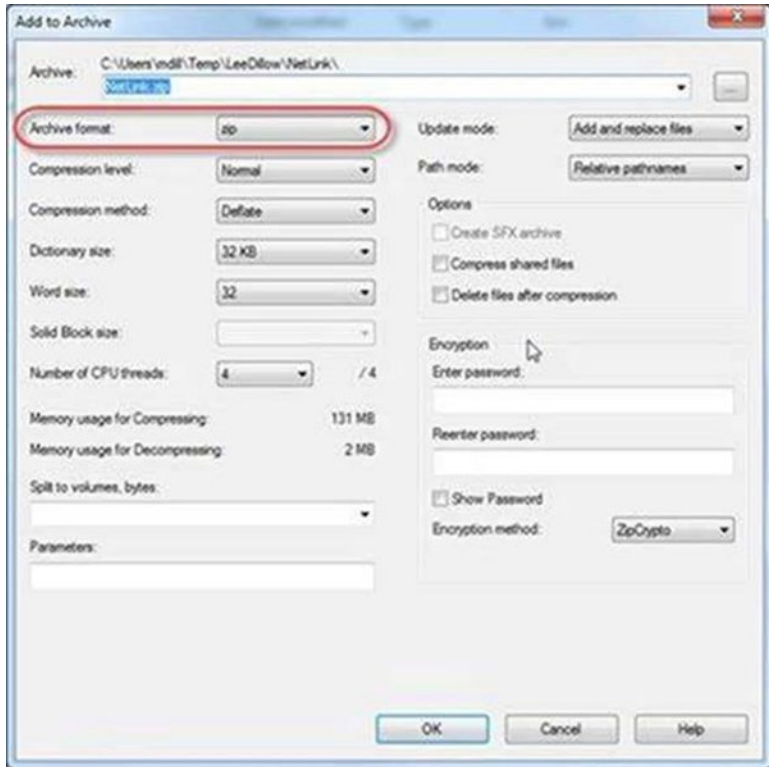
To build the file manually:

- 1 Extract the contents of the NetLink.war file to a new location using 7z.
- 2 Edit the WEB-INF/web.xml file and change all occurrences of nlbaiq05.infor.com (or the lower-case equivalent) with the Fully Qualified Domain Name (FQDN) of your iSeries.



web.xml

- 3 Compress the contents to a new WAR file (named **NetLink.war**), ensuring that the structure matches that of the originally attached WAR file. Set the **Archive Format** field to zip.



WAR file deployment

Tomcat (version 7.0 +)

The deployment of WAR file involves copying the WAR file to the root of the webapps folder of the Tomcat instance. The update is automatically loaded by Tomcat.

Note: If you are using WebSphere with version 8.5, please follow below steps in **WebSphere (Version 8.5)** section. Else, if you are using WebSphere with version 9.x and above, please follow below steps in **WebSphere (Version 9.x)** section.

WebSphere (version 8.5)

For deployment of WAR file using WebSphere, execute these steps:

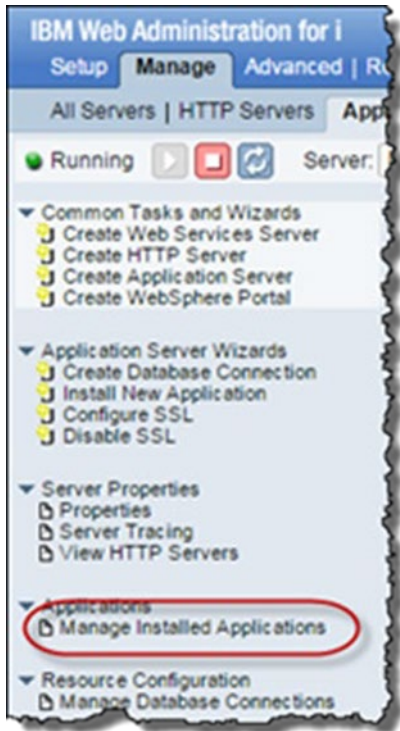
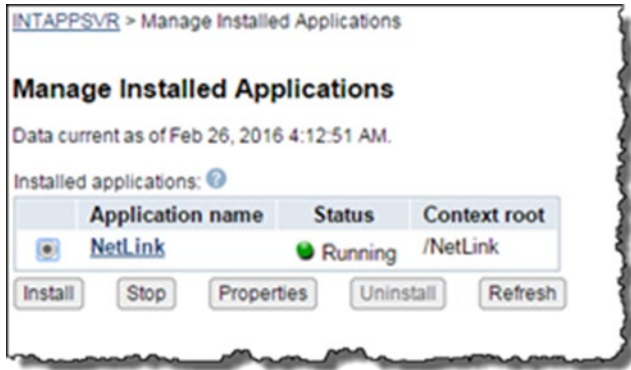
- 1 Copy the WAR file to a location on the IFS of the iSeries which is preferably a 'scratch' folder. However, the location can also be in the root.

Note: If using the WebSphere instance of Systemi Workspace, make a copy of the plugin configuration (see the Systemi Workspace instructions for details).

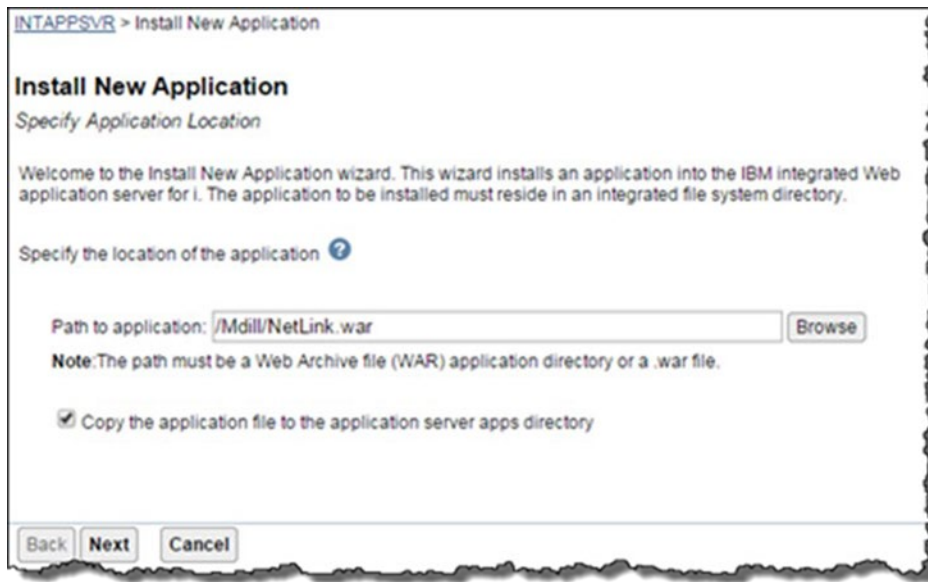
- 2 Open the HTTP Administration console (<http://{hostName}:2001/HTTPAdmin>), and log in with *SECADM authority.
- 3 Select the Manage, and Application Servers tabs.



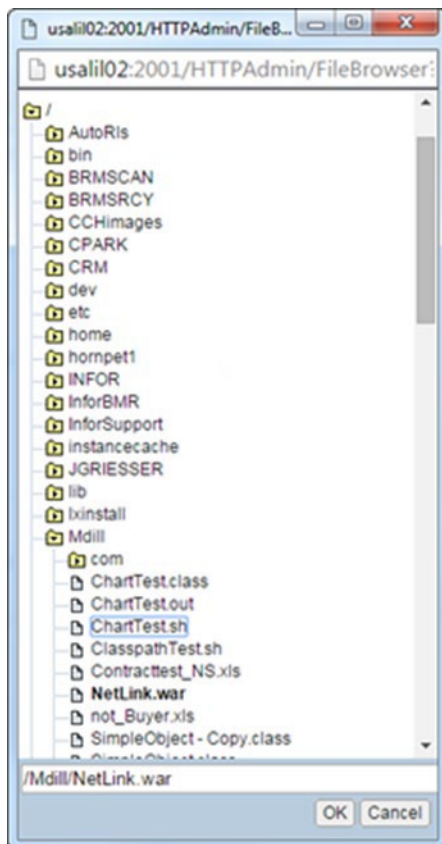
- 4 Specify a server instance in the Server field or select the instance used by Systemi Workspace.
- 5 Select Manage > Manage Installed Applications.
- 6 Click **Install** to add Net-Link as a new application.



- 7 Specify the location of the WAR file (the location specified in Step 1) in the **Path to application** field.

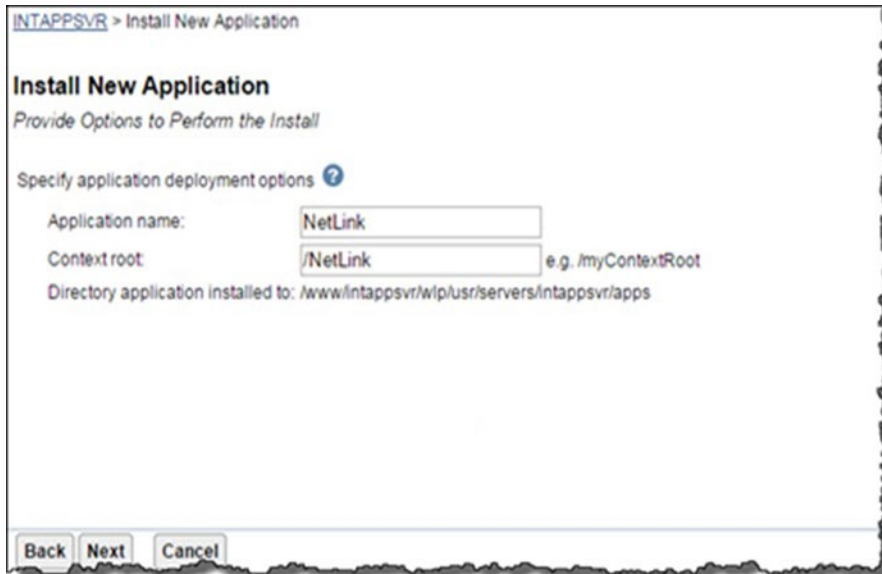


Note: You can also use the Browse option to select the **File**.

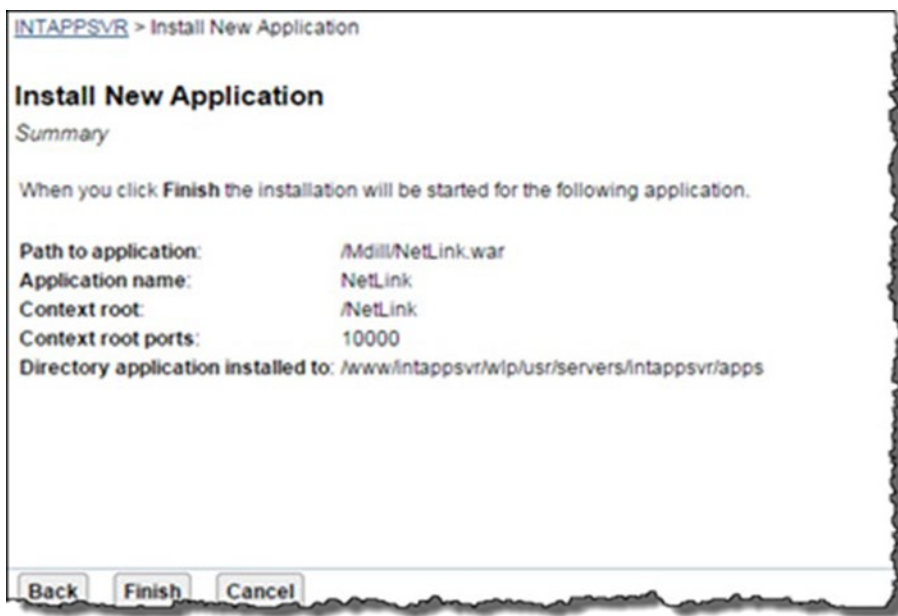


Note: Make sure that the location of the WAR file is correct.

- 8 Select the Copy the application file... check box.



- 9 Click Next. The Provide Options to perform the Install window is displayed.
- 10 Accept the default values for the **Application name** and **Context root**.
- 11 Click **Next**. The **Summary** window is displayed.



- 12 Review the content on the **Summary** window.
- 13 Click **Finish**.

Note: It is assumed that Systemi Workspace is already deployed to WebSphere.

WebSphere (version 9.x)

The deployment process utilizes the WebSphere Wizard function to create a Net-Link Application and associated HTTP server.

Check that you have the following subsystem running, and that all ADMIN jobs are running within the subsystem:

WRKSBSJOB QHTTPSVR

If the subsystem is not active, issue the following OS400 command:

STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)

For deployment of WAR file using WebSphere, execute these steps:

- 1 Copy the WAR file to a location on the IFS of the iSeries which is preferably a 'scratch' folder. However, the location can also be in the root.
- 2 Open the HTTP Administration console (<http://{hostName}:2001/HTTPAdmin>), and log in with *SECADM authority.
- 3 Select the **Manage**, and **All Servers** tab.
- 4 Select Create Application Server and Click Next.



IBM Web Administration for i | Welcome QSECOFR | WebSphere | IBM

Setup | **Manage** | Advanced | Related Links

All Servers | HTTP Servers | Application Servers | Installations

Common Tasks and Wizards

- Create Web Services Server
- Create HTTP Server
- Create Application Server

Manage All Servers

All HTTP Servers | All Application Servers

Data current as of May 20, 2020 4:27:24 AM.

Server	Version	Status	Address:Port	Description
Admin1	V8.5 (int app svr)	Running	*:2002	
Admin2	V8.5 (int app svr)	Running	*:2004,2005	
Admin3	V8.5 (int app svr)	Running	*:2006	
Admin4	V8.5 (int app svr)	Running	*:2008	
Admin5	V8.5 (int app svr)	Running	*:2011	
default/server1	V8.5.5.7 Express	Stopped	*:2809,5060,5061,8880,9043,9060,9080,9443	

- 5 Select V9.0.0.xx Base and Click Next.



6 Enter appropriate Application server name and Server description and Click Next.

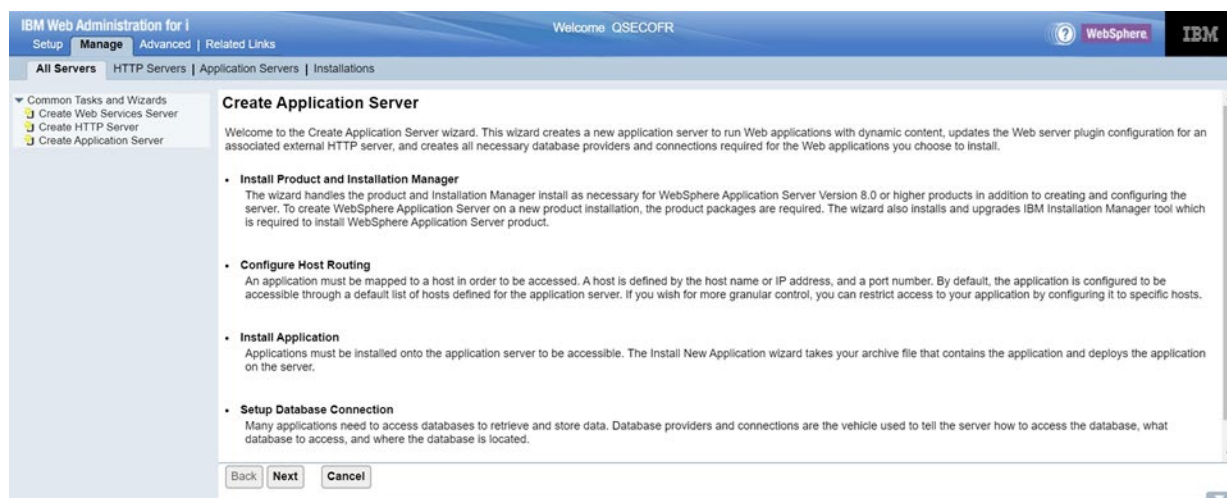
Suggested values

Application server name: NLAPPSVR

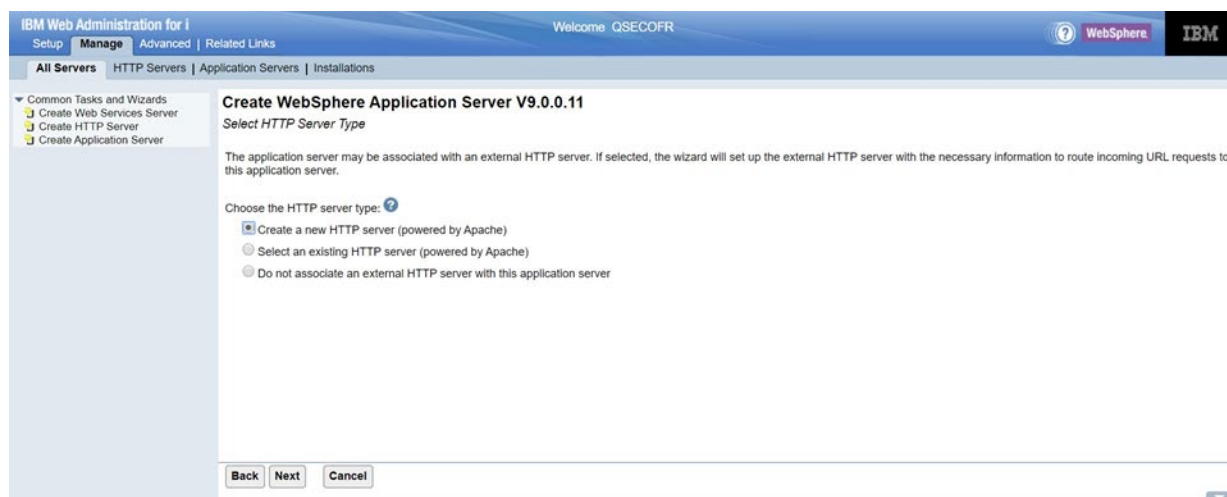
Server description: Net-Link Application Server



7 Click Next.



8 Select Create a new HTTP server (powered by Apache) and Click Next.



9 Enter appropriate HTTP server name and HTTP server description and Click Next.

Suggested values

Application server name: NLWEBSVR

HTTP server description: Net-Link Web server

IP address: All IP address

Port: 36001

Note: The port should be the same as that you have used in the **WAR file generation** section.



Note: If you receive the below Warning that the port is already configured by another application is displayed. Enter a new port, which hasn't been configured by another application, please make a note of the new port and click *Next* to continue the wizard using the port (36001), which is already been configured by another application. You will be asked to change the port (36001) to the new port by following **Appendix A** at the end of this wizard.

10 Accept the default First port in range: default values and Click Next.



11 Deselect Default Applications and Click Next.



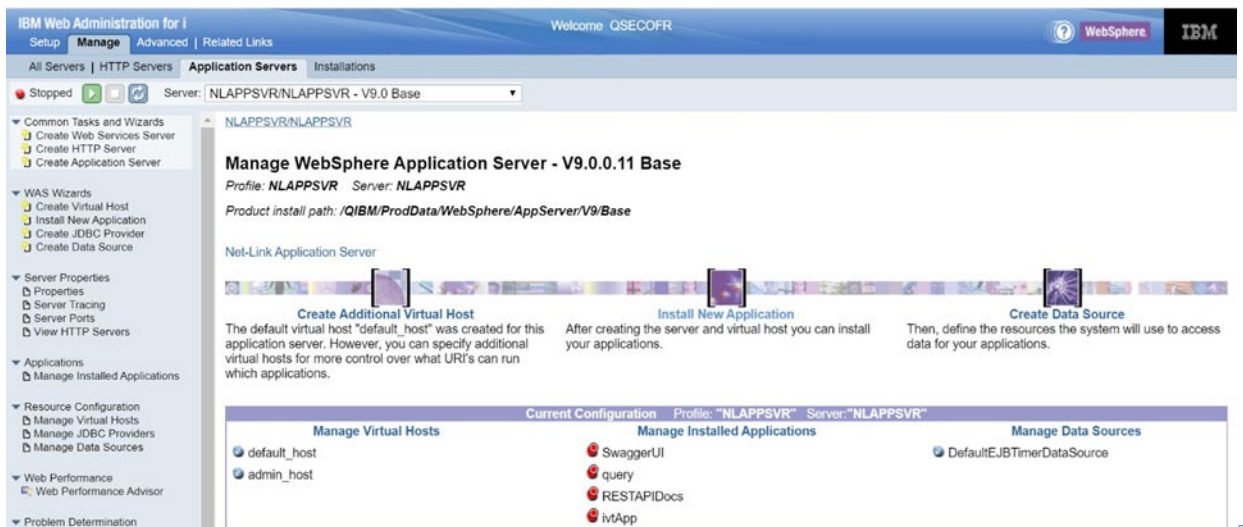
12 Select Do not configure Identity Tokens and Click Next.



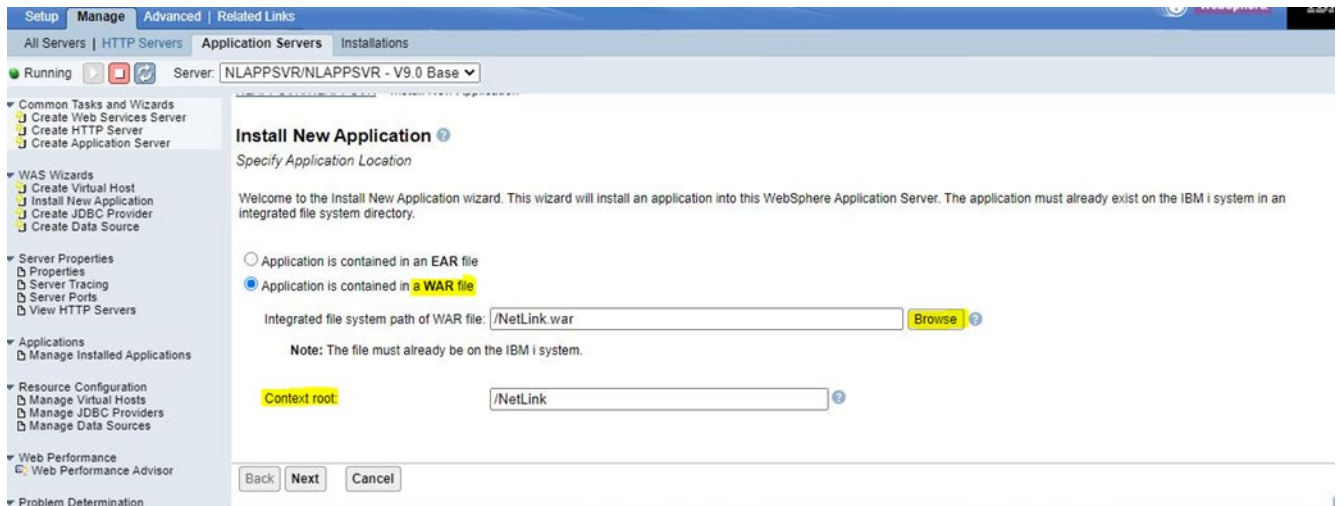
13 Review the Summary and Click **Finish**.



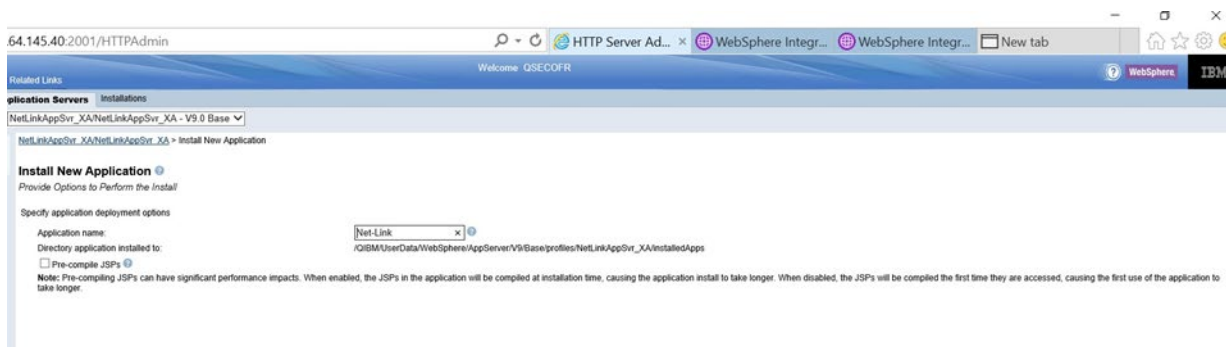
14 Select **Install New Application** from the *WAS Wizards* menu.



15 Select **Application is contained in a WAR file** and click **Browse** to locate and select the WAR file located on the IFS from Step 1 and then at Context root field, update with **/myContextRoot** value (for eg:/NetLink) and Click **Next**.



16 Click Next.



17 Check the Web server checkbox and Click Next.

WAR file deployment

IBM Web Administration for i
Setup **Manage** Advanced | Related Links
Welcome QSECOFR

All Servers | HTTP Servers **Application Servers** Installations

Running Server: NetLinkAppSvr_XA/NetLinkAppSvr_XA - V9.0 Base

NetLinkAppSvr_XA/NetLinkAppSvr_XA > Install New Application

Install New Application

Map Virtual Hosts for Web Modules

Specify the virtual host you want to associate with the Web modules contained in this application. Web modules can be installed on the same virtual host or dispersed among several virtual hosts.

Map Web modules to virtual hosts:

Web module	Virtual host	Web server
Net-Link	default_host	<input checked="" type="checkbox"/> NLWEBSVRXA

18 Click Finish.

IBM Web Administration for i
Setup **Manage** Advanced | Related Links
Welcome QSECOFR

All Servers | HTTP Servers **Application Servers** Installations

Running Server: NetLinkAppSvr_XA/NetLinkAppSvr_XA - V9.0 Base

NetLinkAppSvr_XA/NetLinkAppSvr_XA > Install New Application

Install New Application

Summary

When you click Finish the installation will be started for the following application.

Integrated file system path of WAR file: /NetLink.war
Application name: Net-Link
Directory application installed to: /QIBM/UserData/WebSphere/AppServer/V9/Base/profiles/NetLinkAppSvr_XA/installedApps
Pre-compile JSPs: Disabled

Map Web modules to virtual hosts:

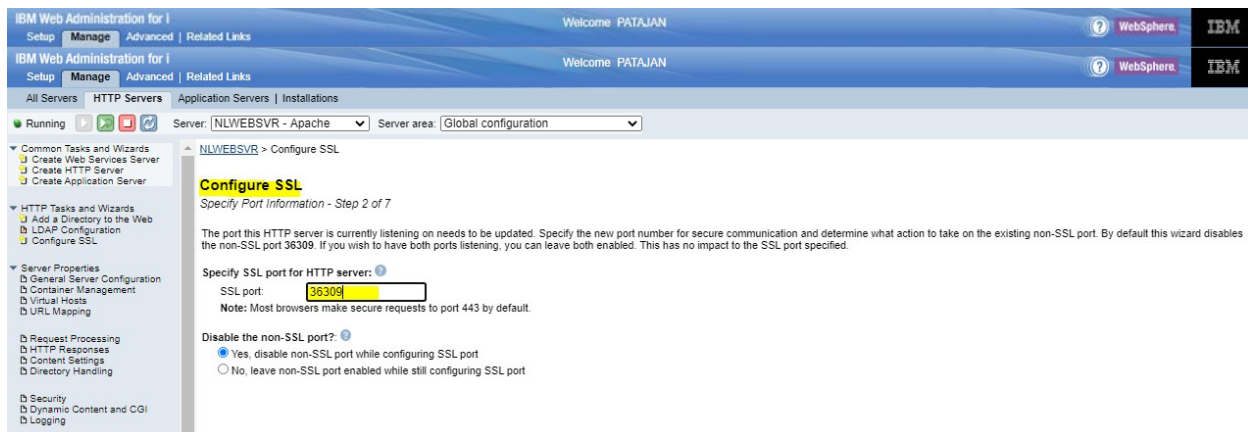
Web module	Virtual host	Web server
Net-Link	default_host	<input checked="" type="checkbox"/> NLWEBSVRXA

19 If you did not change the port (36001) to the new port and continued with the warning 'port is already configured by another application' in **Step 9 – see Appendix A** and then continue with the below section “**Configure SSL**”.

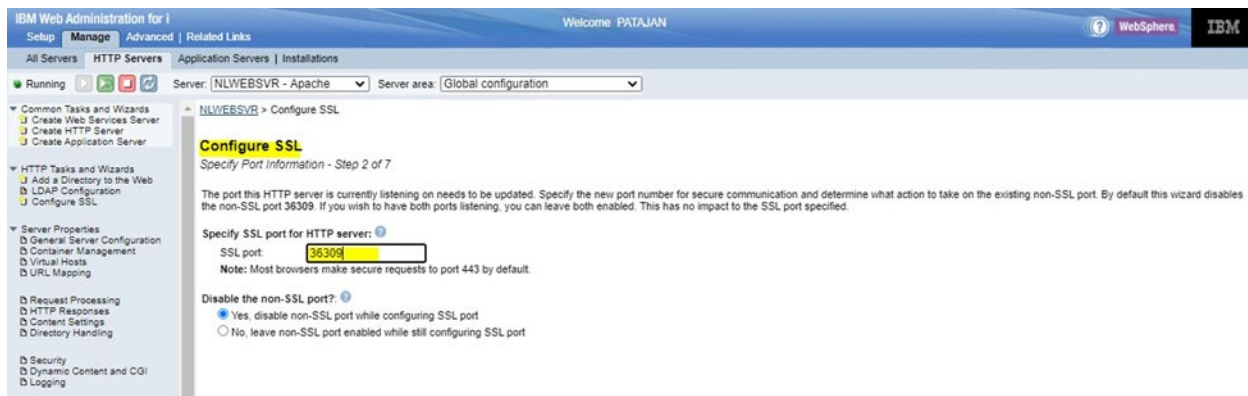
Application logs are available in the following folders.

/QIBM/UserData/WebSphere/AppServer/V9/Base/profiles//logs/ Configure SSL:

20 Select Manage tab | Select HTTP Servers tab | Select Configure SSL – (HTTP Tasks and Wizards) Click **Next**.



21 Enter required SSL port.

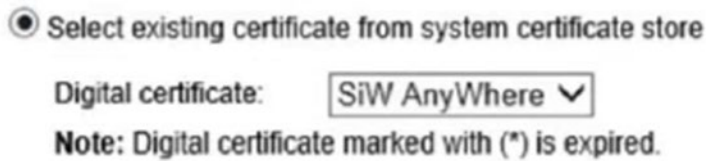


Note: If you have received the warning 'port is already configured by another application' in **Step 9** and performed Port Warning Rest instructions by following Appendix A, then specify that new SSL Port for HTTP server, which has been used in Appendix A. Otherwise, proceed with the port (36001) at **Step 9**, which should be same as a port that you have used in the **WAR file generation** section.

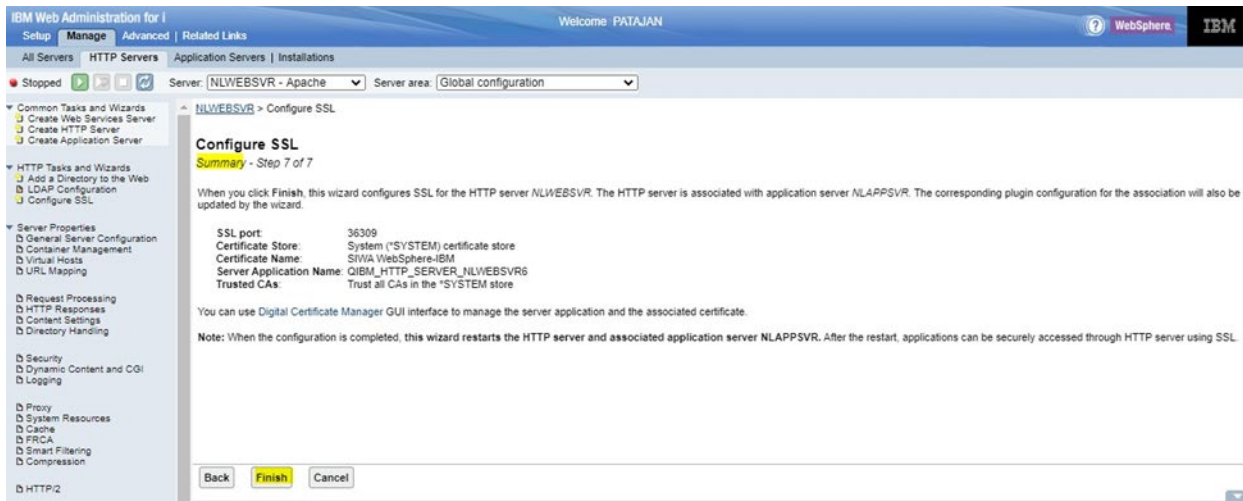
Select **Yes, disable non-SSL port while configuring SSL port**. Click **Next**.

22 Enter the system certificate store password. Click **Next**.

23 Select an existing certificate from the system certificate store, which you have created in **Creating a local Certificate of Authority** section, at the time of SiWA WebSphere installation using the **System i Workspace AnyWhere Installation & Administration Guide**. Click **Next**.



- 24 Select Trust all CAs in the *SYSTEM store. Click Next.
- 25 Select Restart the server immediately after the wizard. Click Next.
- 26 Check that the summary is correct and Click Finish.



The wizard configures SSL for the HTTP server *NLWEBSVR*. The HTTP server is associated with application server *NLAPPSVR*. The corresponding plugin configuration for the association will also be updated by the wizard.

SSL port:	36309
Certificate Store:	System (*SYSTEM) certificate store
Certificate Name:	<certificate_name>
Server Application Name:	QIBM_HTTP_SERVER_NLWEBSVR
Trusted CAs:	Trust all CAs in the *SYSTEM store

Note: When the configuration is completed, **this wizard restarts the HTTP server and associated applicationserver NetLinkAppSvr_XA**. After the restart, applications can be securely accessed through HTTP server using SSL.

- 27 Now try to access the NetLink using below URL.

https://{hostname}:{port}/NetLink Hostname → FQDN of the iseries machinePort → SSL Port number

(For example: <https://usalil2m.infor.com:36309/NetLink>)

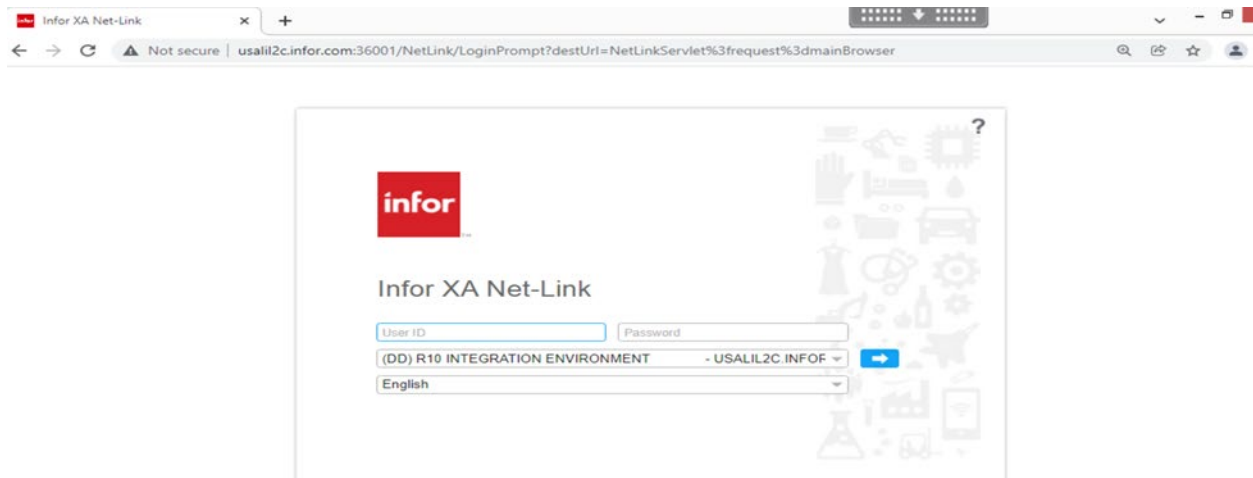
Application logs are contained in the following folders.

/QIBM/UserData/WebSphere/AppServer/V9/Base/profiles//logs/

IDFIONAPI WAR file deployment

The ION API component of IDF will need to be deployed to a location visible to ION. It is expected that this will be the same location as the SiWA / Net-Link server (WebSphere).

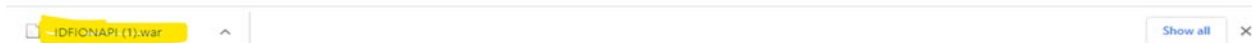
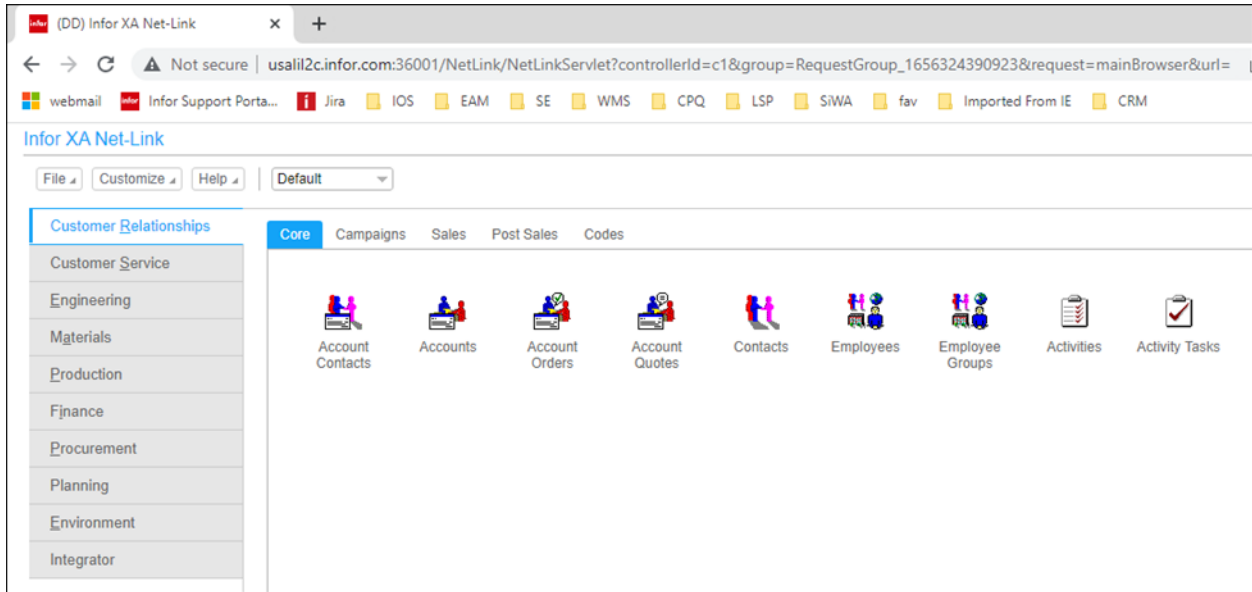
Log in to Net-Link for the environment.” <http://usalil2c.infor.com:36001/NetLink>”



In the Address bar, replace the “/NetLinkServlet?.....” with “/WebArchive?archive=IMS”

(e.g. “<http://usalil2c.infor.com:36001/NetLink/WebArchive?archive=IMS>”), and press enter.

WAR file deployment



The deployment war file should be generated and downloaded to the local machine.

The deployment process utilizes the WebSphere Wizard function to create a Net-Link Application and associated HTTP server.

Check that you have the following subsystem running, and that all ADMIN jobs are running within the subsystem:

WRKSBSJOB QHTTPSVR

```
MAIN                                IBM i Main Menu                                System:  USALIL2C
Select one of the following:
  1. User tasks
  2. Office tasks
  3. General system tasks
  4. Files, libraries, and folders
  5. Programming
  6. Communications
  7. Define or change the system
  8. Problem handling
  9. Display a menu
 10. Information Assistant options
 11. IBM i Access tasks
 90. Sign off
Selection or command
===> WRKSBSJOB QHTTSPVR
-----
F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel  F13=Information Assistant
F23=Set initial menu
(C) COPYRIGHT IBM CORP. 1980, 2015.
MA  A  MW  20/007
```

If the subsystem is not active, issue the following OS400 command:

STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)

For deployment of WAR file using WebSphere, execute below steps:

- 1 Copy the WAR file to a location on the IFS of the iSeries which is preferably a 'temp' folder. However, the location can also be in the root.
- 2 Open the HTTP Administration console (**Error! Hyperlink reference not valid.**)
Ex:(<http://ualil2c.infor.com:2001/HTTPAdmin>), and log in with *SECADM authority.
- 3 Select the Manage, and All Servers tab.

WAR file deployment

The screenshot shows the IBM Web Administration console interface. The browser address bar displays 'usall2c.infor.com:2001/HTTPAdmin'. The main content area is titled 'Manage All Servers' and shows a table of servers. The left sidebar contains a navigation menu with 'Create Application Server' highlighted.

Server	Version	Status	Address:Port	Description
<input type="radio"/> Admin1	V8.5 (int app svr)	Running	*.2002	
<input type="radio"/> Admin2	V8.5 (int app svr)	Stopped	*.2004,2005	
<input type="radio"/> Admin3	V8.5 (int app svr)	Running	*.2006	
<input type="radio"/> Admin4	V8.5 (int app svr)	Running	*.2008	
<input type="radio"/> Admin5	V8.5 (int app svr)	Running	*.2011	
<input type="radio"/> default:server1	V9 0.5.6 Base	Running	*.2809,5060,5061,8880,9043,9060,9080,9443	
<input type="radio"/> default:WSAnyWhere	V9 0.5.6 Base	Running	*.2810,5062,5063,8881,9044,9061,9081,9444	
<input checked="" type="radio"/> NLAPPSVR/NLAPPSVR	V9 0.5.6 Base	Running	*.10000,10001,10002,10003,10004,10005,10016,10017	Net-Link Application Server

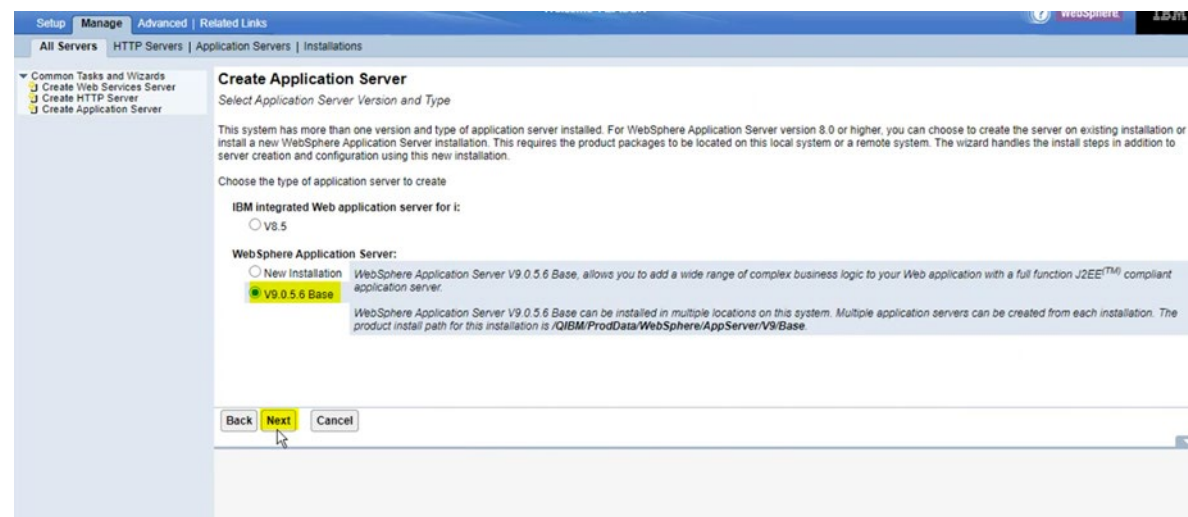
Select Create Application Server and Click Next.

The screenshot shows the 'Create Application Server' wizard. The main content area contains the following sections:

- Install Product and Installation Manager**
The wizard handles the product and Installation Manager install as necessary for WebSphere Application Server Version 8.0 or higher products in addition to creating and configuring the server. To create WebSphere Application Server on a new product installation, the product packages are required. The wizard also installs and upgrades IBM Installation Manager tool which is required to install WebSphere Application Server product.
- Configure Host Routing**
An application must be mapped to a host in order to be accessed. A host is defined by the host name or IP address, and a port number. By default, the application is configured to be accessible through a default list of hosts defined for the application server. If you wish for more granular control, you can restrict access to your application by configuring it to specific hosts.
- Install Application**
Applications must be installed onto the application server to be accessible. The Install New Application wizard takes your archive file that contains the application and deploys the application on the server.
- Setup Database Connection**
Many applications need to access databases to retrieve and store data. Database providers and connections are the vehicle used to tell the server how to access the database, what database to access, and where the database is located.

At the bottom of the wizard, there are three buttons: 'Back', 'Next', and 'Cancel'. The 'Next' button is highlighted.

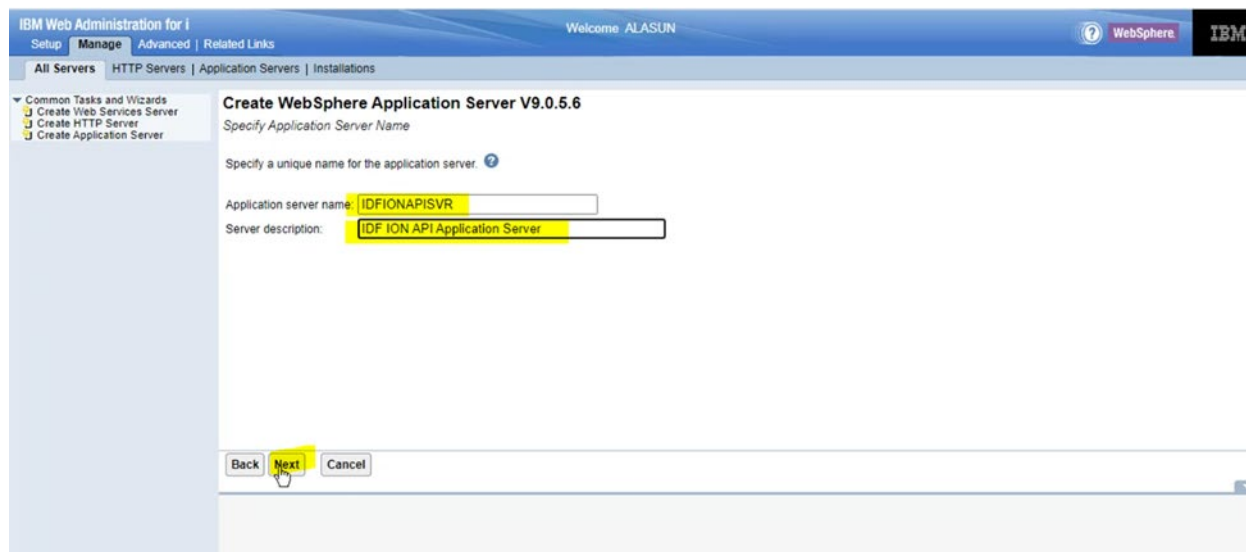
Select V9.0.0.xx Base and Click Next.



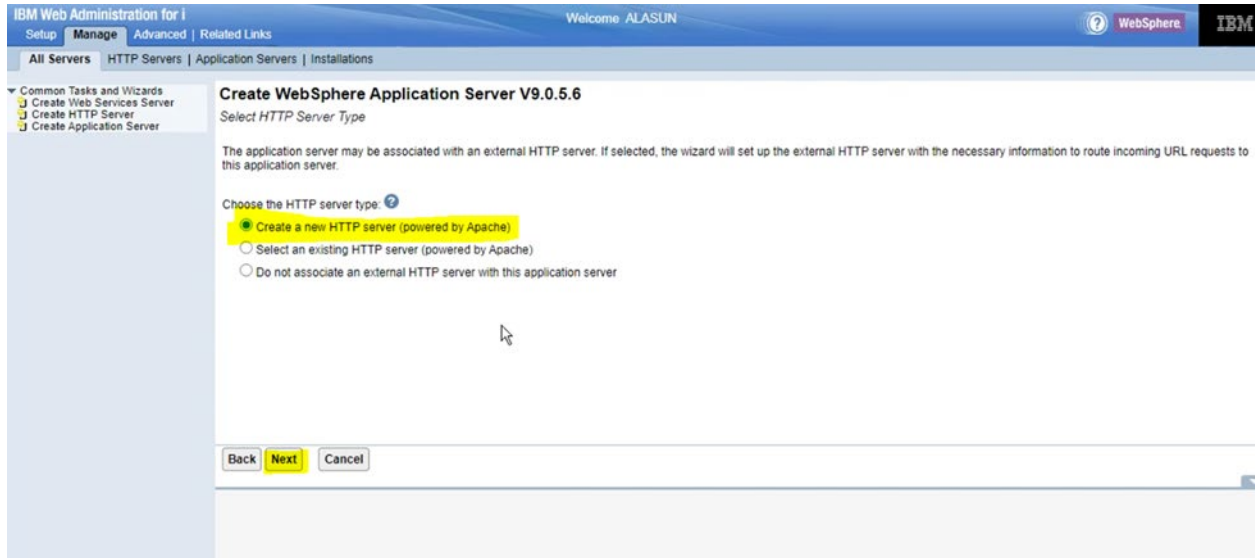
Enter below Application server name, description and Click Next.

Application server name: IDFIONAPISVR

Server description: IDF ION API Application Server



Select Create a new **HTTP server** and Click **Next**.



Enter below HTTP server name, HTTP server description and Click Next.

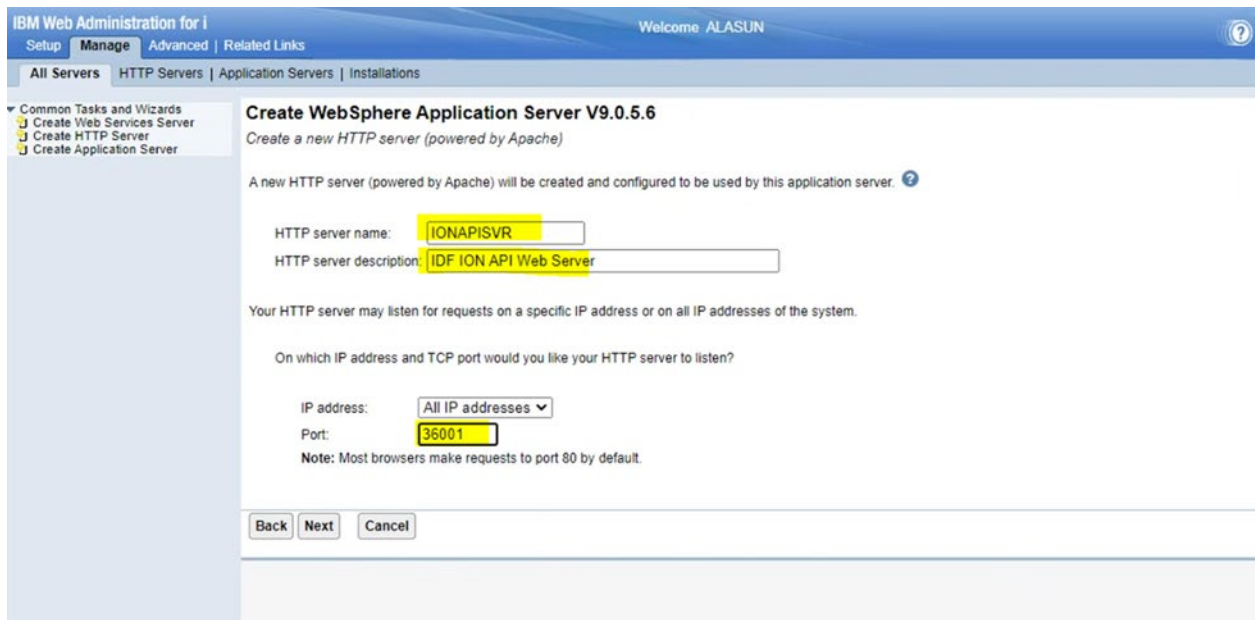
HTTP server name: IONAPISVR

HTTP server description: IDF ION API Web Server

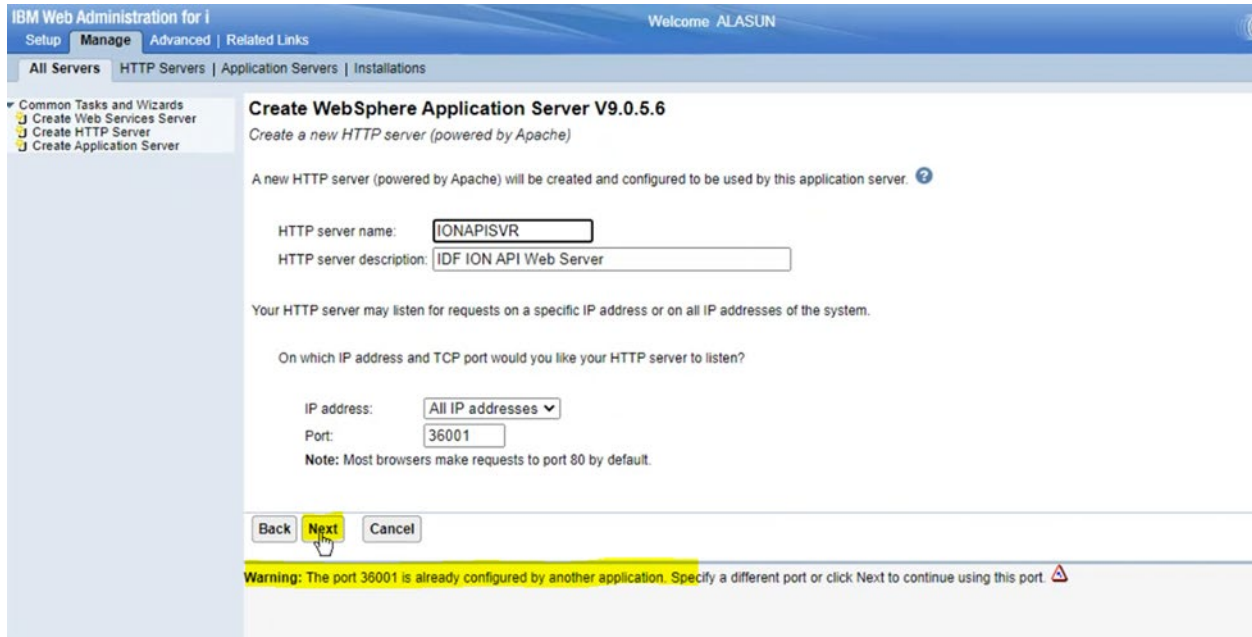
IP address: All IP address

Port: 36001

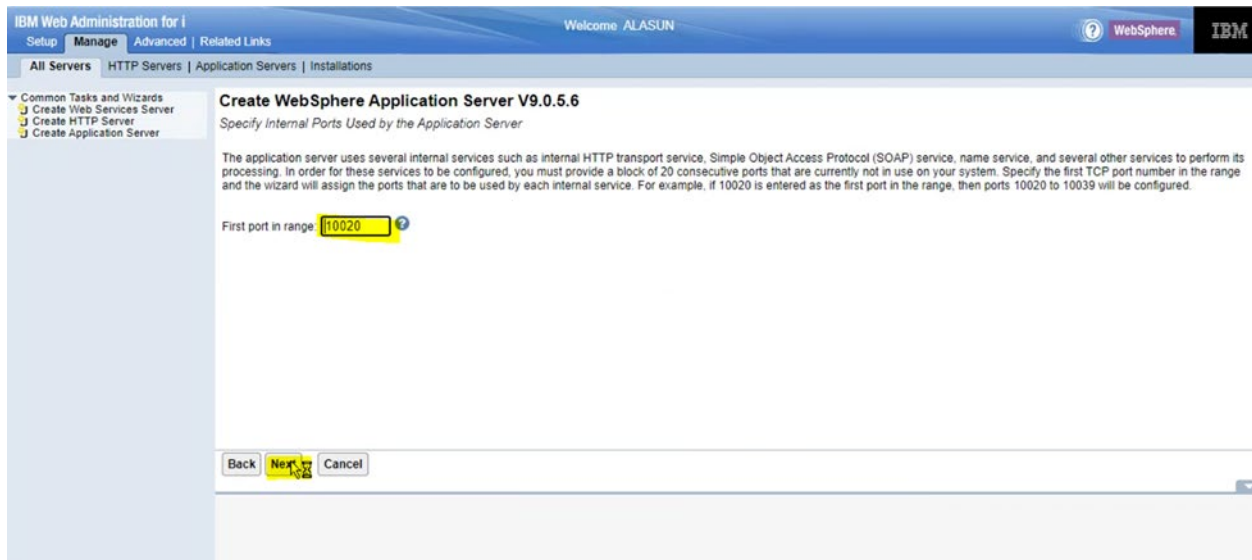
Note: The port should be the same as that you have used in the WAR file generation section



Click next again

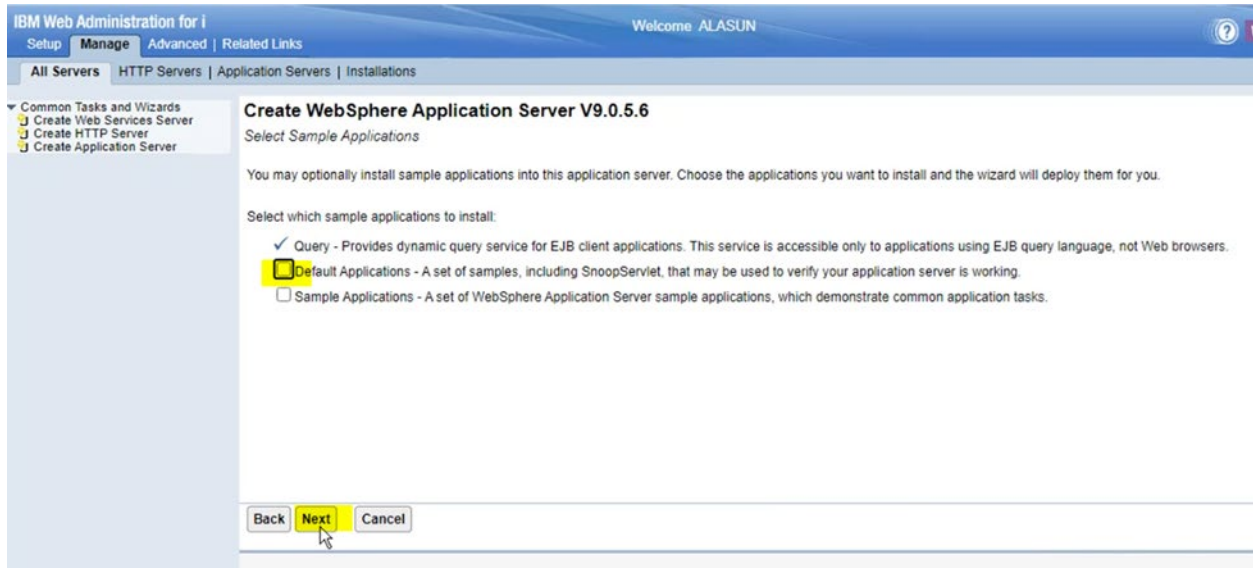


Accept the default **First port in range**: default values and Click Next.

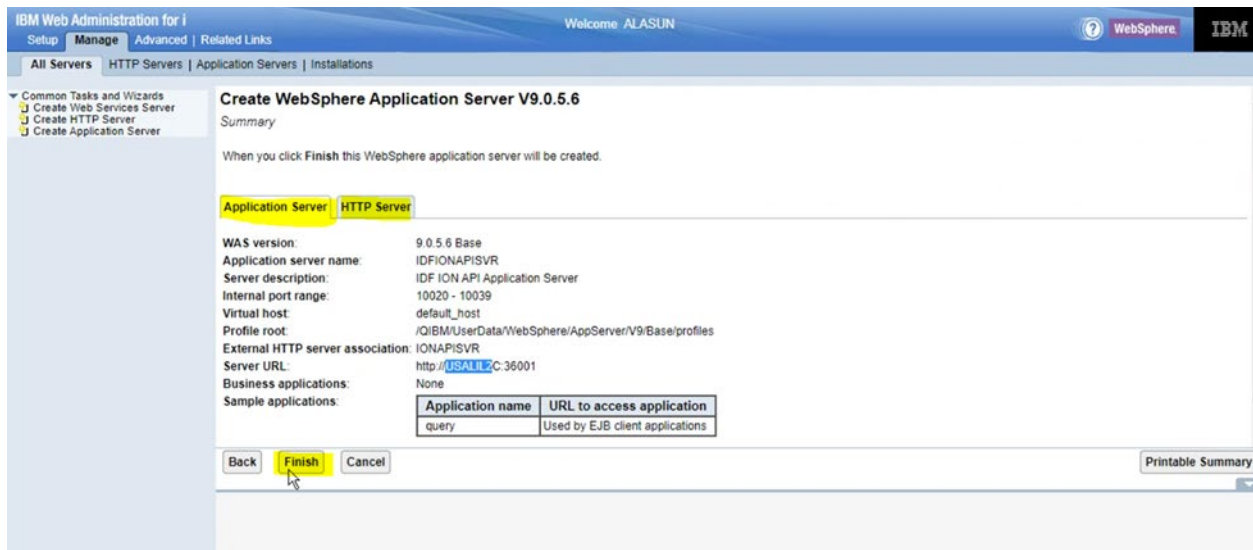


Deselect Default Applications and Click Next.

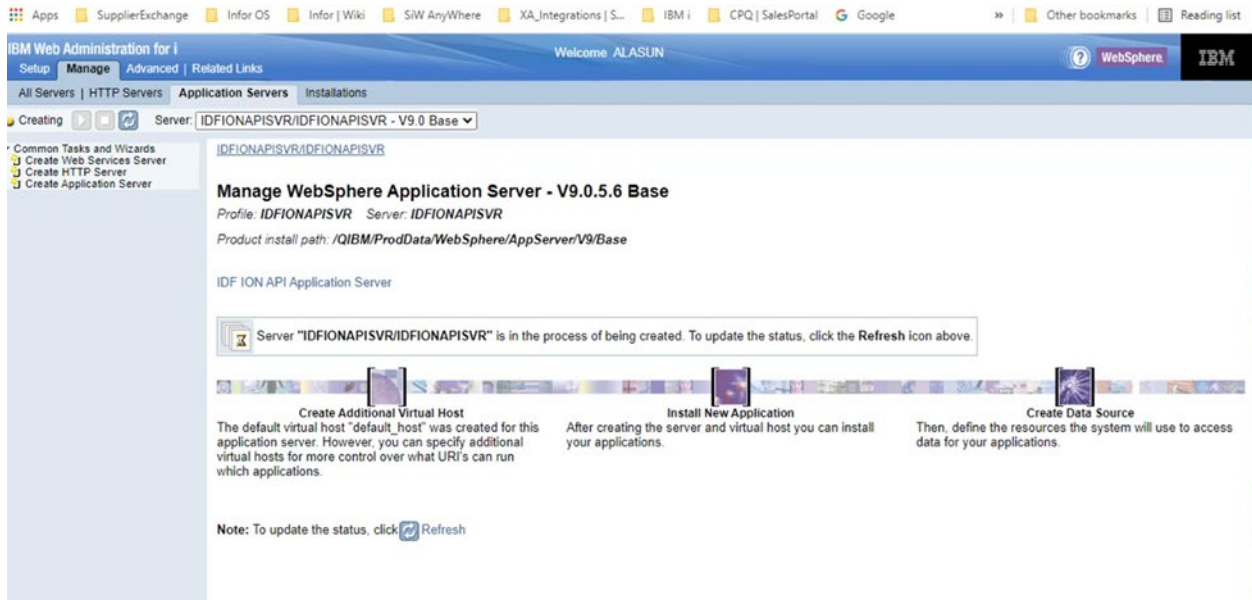
WAR file deployment



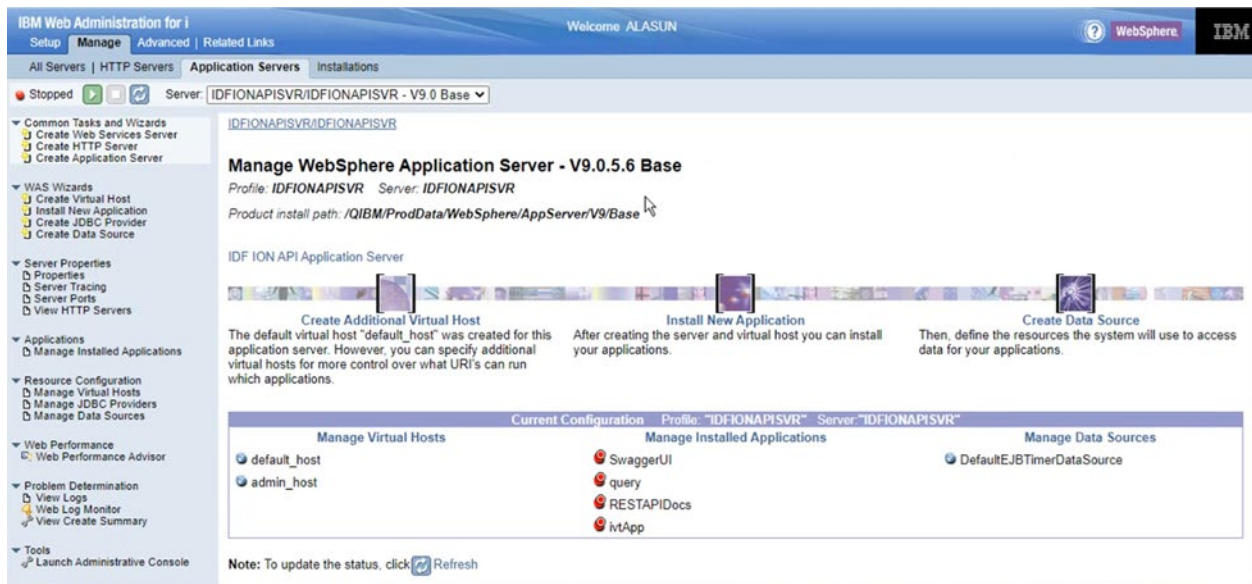
Review the Summary and Click **Finish**.



Wait until the creation process is completed



Click on refresh to update the status



Check for the created servers in All servers.

WAR file deployment

IBM Web Administration for i | Welcome ALASUN | WebSphere | IBM

Setup | **Manage** | Advanced | Related Links

All Servers | HTTP Servers | Application Servers | Installations

Common Tasks and Wizards
 Create Web Services Server
 Create HTTP Server
 Create Application Server

Manage All Servers

All HTTP Servers | All Application Servers

Data current as of Jan 24, 2022 1:42:46 AM.

Server	Version	Status	Address:Port	Associated Application Server	Description
<input type="radio"/> ADMIN	Apache/2.4.20 (IBM i)	Running	*:2001	None	Administration server
<input type="radio"/> AJSP	Apache/2.4.20 (IBM i)	Stopped	*:8210	None	
<input type="radio"/> APACHEDET	Apache/2.4.20 (IBM i)	Stopped	*:80	None	IBM supplied sample HTTP server (powered by Apache)
<input checked="" type="radio"/> IONAPISVR	Apache/2.4.20 (IBM i)	Stopped	*:36001	IDFIONAPISVR, V9.0 Base	IDF ION API Web Server
<input type="radio"/> IWADEF	Apache/2.4.20 (IBM i)	Stopped	*:2020	None	
<input type="radio"/> NLWEBSVR	Apache/2.4.20 (IBM i)	Running	*:36410	NLAPPSVR, V9.0 Base	Net-Link Web server
<input type="radio"/> WQLW7Z	Apache/2.4.20 (IBM i)	Stopped	*:11331	None	
<input type="radio"/> WSANYWHERE	Apache/2.4.20 (IBM i)	Running	*:443	default, V9.0 Base	SIWA Websphere on L2C

Server startup parameters:

Refresh Start Stop Restart
 Manage Details Delete Rename

usallizc.infor.com:2001/HTTPAdmin/Frame/normal/ManageAll/switchTab

IBM Web Administration for i | Welcome ALASUN | WebSphere | IBM

Setup | **Manage** | Advanced | Related Links

All Servers | HTTP Servers | Application Servers | Installations

Common Tasks and Wizards
 Create Web Services Server
 Create HTTP Server
 Create Application Server

Manage All Servers

All HTTP Servers | All Application Servers

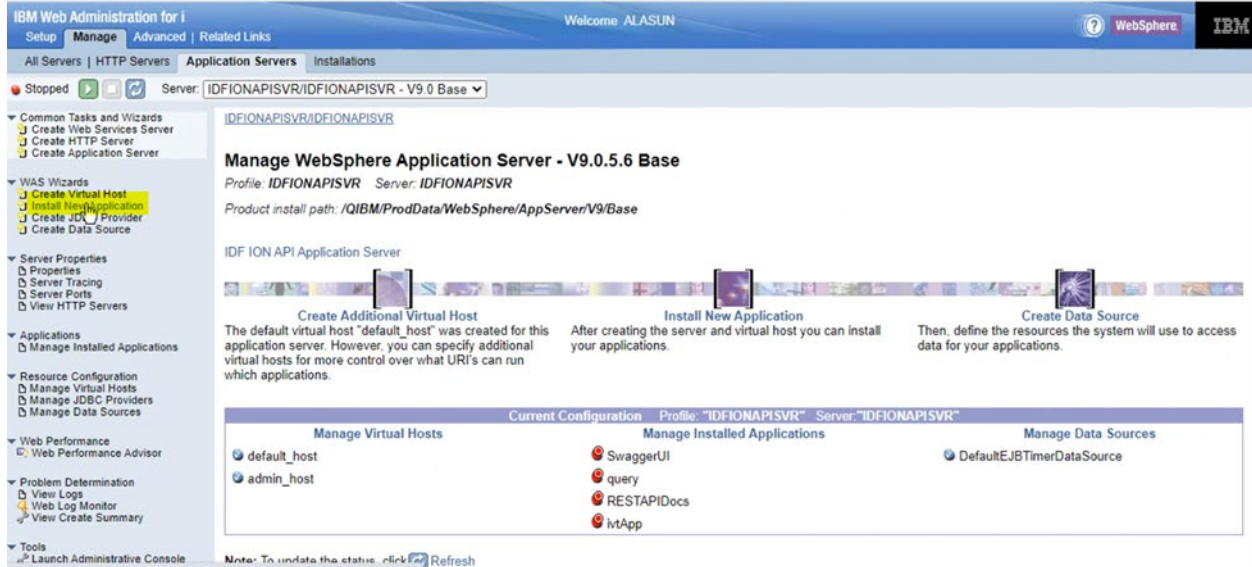
Data current as of Jan 24, 2022 1:42:33 AM.

Server	Version	Status	Address:Port	Description
<input type="radio"/> Admin1	V8.5 (int app svr)	Running	*:2002	
<input type="radio"/> Admin2	V8.5 (int app svr)	Stopped	*:2004,2005	
<input type="radio"/> Admin3	V8.5 (int app svr)	Running	*:2006	
<input type="radio"/> Admin4	V8.5 (int app svr)	Running	*:2008	
<input type="radio"/> Admin5	V8.5 (int app svr)	Running	*:2011	
<input type="radio"/> default/server1	V9.0 5.6 Base	Running	*:2809,5060,5061,8880,9043,9060,9080,9443	
<input type="radio"/> default/WSAnyWhere	V9.0 5.6 Base	Running	*:2810,5062,5063,8881,9044,9061,9081,9444	
<input checked="" type="radio"/> IDFIONAPISVR/IDFIONAPISVR	V9.0 5.6 Base	Stopped	*:10020,10021,10022,10023,10024,10025,10036,10037	IDF ION API Application Server
<input type="radio"/> NLAPPSVR/NLAPPSVR	V9.0 5.6 Base	Running	*:10000,10001,10002,10003,10004,10005,10016,10017	Net-Link Application Server

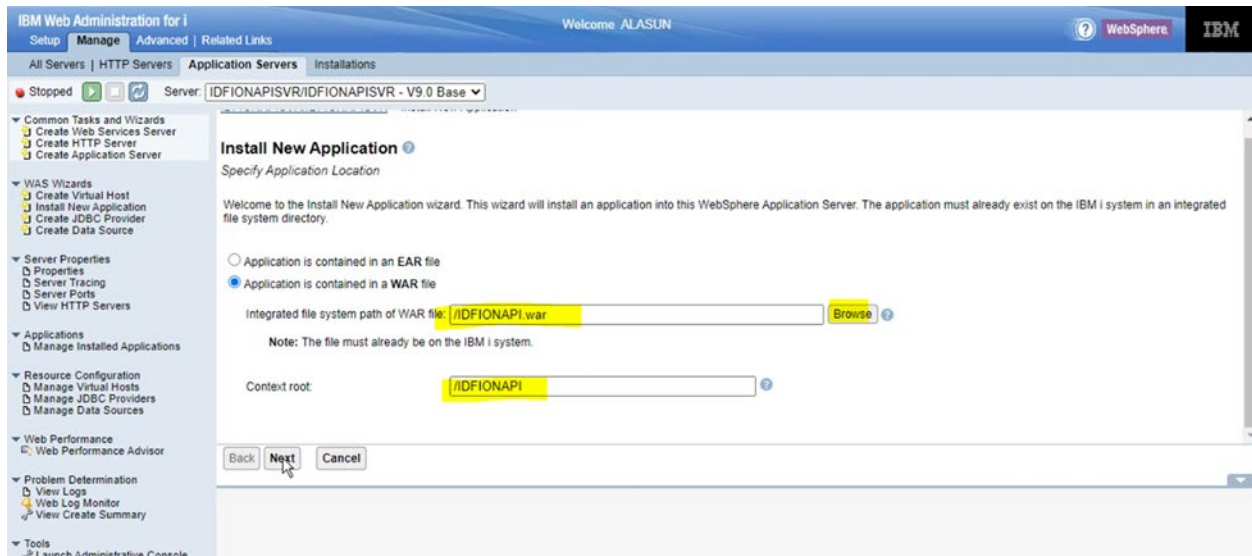
Refresh Start Stop Restart
 Manage Details Delete Rename

usallizc.infor.com:2001/Manage Details

Click on the created application server (**IDFIONAPISVR**) and Select **Install New Application** from the WAS Wizards menu.



Select **Application is contained in a WAR file** and click **Browse** to locate and select the WAR file located on the IFS from Step 1 and then at Context root field, update with /myContextRoot value (for eg:/IDFIONAPI) and Click **Next**.



Click **Next**.

WAR file deployment

IBM Web Administration for i | Welcome ALASUN

Setup | **Manage** | Advanced | Related Links

All Servers | HTTP Servers | **Application Servers** | Installations

Stopped | Server: IDFIONAPISVR/IDFIONAPISVR - V9.0 Base

Common Tasks and Wizards

- Create Web Services Server
- Create HTTP Server
- Create Application Server

WAS Wizards

- Create Virtual Host
- Install New Application**
- Create JDBC Provider
- Create Data Source

Server Properties

- Properties
- Server Tracing
- Server Ports
- View HTTP Servers

Applications

- Manage Installed Applications

Resource Configuration

- Manage Virtual Hosts
- Manage JDBC Providers
- Manage Data Sources

Web Performance

- Web Performance Advisor

Problem Determination

- View Logs
- Web Log Monitor
- View Create Summary

Tools

- Launch Administrative Console

usali2c.infor.com:2001/Next

Install New Application

Provide Options to Perform the Install

Specify application deployment options

Application name: IDF ION API

Directory application installed to: /QIBM/UserData/WebSphere/AppServer/V9/Base/profiles/IDFIONAPISVR/installedApps

Pre-compile JSPs

Note: Pre-compiling JSPs can have significant performance impacts. When enabled, the JSPs in the application will be compiled at installation time, causing the application to take longer. When disabled, the JSPs will be compiled the first time they are accessed, causing the first use of the application to take longer.

Back | **Next** | Cancel

Check the Web server checkbox and Click Next.

IBM Web Administration for i | Welcome ALASUN

Setup | **Manage** | Advanced | Related Links

All Servers | HTTP Servers | **Application Servers** | Installations

Stopped | Server: IDFIONAPISVR/IDFIONAPISVR - V9.0 Base

Common Tasks and Wizards

- Create Web Services Server
- Create HTTP Server
- Create Application Server

WAS Wizards

- Create Virtual Host
- Install New Application**
- Create JDBC Provider
- Create Data Source

Server Properties

- Properties
- Server Tracing
- Server Ports
- View HTTP Servers

Applications

- Manage Installed Applications

Resource Configuration

- Manage Virtual Hosts
- Manage JDBC Providers
- Manage Data Sources

Web Performance

- Web Performance Advisor

Problem Determination

- View Logs
- Web Log Monitor
- View Create Summary

usali2c.infor.com:2001/Next

Install New Application

Map Virtual Hosts for Web Modules

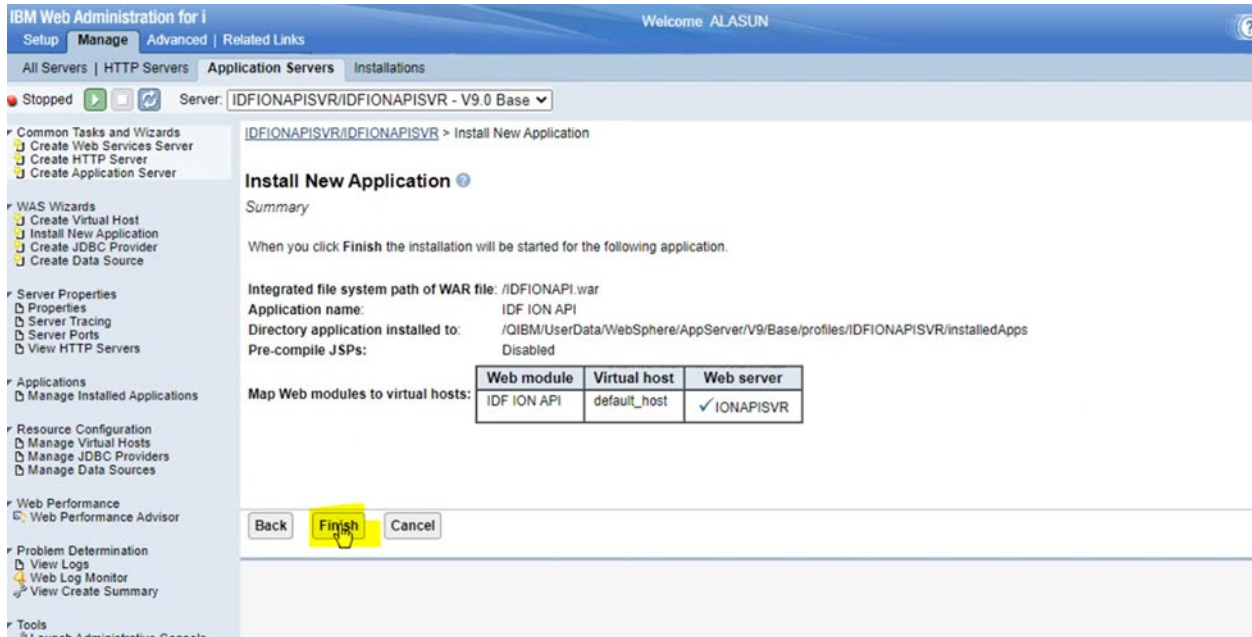
Specify the virtual host you want to associate with the Web modules contained in this application. Web modules can be installed on the s

Map Web modules to virtual hosts:

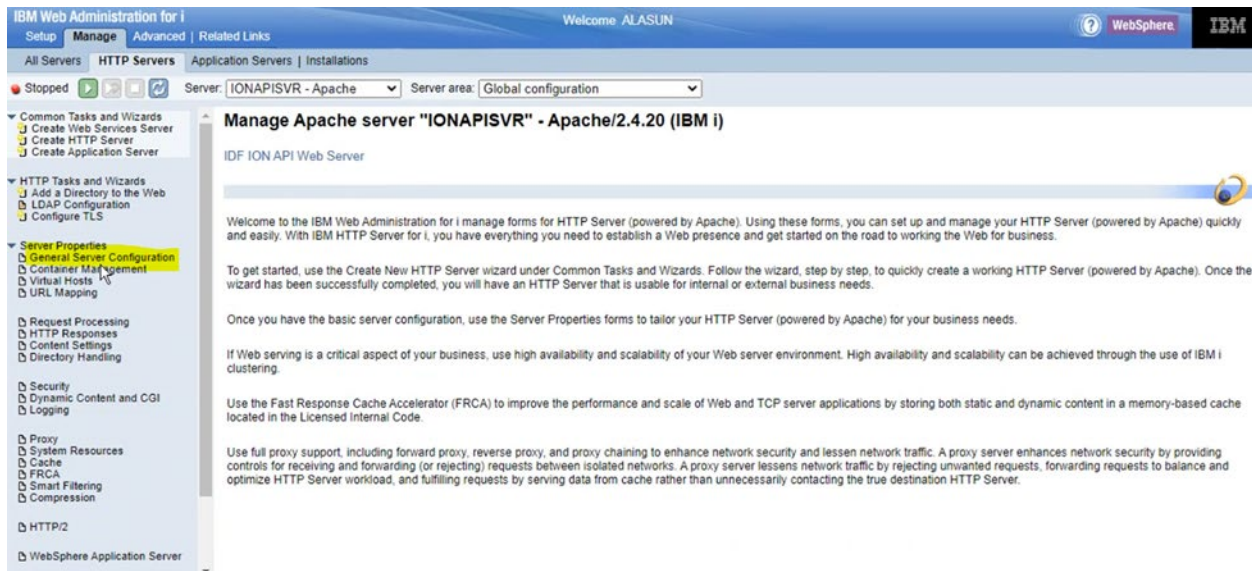
Web module	Virtual host	Web server
IDF ION API	default_host	<input checked="" type="checkbox"/> IONAPISVR

Back | **Next** | Cancel

Click on Finish.



Now go to manage http servers, in **IDFIONAPI Web Server**, click on general server configuration.

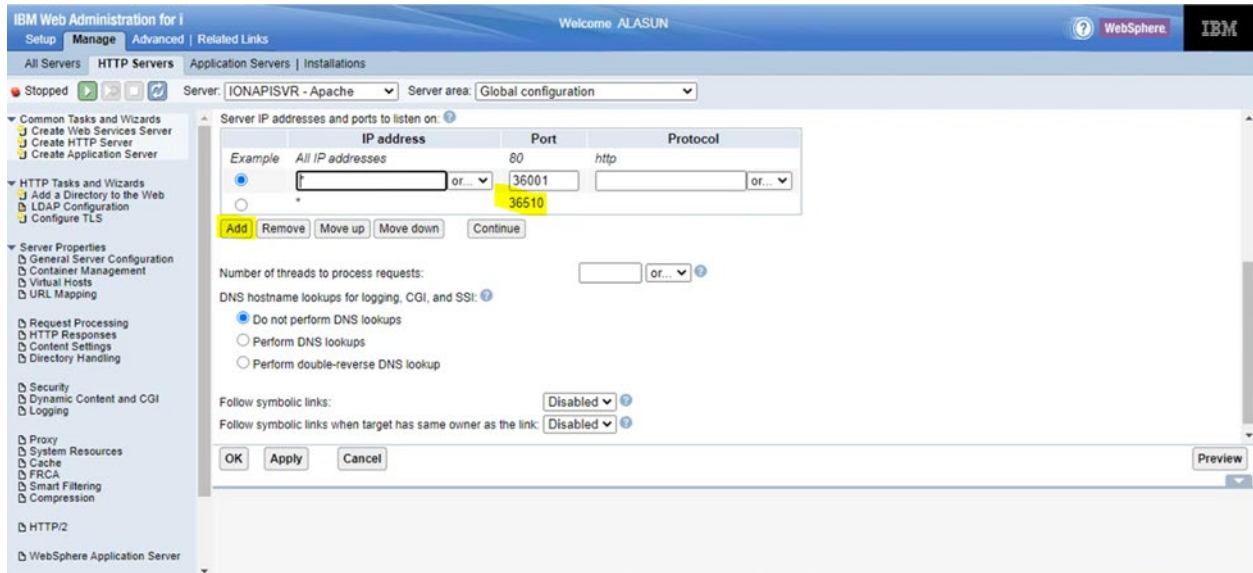


Click on add to add the new port and remove the old port

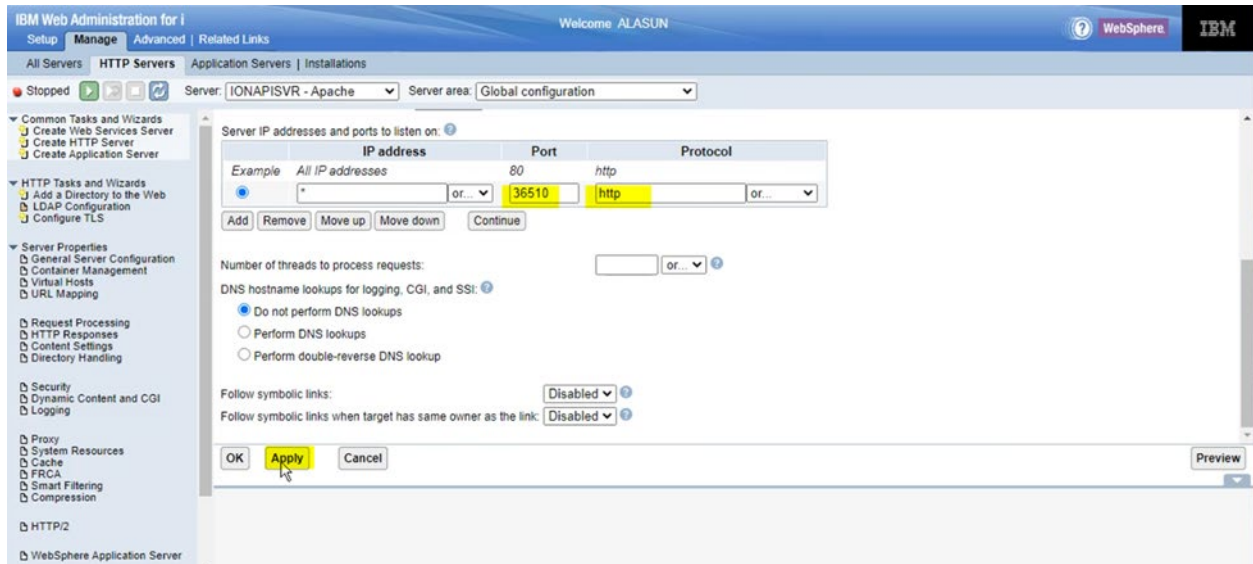
Port: 36510

Protocol: http

WAR file deployment

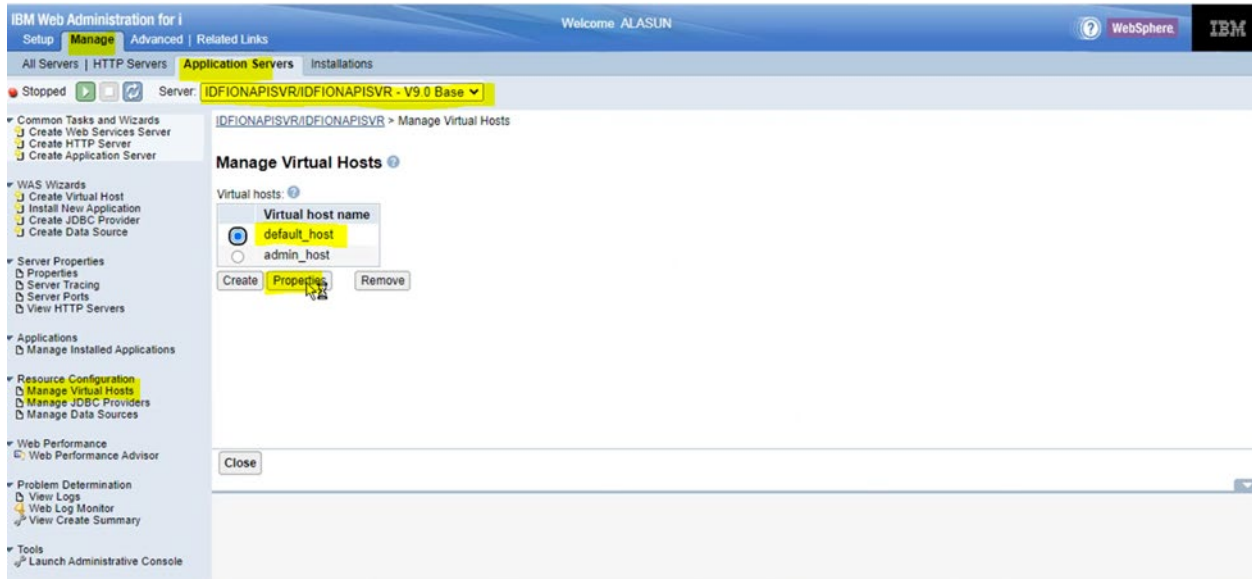


Click on Apply then ok.

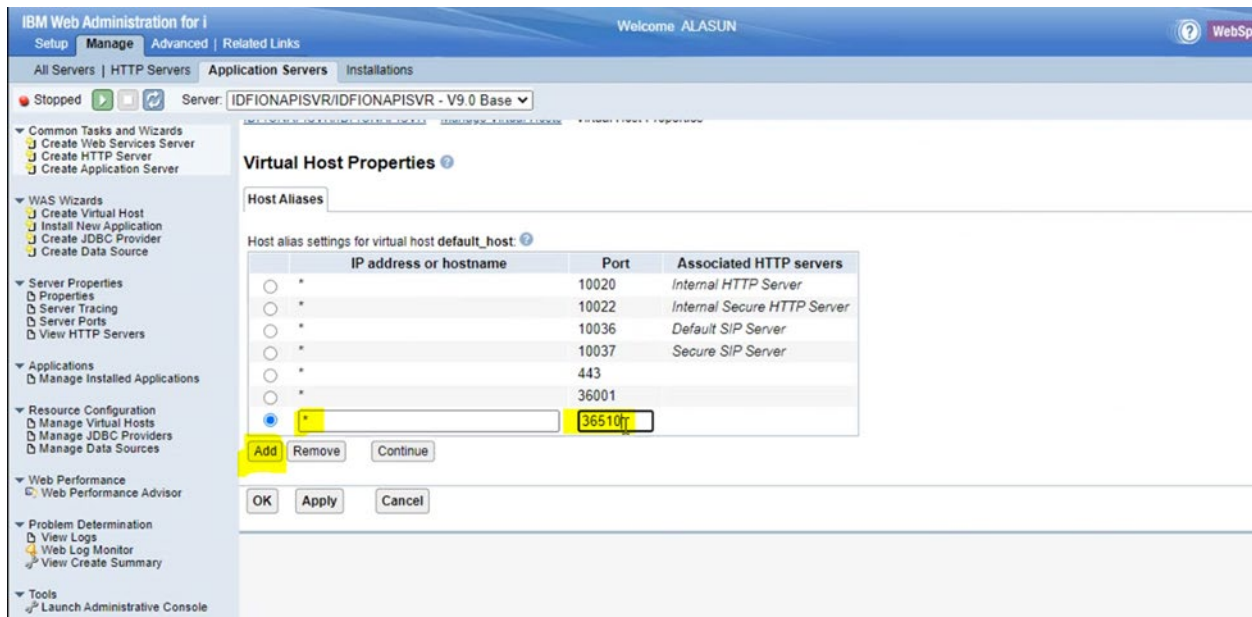


Select the **Manage Virtual Hosts** under **Resource Configuration** from the IDFIIONAPISVR Application server, as shown in below screenshot.

Select the default host and Click Properties

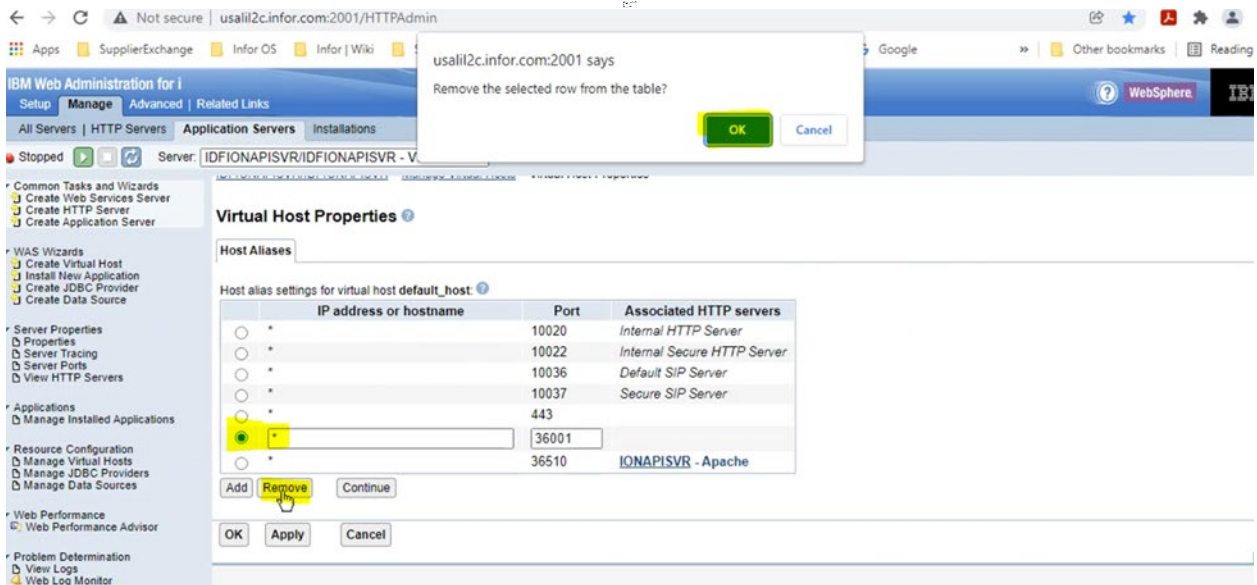


Click Add to add a Host Aliases (In the below example, added 36510 as a port).

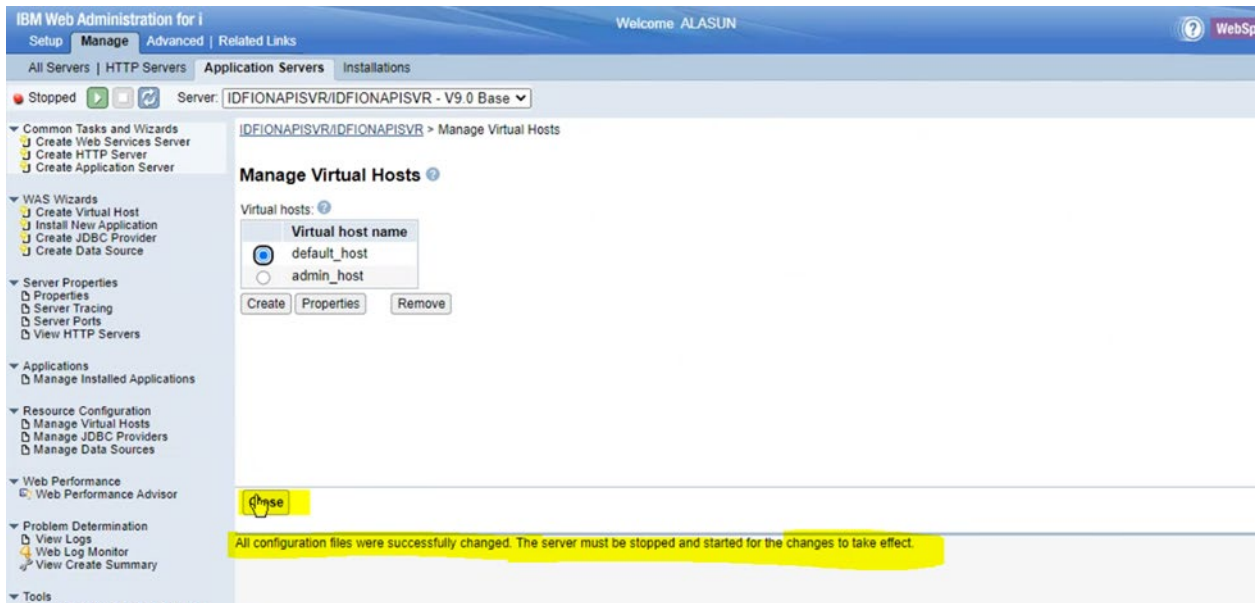


Select the 36001 port and Click Remove. Click Apply.

WAR file deployment

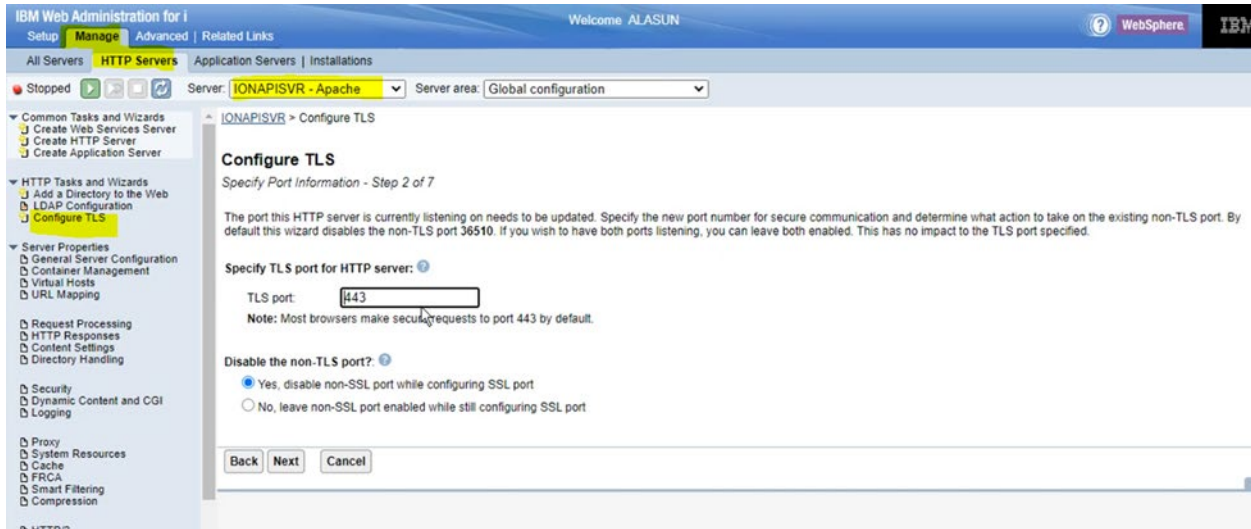


Click on close. As all configuration is saved, server must be **restarted**.

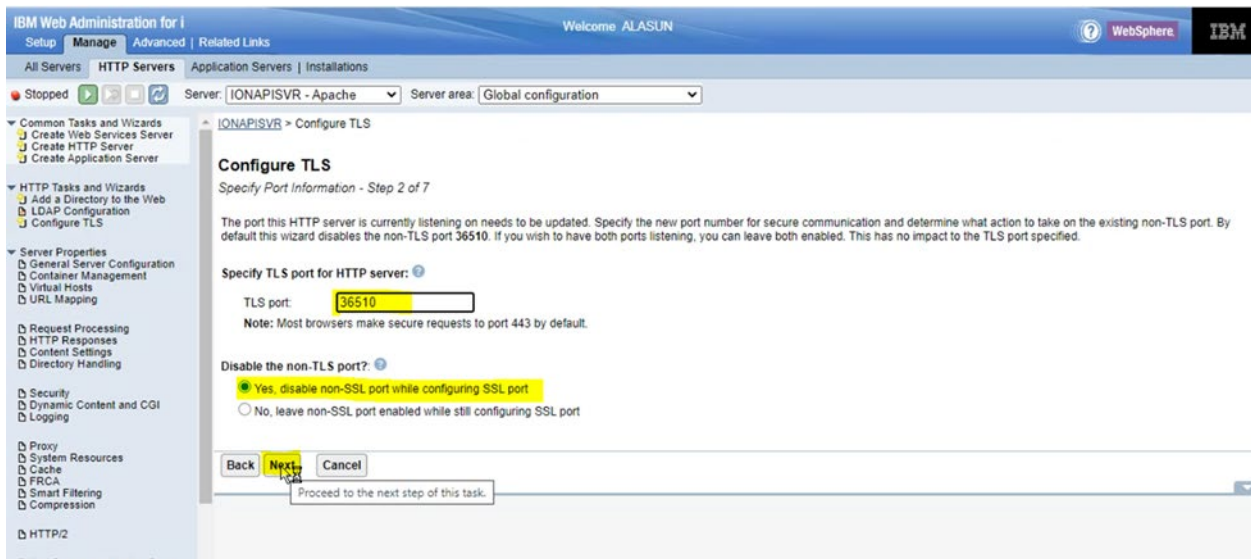


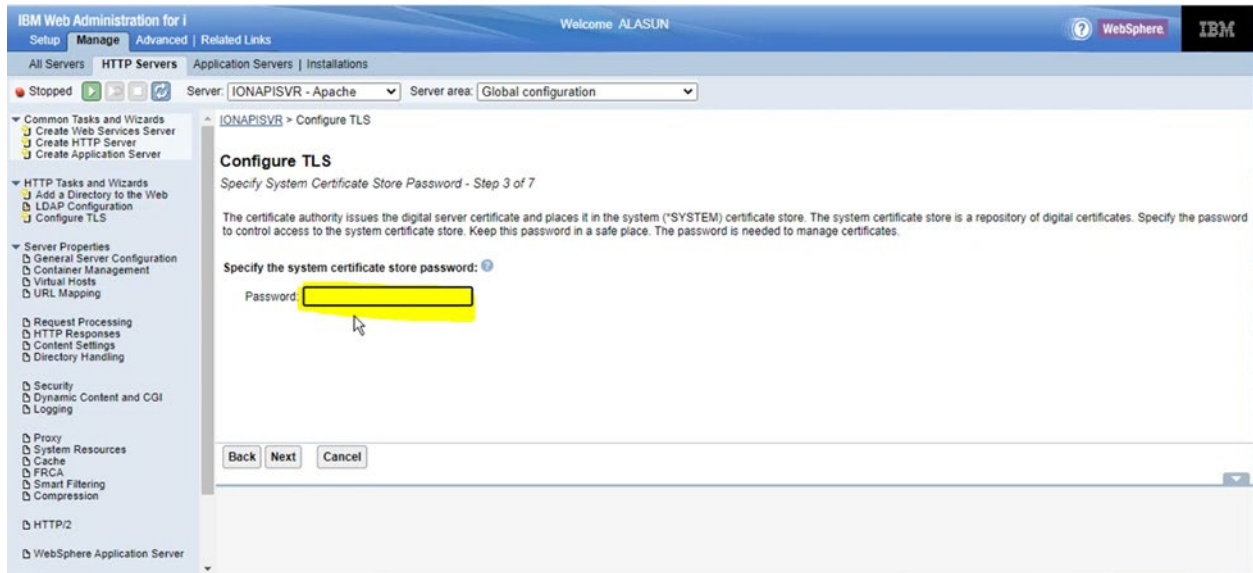
Configuring TLS:

Select Manage tab | Select HTTP Servers tab | Select Configure TLS – (HTTP Tasks and Wizards).



Give the port number (36510) select radio button for “Yes, disable non-SSL...” and Click Next.





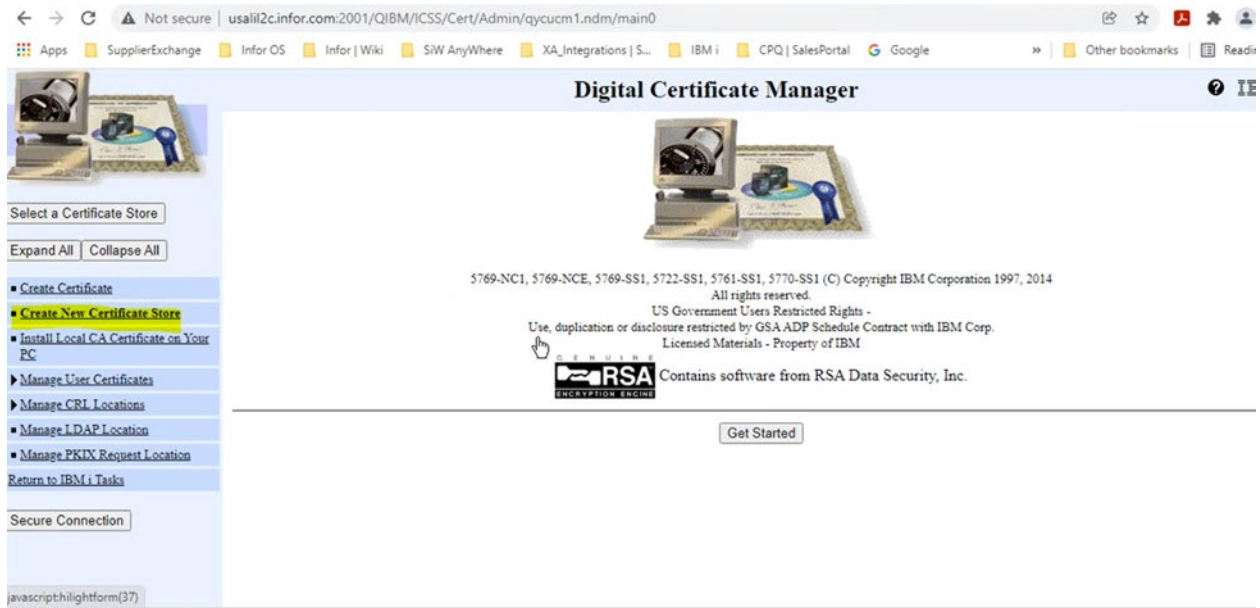
If the required system certificate store password is available on hand then enter it.

If you are sure about the password, then you can reset the password and use it.

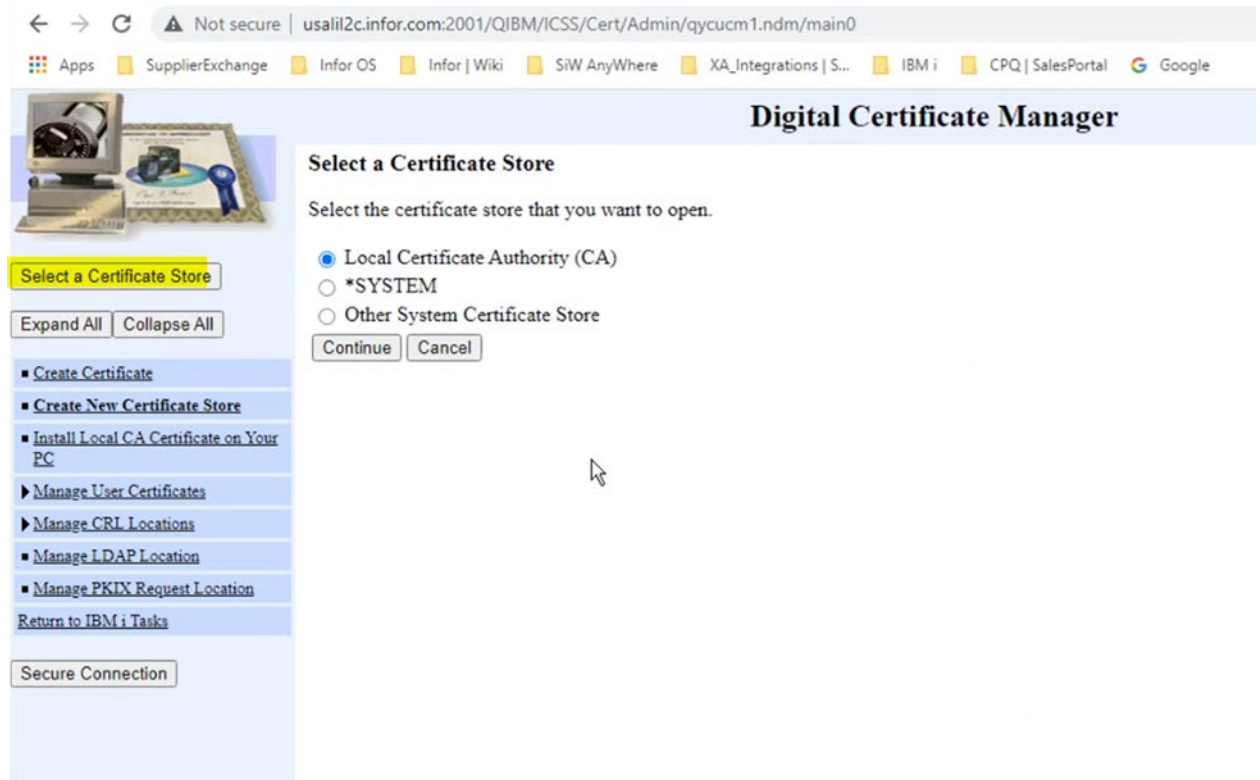
Follow **“Creating a local Certificate of Authority”** from **System i Workspace AnyWhere Installation & Administration Guide** to re-generate password and use here.

Example re-generation steps below:

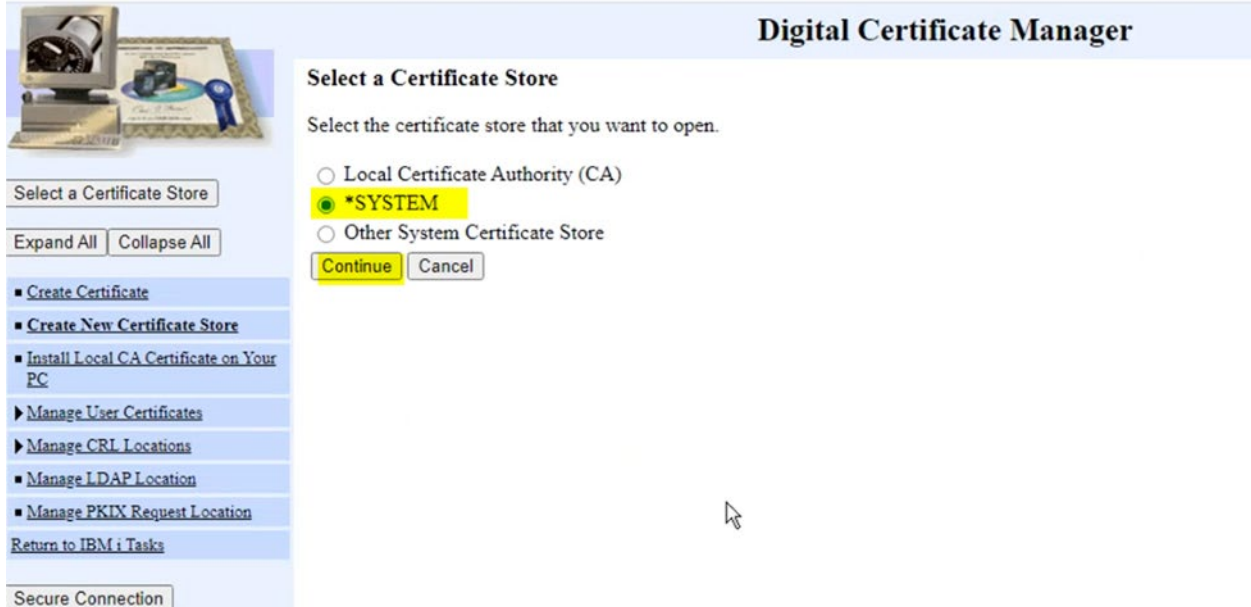
<http://usali2c.infor.com:2001/QIBM/ICSS/Cert/Admin/qycucm1.ndm/main0>



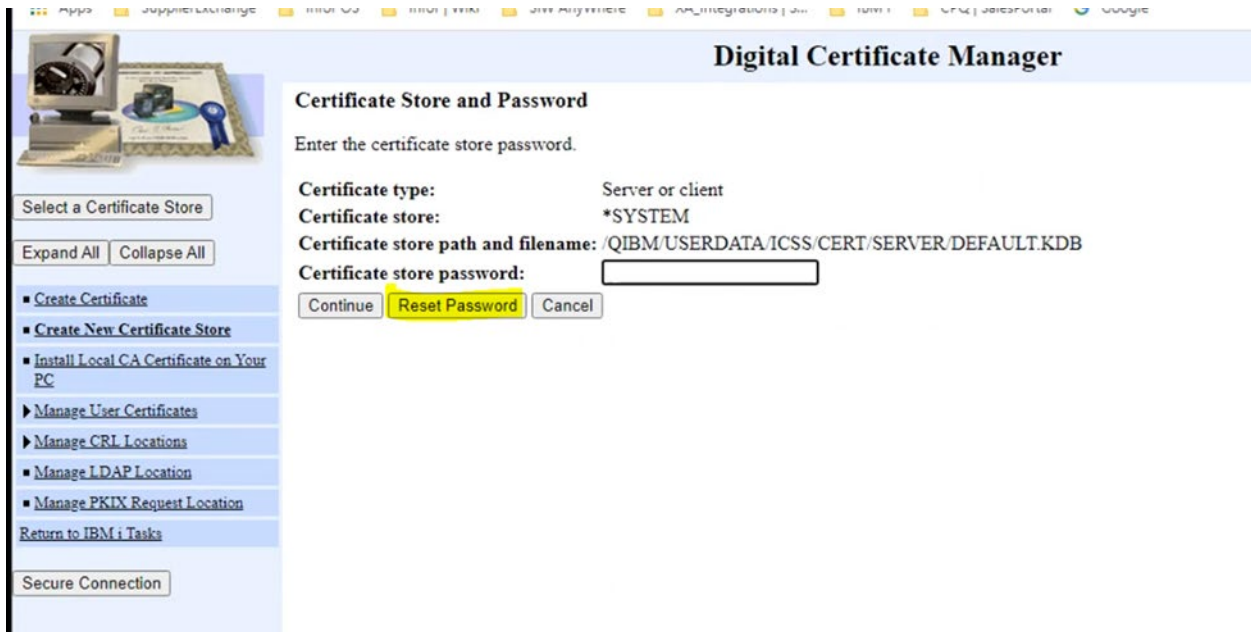
Select a Certificate Store.



Select ***SYSTEM** and click Continue.



Click on reset password

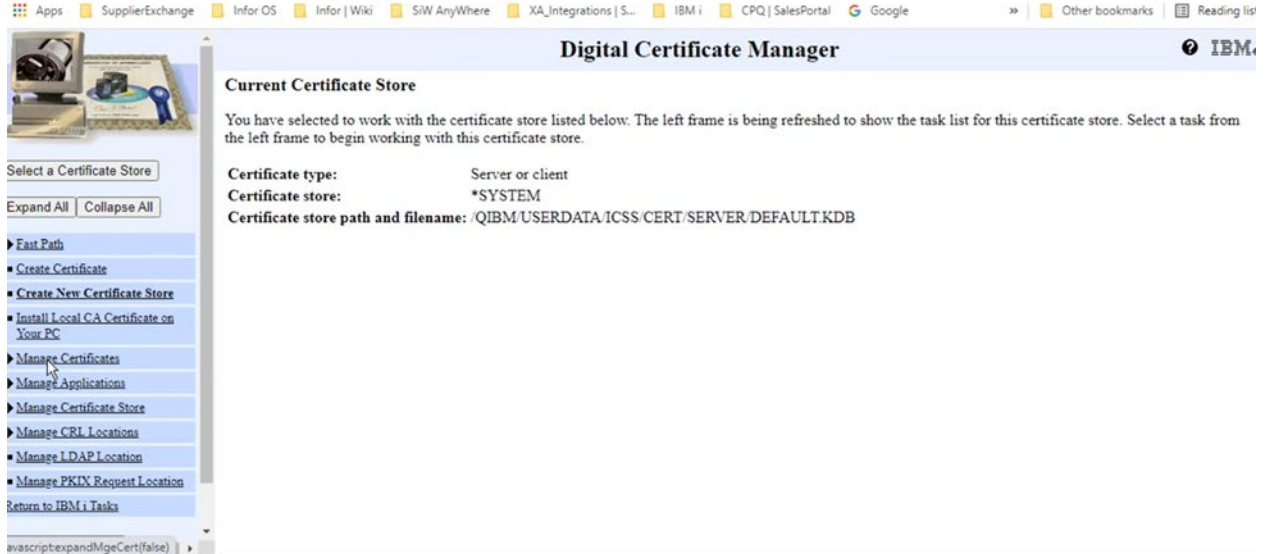


Enter and confirm the password and click on continue.

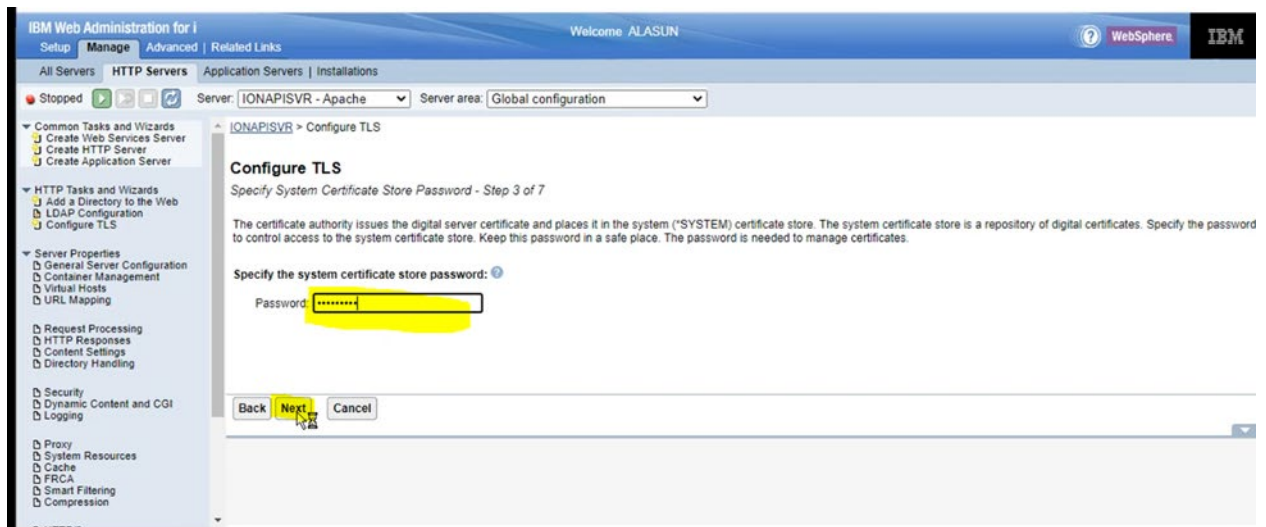
Enter the password and click on continue.

Password got changed.

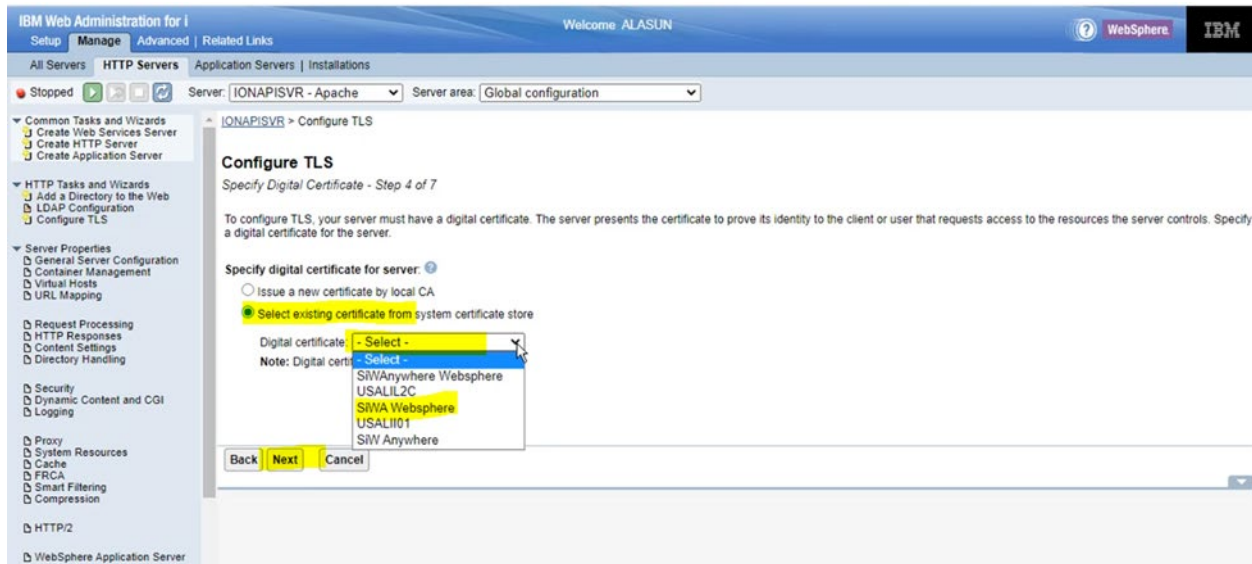
WAR file deployment



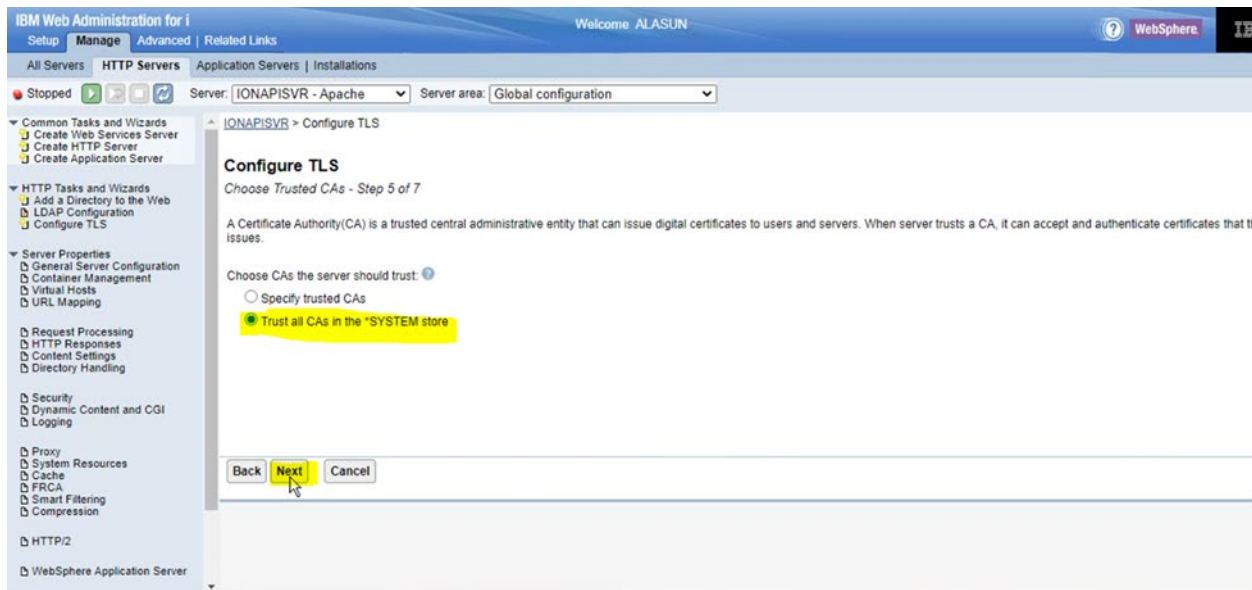
Enter the new password in the TLS page and click on next.



Select existing certificate from system certificate store. And select SIWA WebSphere.

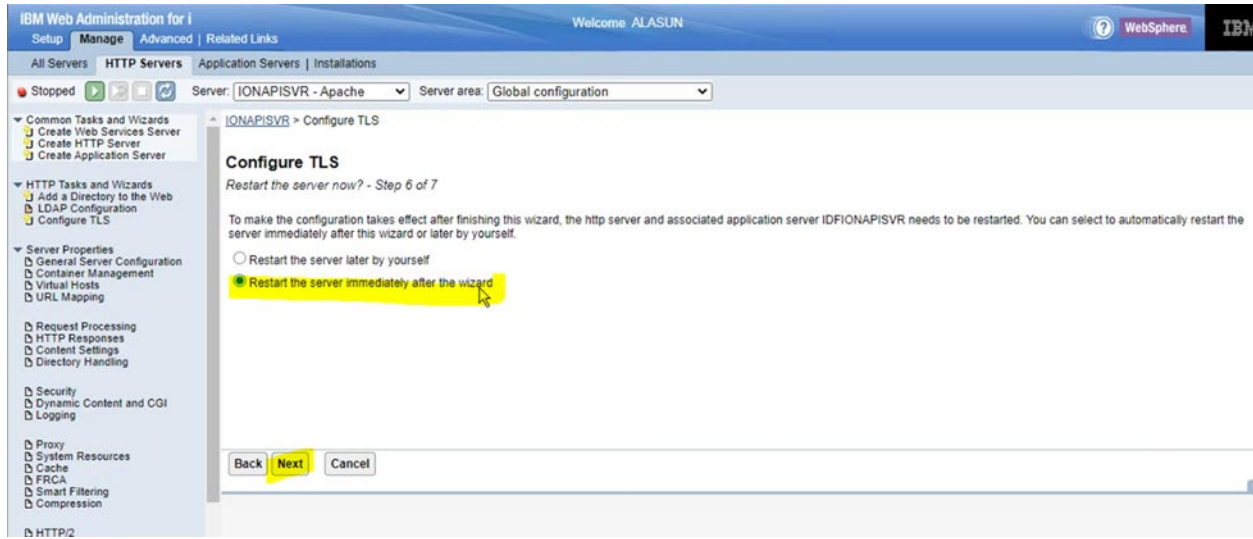


Select "Trust all CAs in the "SYSTEM store"" and click on next.

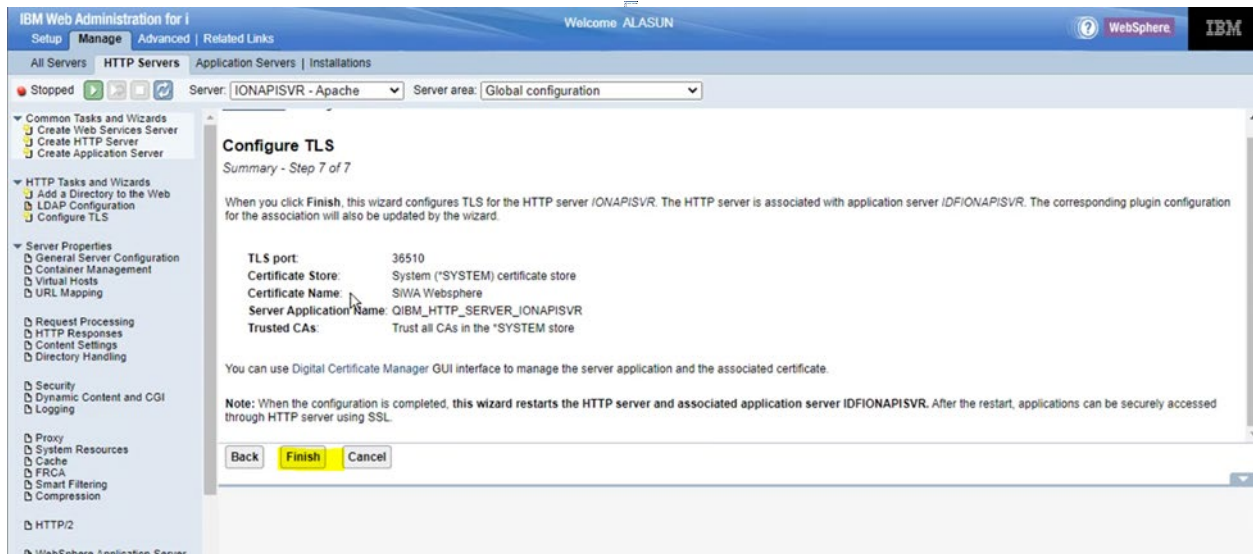


Select restart the server immediately option and click next.

WAR file deployment



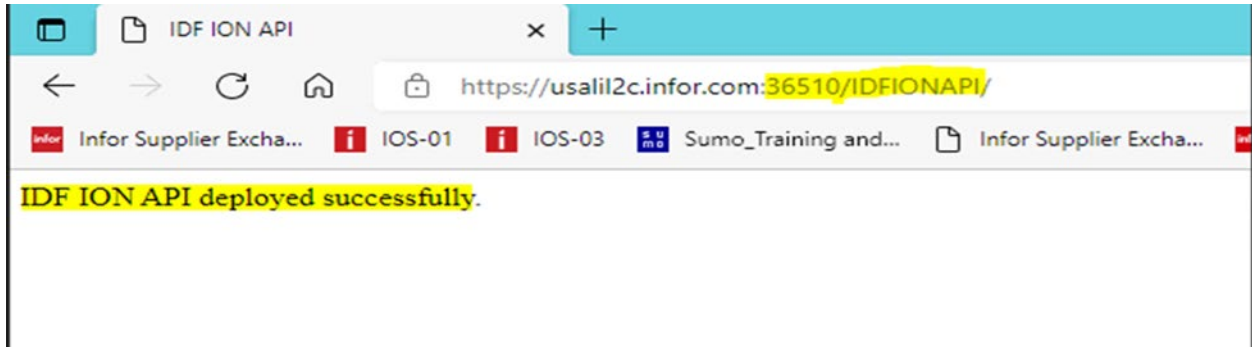
Click on finish and the servers will be restarted.



After restart validate if the IDFIONAPI deployment is successful.

<https://usalil2c.infor.com:36510/IDFIONAPI/>

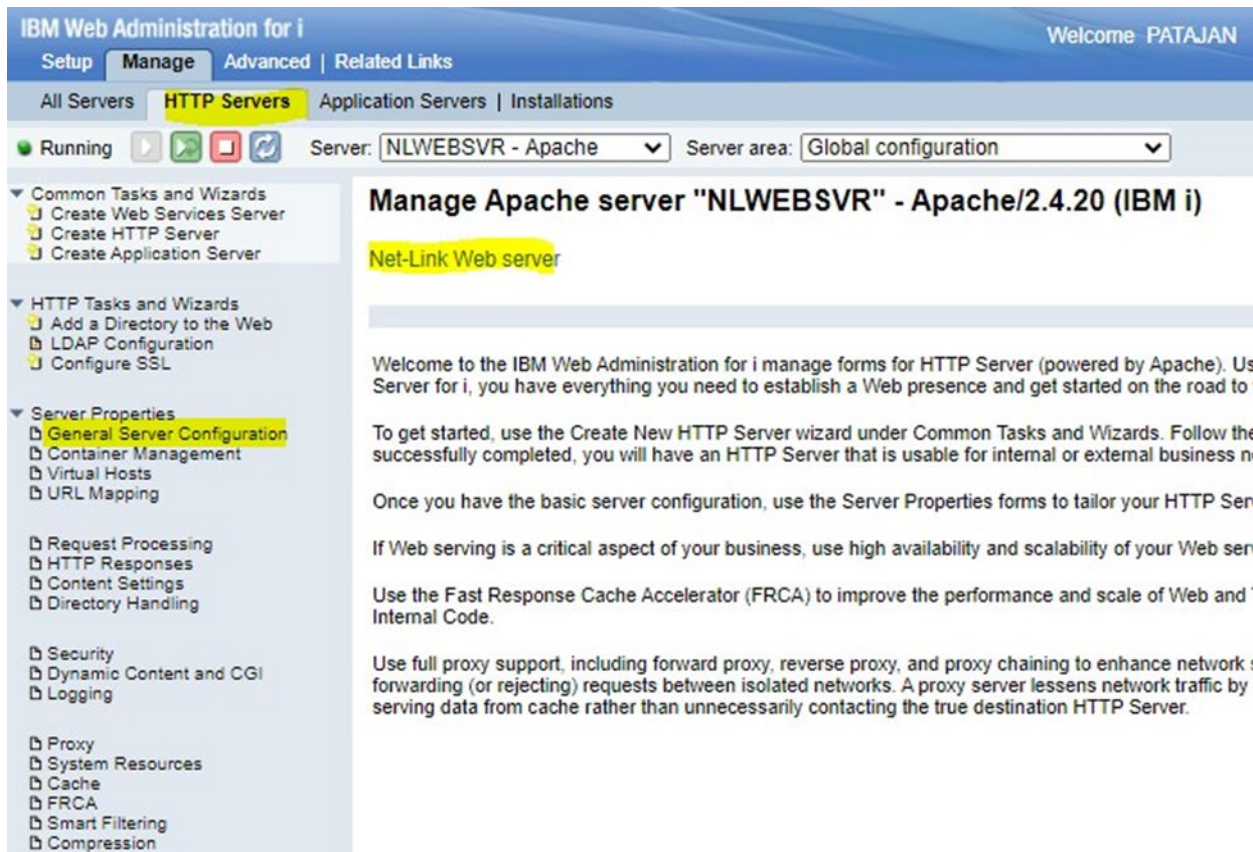
“IDF ION API deployed successfully” will be displayed.



Appendix A Port Warning Reset

Follow these steps if you need to reset the assigned default Net-Link port.

- 1 Select the General Server Configuration under Server Properties from the Net-Link HTTP server, as shown in below screenshot.



- 2 Navigate to General settings and Click Add to add a new port with http as a protocol (In the below example, added 36309 as a new unused port).

IBM Web Administration for i Welcome PATAJAN

Setup **Manage** Advanced Related Links

All Servers HTTP Servers Application Servers Installations

Running ▶ ■ ↻ Server: NLWEBSVR - Apache Server area: Global configuration

Server root directory: /www/nlwebsvr
 Configuration file: conf/httpd.conf
 Document root: /www/nlwebsvr/htdocs Browse ?
 Server name:
 Fully qualified server host name:
 Port:

Server IP addresses and ports to listen on: ?

IP address	Port	Protocol
Example All IP addresses	80	http
<input type="radio"/> *	36001	
<input checked="" type="radio"/> *	36309	http

Add Remove Move up Move down Continue

Number of threads to process requests: or... ?

DNS hostname lookups for logging, CGI, and SSI: ?

Do not perform DNS lookups
 Perform DNS lookups
 Perform double-reverse DNS lookup

Follow symbolic links: Disabled ?
 Follow symbolic links when target has same owner as the link: Disabled ?

OK Apply Cancel

3 Select the 36001 port and Click on **Remove**.

IBM Web Administration for i Welcome PATAJAN

Setup **Manage** Advanced Related Links

All Servers HTTP Servers Application Servers Installations

Running ▶ ■ ↻ Server: NLWEBSVR - Apache Server area: Global configuration

Server root directory: /www/nlwebsvr
 Configuration file: conf/httpd.conf
 Document root: /www/nlwebsvr/htdocs Browse ?
 Server name:
 Fully qualified server host name:
 Port:

Server IP addresses and ports to listen on: ?

IP address	Port	Protocol
Example All IP addresses	80	http
<input checked="" type="radio"/> *	36001	
<input type="radio"/> *	36309	http

Add Remove Move up Move down Continue

Number of threads to process requests: or... ?

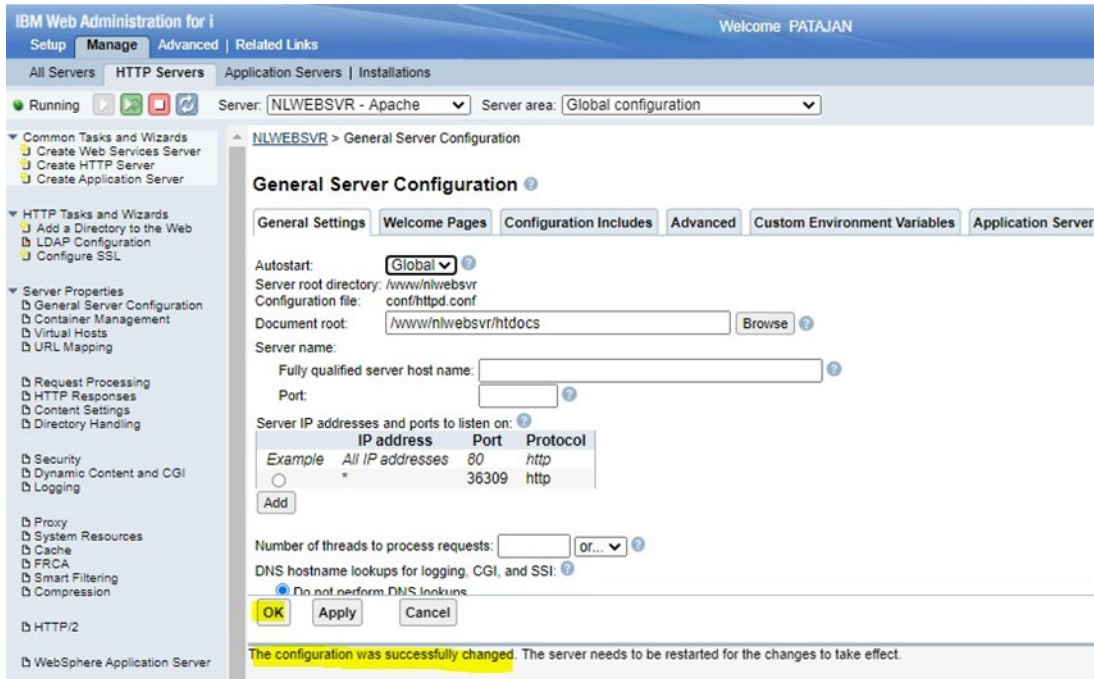
DNS hostname lookups for logging, CGI, and SSI: ?

Do not perform DNS lookups
 Perform DNS lookups
 Perform double-reverse DNS lookup

Follow symbolic links: Disabled ?
 Follow symbolic links when target has same owner as the link: Disabled ?

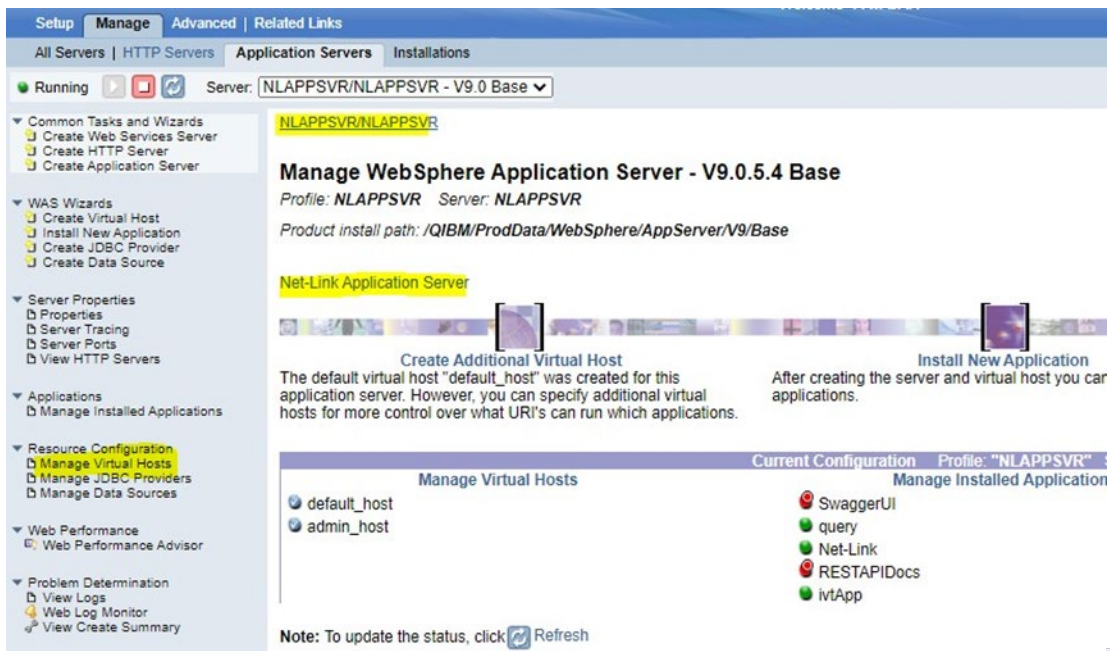
OK Apply Cancel

4 Click Apply.

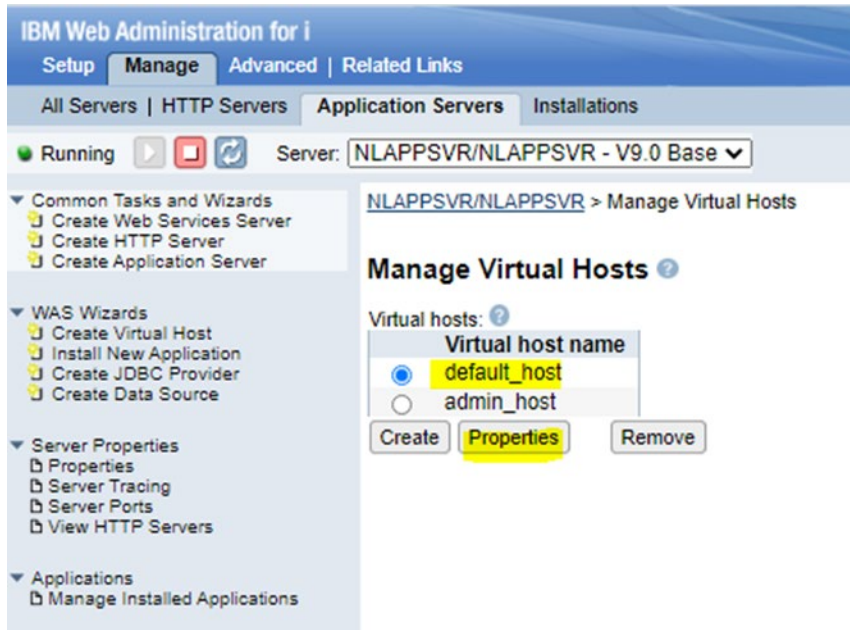


5 Click **OK** then Click **Close**.

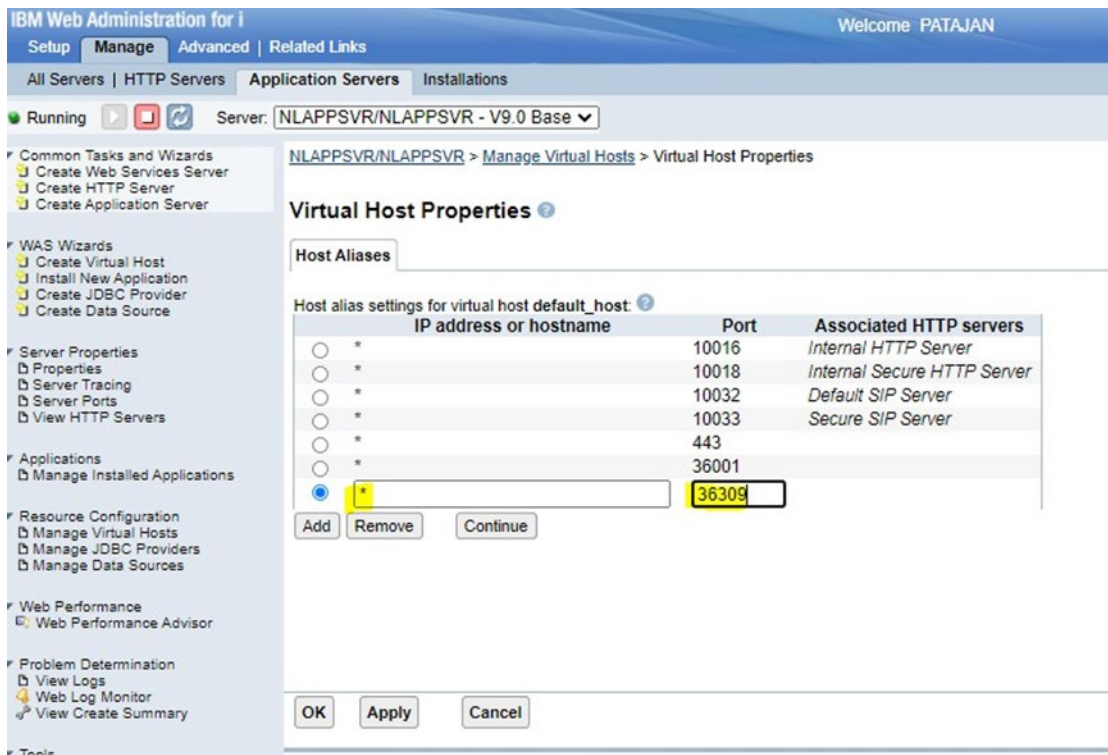
6 Select the Manage Virtual Hosts under Resource Configuration from the Net-Link Application server, as shown in below screenshot.



7 Select the default host and Click **Properties**.



8 Click **Add** to add a Host Aliases (In the below example, added 36309 as a port).



9 Select the 36001 port and Click **Remove**. Click **Apply**.

Port Warning Reset

The screenshot shows the IBM Web Administration for i interface. The top navigation bar includes 'Setup', 'Manage', 'Advanced', and 'Related Links'. The main navigation area shows 'All Servers | HTTP Servers | Application Servers | Installations'. The server is identified as 'NLAPPSVR/NLAPPSVR - V9.0 Base'. The left sidebar contains various configuration categories like 'Common Tasks and Wizards', 'WAS Wizards', 'Server Properties', 'Applications', 'Resource Configuration', 'Web Performance', 'Problem Determination', and 'Tools'. The main content area is titled 'Virtual Host Properties' and shows the 'Host Aliases' tab. A table lists host alias settings for 'virtual host default_host' with columns for 'IP address or hostname', 'Port', and 'Associated HTTP servers'. The table contains the following entries:

IP address or hostname	Port	Associated HTTP servers
* *	10016	Internal HTTP Server
* *	10018	Internal Secure HTTP Server
* *	10032	Default SIP Server
* *	10033	Secure SIP Server
* *	443	
* *	36001	
* *	36309	NLWEBSVR - Apache

Buttons for 'Add', 'Remove', and 'Continue' are visible below the table. At the bottom of the configuration area are 'OK', 'Apply', and 'Cancel' buttons.

10 Click **OK** then Click **Close**.

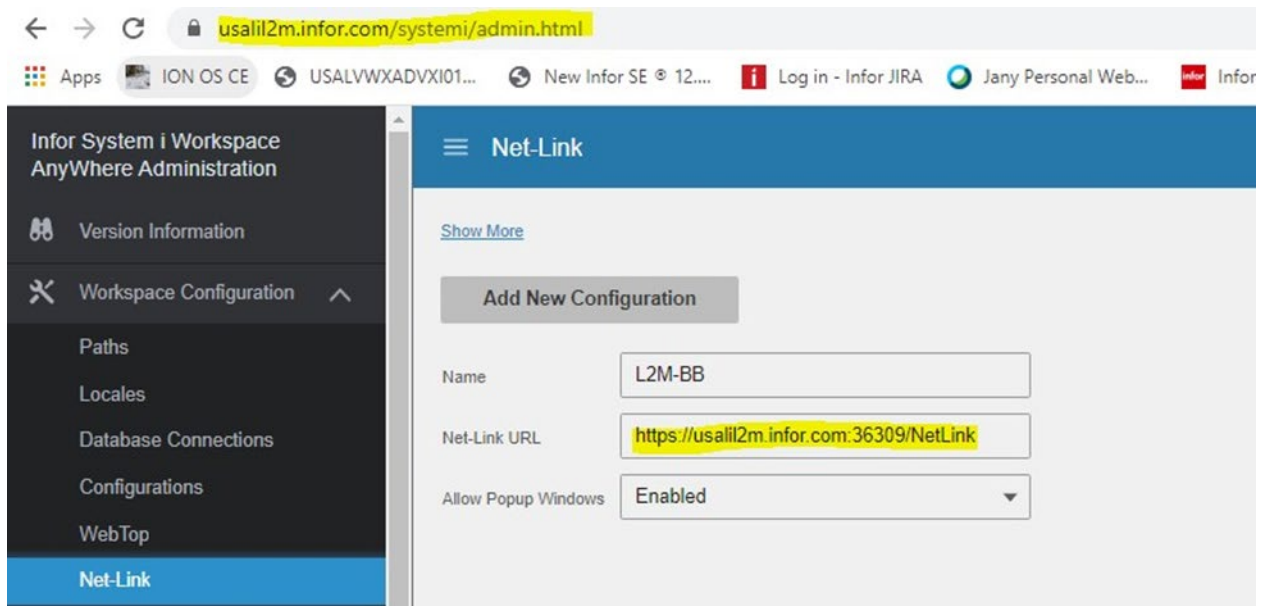
This screenshot shows the same 'Virtual Host Properties' configuration page. At the bottom of the page, a yellow highlighted message states: 'All configuration files were successfully changed. The server must be stopped and started for the changes to take effect.' The 'OK', 'Apply', and 'Cancel' buttons are still visible at the bottom of the configuration area.

Restart both the Net-Link HTTP and Application servers to make sure changes has been reflected successfully.

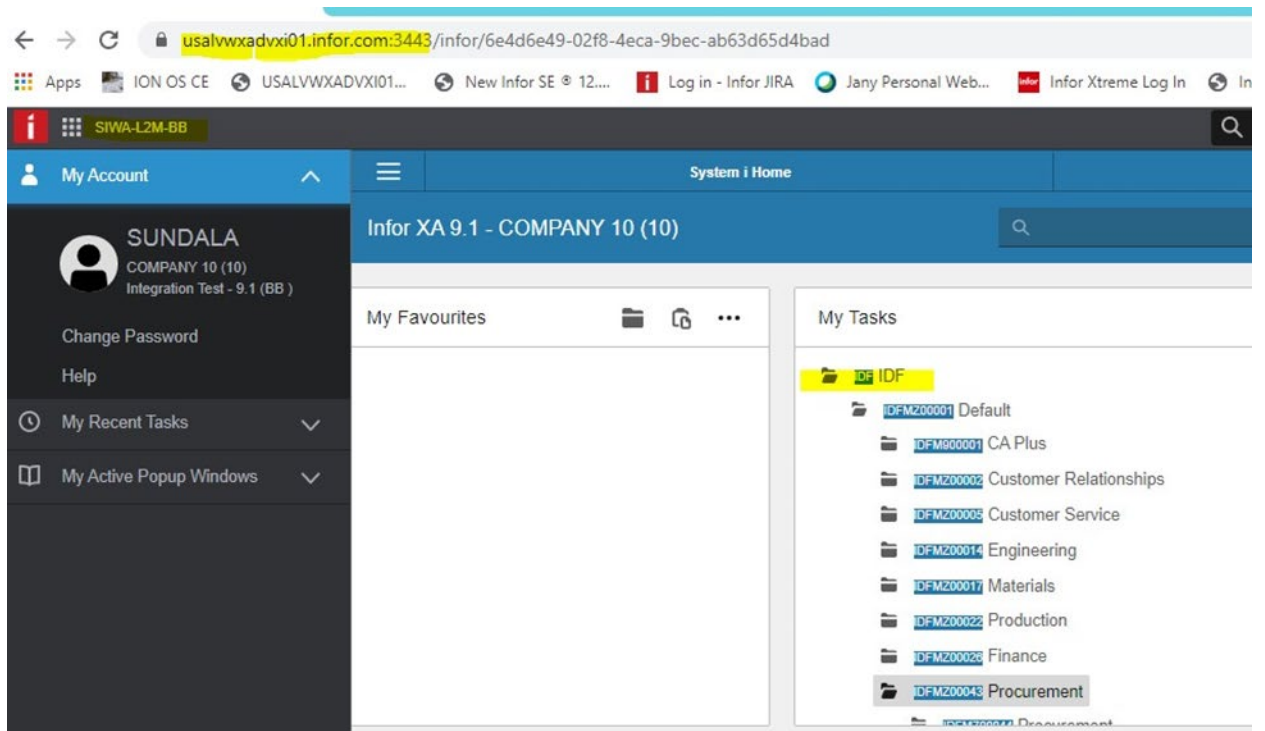
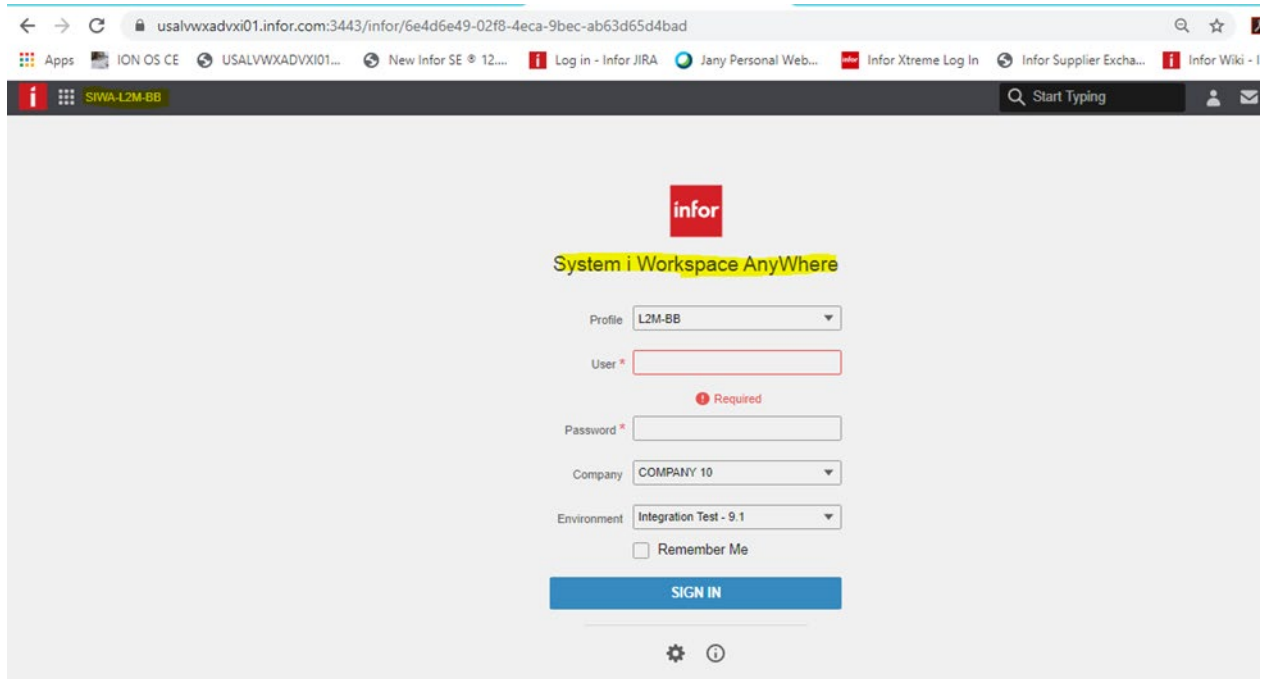
Appendix B Workspace Net-Link URL configuration

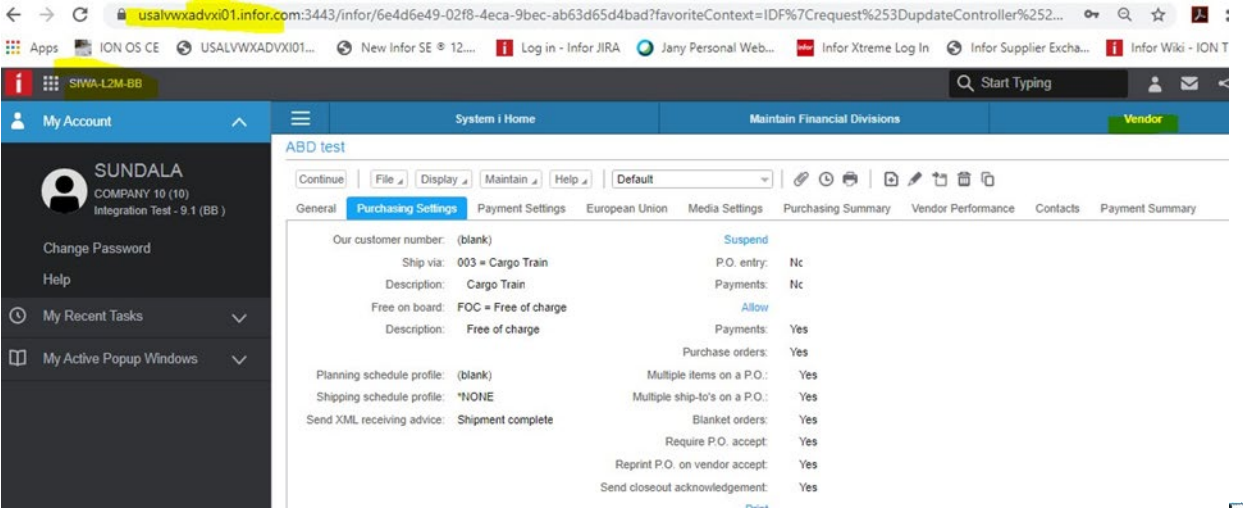
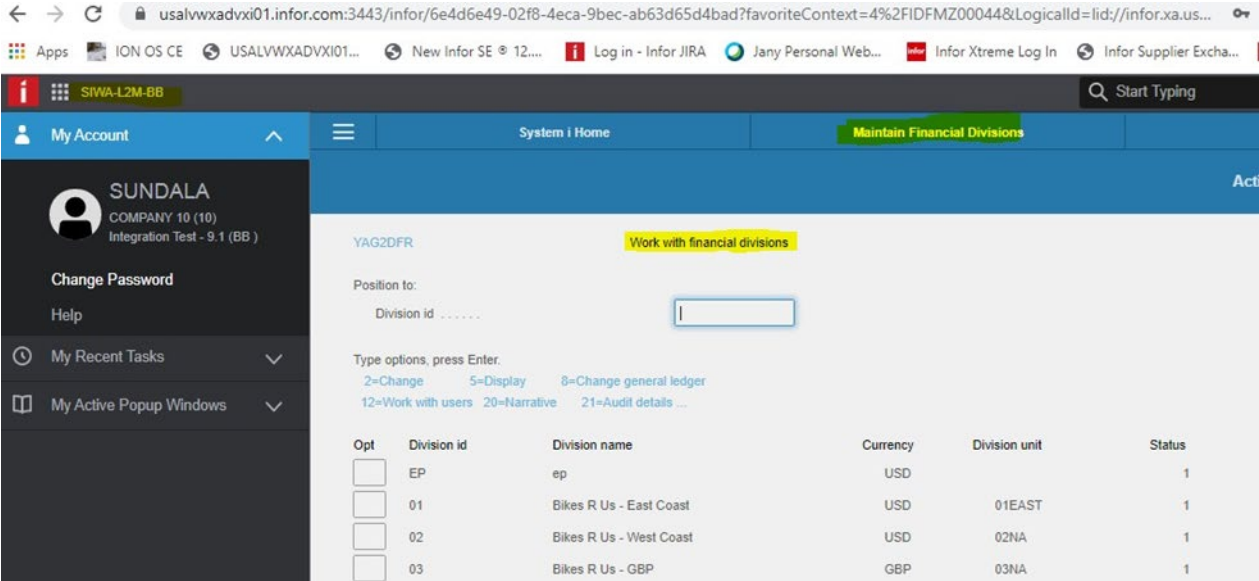
The Net-Link URL is set up in the admin.html file as `http://iseries:port/NetLink`. to the URL must now refer to the web app running inside WebSphere (with ssl). In the Workspace URL (Refer address bar) replace `'/systemi'` with `'/NetLink'` (For example: <https://usalil2m.infor.com:36309/NetLink>).

The below screenshot represents that, we are able to launch and access the System i Workspace Anywhere WebSphere application using the Infor OS on premise.



Workspace Net-Link URL configuration





Appendix C WAR file redeployment

WAR file redeployment

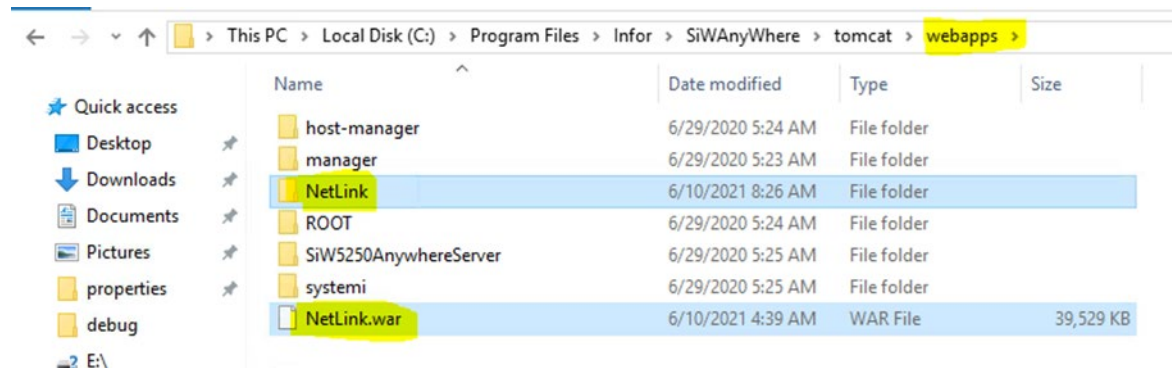
This section explains about the procedure on Net-Link WAR file redeployment. We perform this section only, whenever we want to redeploy the Net-Link war file with new changes.

WAR file generation

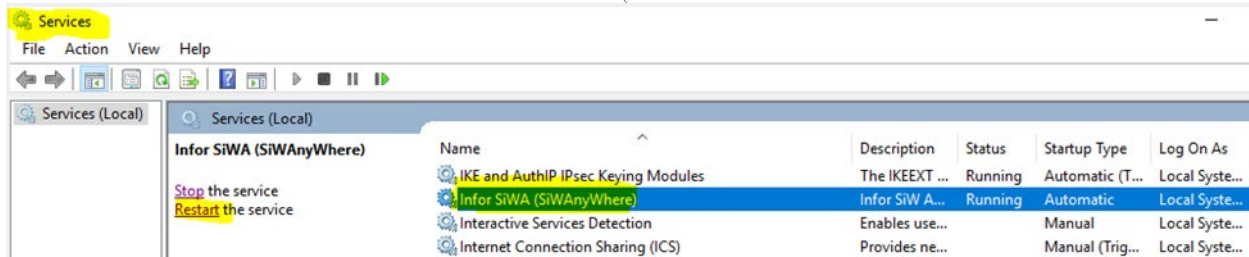
Follow the “**WAR file generation**” section above in this document.

Tomcat (version 7.0 +)

- Delete or take the backup of the **NetLink.war** file & **NetLink** folder from the root of the **webapps** folder of the Tomcat instance, shown as below.



- The redeployment of WAR file involves copying the WAR file to the root of the **webapps** folder of the Tomcat instance. The update is automatically loaded by Tomcat.
- Restart the Infor SiWA service from Windows → Services, shown as below.



WebSphere (version 9.x)

Check that you have the following subsystem running, and that all ADMIN jobs are running within the subsystem:

WRKSBSJOB QHTTPSVR

If the subsystem is not active, issue the following OS400 command:

```
STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)
```

For deployment of WAR file using WebSphere, execute below steps:

- 1 Replace the existing Net-Link WAR file with the new Net-Link WAR file on the IFS of the iSeries which is preferably a 'scratch' folder. However, the location can also be in the root.
- 2 Open the HTTP Administration console (<http://{hostName}:2001/HTTPAdmin>), and log in with *SECADM authority.
- 3 Stop the HTTP server and its associated Application server instances for both the SiWA & NetLink applications.

WAR file redeployment

IBM Web Administration for i | Welcome SAXEAYU

Setup | **Manage** | Advanced | Related Links

All Servers | HTTP Servers | Application Servers | Installations

Common Tasks and Wizards
 Create Web Services Server
 Create HTTP Server
 Create Application Server

Manage All Servers

All HTTP Servers | All Application Servers

Data current as of 21.05.2021 10:33:49.

Server	Version	Status	Address:Port	Associated Application Server	Description
ADMIN	Apache/2.4.20 (IBM i)	Running	*:2001	None	Administration server
ADMIN	Apache/2.4.20 (IBM i)	Stopped	*:8210	None	
APACHEDEF	Apache/2.4.20 (IBM i)	Stopped	*:80	None	IBM supplied sample HTTP server (powered by Apache)
IWADFT	Apache/2.4.20 (IBM i)	Stopped	*:2020	None	
NLWESSVR	Apache/2.4.20 (IBM i)	Stopped	*:36301	NLAPPSVR, V9.0 Base	Net-Link Web server
QIWIRELESS	Apache/2.4.20 (IBM i)	Stopped	*:9004	None	
WISANYWHERE	Apache/2.4.20 (IBM i)	Stopped	*:443	default, V9.0 Base	SIWA_WebSphere

Server startup parameters:

IBM Web Administration for i | Welcome SAXEAYU

Setup | Manage | Advanced | Related Links

All Servers | HTTP Servers | Application Servers | Installations

Common Tasks and Wizards
 Create Web Services Server
 Create HTTP Server
 Create Application Server

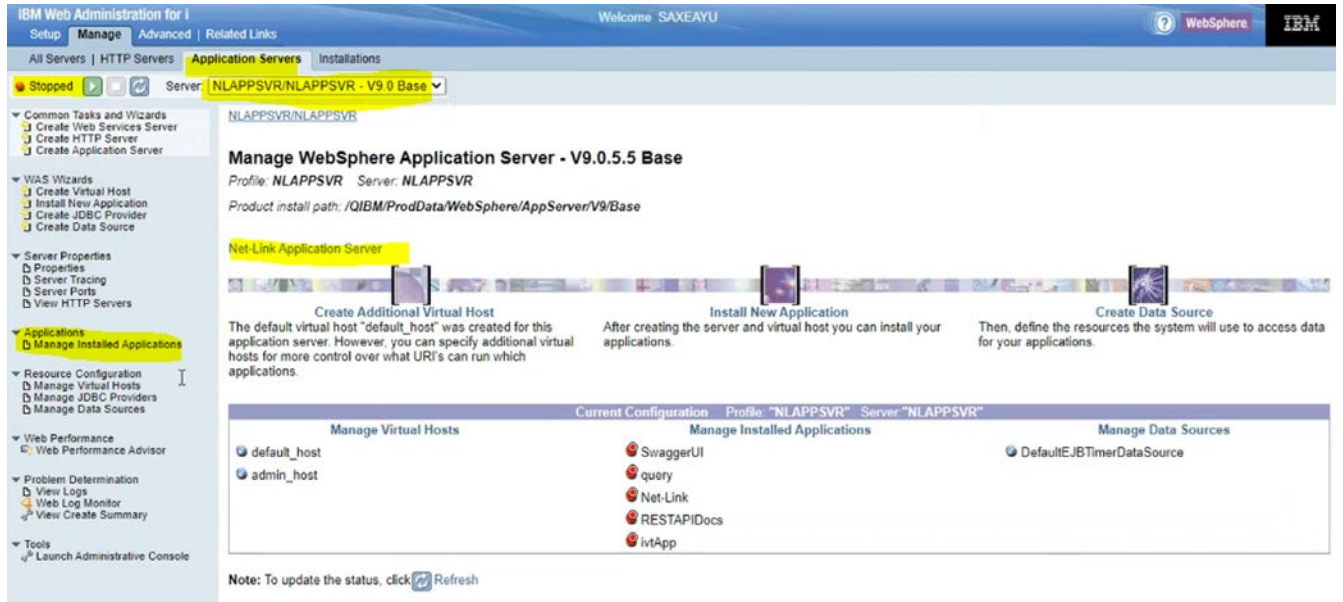
Manage All Servers

All HTTP Servers | All Application Servers

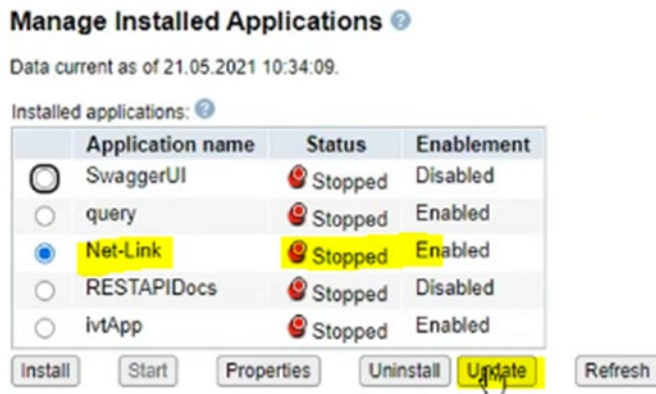
Data current as of 21.05.2021 10:33:52.

Server	Version	Status	Address:Port	Description
Admin1	V8.5 (int app svr)	Running	*:2002	
Admin2	V8.5 (int app svr)	Running	*:2004,2005	
Admin3	V8.5 (int app svr)	Running	*:2006	
Admin4	V8.5 (int app svr)	Running	*:2008	
Admin5	V8.5 (int app svr)	Running	*:2011	
default/server1	V9.0.5.5 Base	Stopped	*:2809,5061,5062,8880,9043,9060,9080,9443	
default/WISAnyWhere	V9.0.5.5 Base	Stopped	*:2810,5063,5064,8881,9044,9051,9081,9444	
NLAPPSVR/NLAPPSVR	V9.0.5.5 Base	Stopped	*:10000,10001,10002,10003,10004,10005,10016,10017	Net-Link Application Server

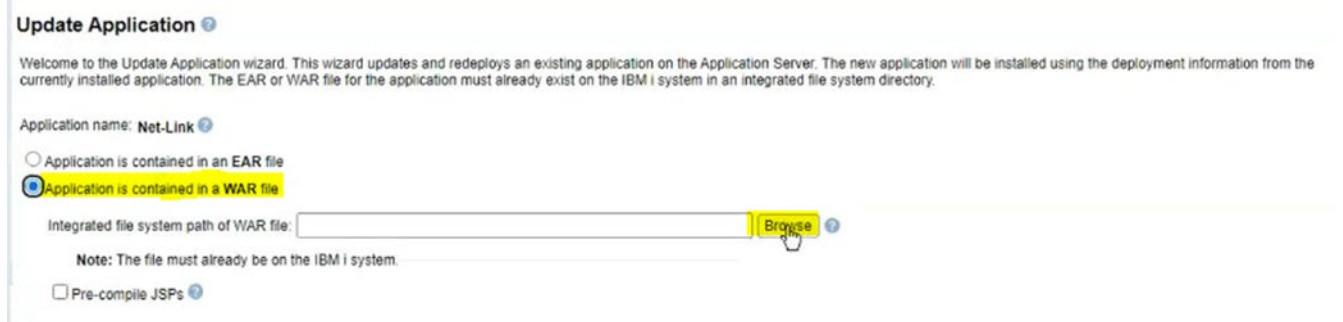
- Click on the Net-Link application server (NLAPPSVR/NLAPPSVR) and then Select **Manage Installed Applications** under **Applications**.

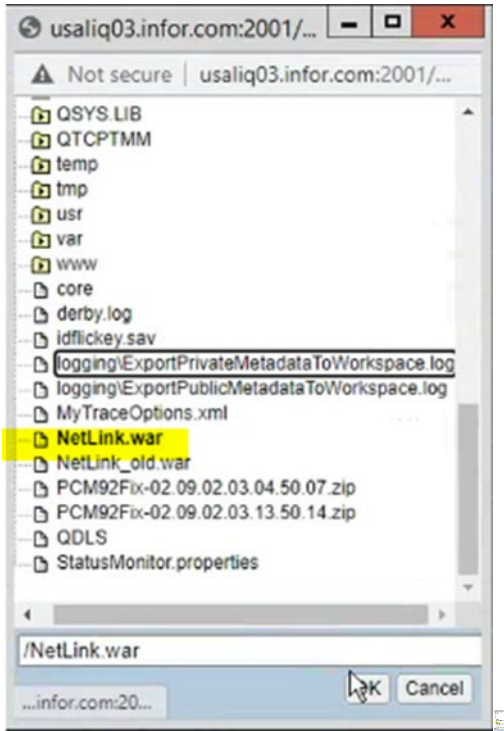


5 Select the Net-Link application and click on **Update**, shown as below.



6 Select the **Application is connected in a WAR file**, click on **Browse** and select the Net-Link war file and click on **OK**.





7 Click on **Update**.

NLAPPSVR/NLAPPSVR > Manage Installed Applications > Update Application

Update Application ?

Welcome to the Update Application wizard. This wizard updates and redeploys an existing application on the Application Server. The r currently installed application. The EAR or WAR file for the application must already exist on the IBM i system in an integrated file syst

Application name: **Net-Link** ?

Application is contained in an EAR file
 Application is contained in a WAR file

Integrated file system path of WAR file: ?

Note: The file must already be on the IBM i system.

Pre-compile JSPs ?

8 The Status of the Net-Link is now changed to Updating.

NLAPPSVR/NLAPPSVR > Manage Installed Applications

Manage Installed Applications ?

Data current as of 21.05.2021 10:39:31.

Installed applications: ?

	Application name	Status	Enablement
<input checked="" type="radio"/>	SwaggerUI	Stopped	Disabled
<input type="radio"/>	query	Stopped	Enabled
<input checked="" type="radio"/>	Net-Link	Updating	Disabled
<input type="radio"/>	RESTAPIDocs	Stopped	Disabled
<input type="radio"/>	ivtApp	Stopped	Enabled

9 After successful update, the status of the Net-Link will change to Stopped.

NLAPPSVR/NLAPPSVR > Manage Installed Applications

Manage Installed Applications

Data current as of 21.05.2021 10:43:10.

Installed applications:

	Application name	Status	Enablement
<input type="radio"/>	SwaggerUI	Stopped	Disabled
<input type="radio"/>	query	Stopped	Enabled
<input checked="" type="radio"/>	Net-Link	Stopped	Enabled
<input type="radio"/>	RESTAPIDocs	Stopped	Disabled
<input type="radio"/>	ivtApp	Stopped	Enabled

10 Start the HTTP server and its associated Application server instances for both the SiWA & NetLink applications.

IBM Web Administration for i

Welcome SAXEAYU

Setup | Manage | Advanced | Related Links

All Servers | HTTP Servers | Application Servers | Installations

Manage All Servers

All HTTP Servers | All Application Servers

Data current as of 21.05.2021 10:47:21.

Server	Version	Status	Address:Port	Description
<input type="radio"/> Admin1	V8.5 (int app svr)	Running	*2002	
<input type="radio"/> Admin2	V8.5 (int app svr)	Running	*2004,2005	
<input type="radio"/> Admin3	V8.5 (int app svr)	Running	*2006	
<input type="radio"/> Admin4	V8.5 (int app svr)	Running	*2008	
<input type="radio"/> Admin5	V8.5 (int app svr)	Running	*2011	
<input checked="" type="radio"/> default:server1	V9.0 5.5 Base	Running	*2809,5061,5062,8880,9043,9060,9080,9443	
<input type="radio"/> default:WSAnyWhere	V9.0 5.5 Base	Running	*2810,5063,5064,8881,9044,9061,9081,9444	
<input type="radio"/> NLAPPSVR/NLAPPSVR	V9.0 5.5 Base	Running	*10000,10001,10002,10003,10004,10005,10016,10017	Net-Link Application Server

IBM Web Administration for i

Welcome SAXEAYU

Setup | Manage | Advanced | Related Links

All Servers | HTTP Servers | Application Servers | Installations

Manage All Servers

All HTTP Servers | All Application Servers

Data current as of 21.05.2021 10:44:35.

Server	Version	Status	Address:Port	Associated Application Server	Description
<input type="radio"/> ADMIN	Apache/2.4.20 (IBM I)	Running	*2001	None	Administration server
<input type="radio"/> AJSP	Apache/2.4.20 (IBM I)	Stopped	*8210	None	
<input type="radio"/> APACHEDFT	Apache/2.4.20 (IBM I)	Stopped	*80	None	IBM supplied sample HTTP server (powered by Apache)
<input type="radio"/> IWADEFI	Apache/2.4.20 (IBM I)	Stopped	*2020	None	
<input type="radio"/> NLWEBSVR	Apache/2.4.20 (IBM I)	Running	*36301	NLAPPSVR, V9.0 Base	Net-Link Web server
<input type="radio"/> QIWIWRELESS	Apache/2.4.20 (IBM I)	Stopped	*9004	None	
<input checked="" type="radio"/> WSANYWHERE	Apache/2.4.20 (IBM I)	Running	*443	default, V9.0 Base	SIWA_WebSphere

Server startup parameters:

Appendix D Configuring SiWA IBMi WAS with single port

Configuring all XA web components to use a single HTTP server and port on WebSphere

To simplify web security for XA deployments where all web related components are running on a single IBM i server, a single HTTP server can be used when deploying through a firewall. The components include SiW Anywhere and Net-Link. These instructions will provide the basics for configuring this type of environment.

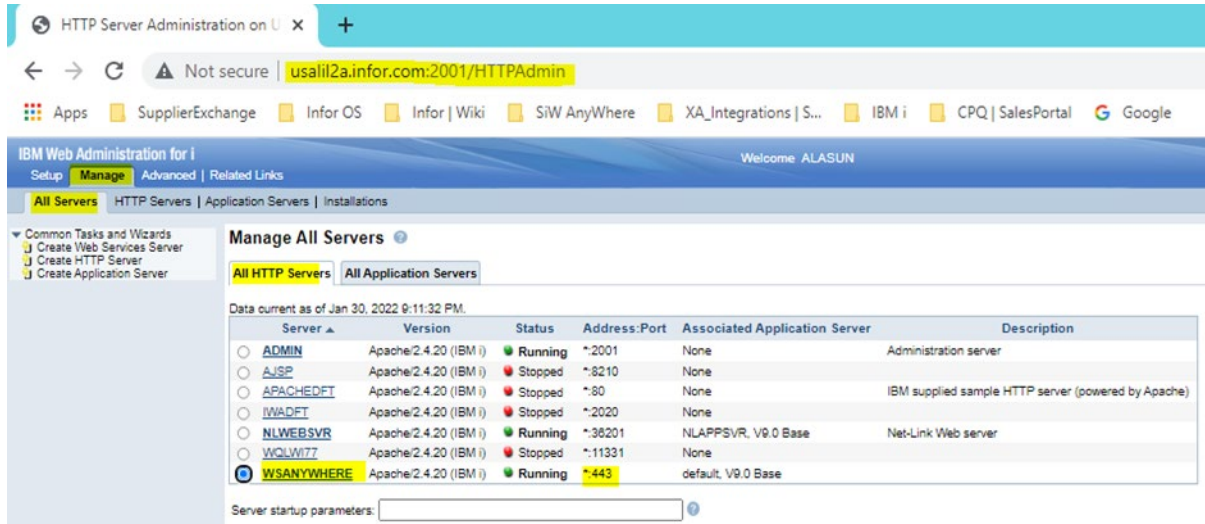
Approach

- Install all components on a single IBM i server
- Setup SIWA on SSL port 443 (default, can be different)
- Setup Net-Link on another port
- Net-Link is on 36001 by default
- Install NetLink.war in a new WAS profile

SiW Anywhere HTTPD.conf changes

- 1 Login to IBMi Web Administration, using the below URL (where **hostname**, is the FQDN of the IBMi server)
Error! Hyperlink reference not valid.
(For example: <http://usali12a:2001/HTTPAdmin>)
- 2 Navigate to **Manage -> All Servers -> All HTTP Servers**, click on the SiWA configured HTTP server, which is running on 443 port (for example: *WSANYWHERE*) shown as below.

Configuring SiWA IBMi WAS with single port



The screenshot shows the IBM Web Administration for i console. The browser address bar displays "usall2a.infor.com:2001/HTTPAdmin". The console header includes "Setup", "Manage", "Advanced", and "Related Links". The "All Servers" tab is active, showing a table of servers. The "WSANYWHERE" server is highlighted in yellow.

Server	Version	Status	Address:Port	Associated Application Server	Description
ADMIN	Apache/2.4.20 (IBM i)	Running	*:2001	None	Administration server
AJSP	Apache/2.4.20 (IBM i)	Stopped	*:8210	None	
APACHEDEF	Apache/2.4.20 (IBM i)	Stopped	*:80	None	IBM supplied sample HTTP server (powered by Apache)
IWADFT	Apache/2.4.20 (IBM i)	Stopped	*:2020	None	
NLWEBSVR	Apache/2.4.20 (IBM i)	Running	*:38201	NLAPPSVR, V9.0 Base	Net-Link Web server
WQLW77	Apache/2.4.20 (IBM i)	Stopped	*:11331	None	
WSANYWHERE	Apache/2.4.20 (IBM i)	Running	*:443	default, V9.0 Base	

- 3 On WSANYWHERE HTTP Server, open the httpd.conf file by navigating to **Tools -> Edit Configuration File**, shown as below.

The screenshot shows a web browser window with the URL `usali2a.infor.com:2001/HTTPAdmin`. The page title is "Manage Apache server 'WSANYWHERE' - Apache/2.4.20 (IBM i)". The interface includes a navigation menu on the left with categories like "Common Tasks and Wizards", "HTTP Tasks and Wizards", "Server Properties", and "Tools". The main content area contains introductory text for the Apache server configuration, such as "Welcome to the IBM Web Administration for i manage forms for HTTP Server (powered by Apache)." and instructions on how to get started and optimize performance.

Configuring SiWA IBMi WAS with single port

The screenshot shows the IBM Web Administration console interface. The main window displays the 'Edit Configuration File' dialog for the file `www/wsanywhere/conf/httpd.conf`. The file content is shown in a text area, with the following lines highlighted in yellow:

```
LoadModule proxy_module /QSYS.LIB/QHTTSPVR.LIB/QZSRCORE.SRVPGM
LoadModule proxy_http_module /QSYS.LIB/QHTTSPVR.LIB/QZSRCORE.SRVPGM
```

The console interface includes a navigation pane on the left with categories like 'Common Tasks and Wizards', 'HTTP Tasks and Wizards', 'Server Properties', and 'Tools'. The top of the console shows the server name 'WSANYWHERE' and the configuration area 'Global configuration'.

- 4 It is suggestible to take a backup of httpd.conf file, before proceeding with any changes.
- 5 Add the below statements to the httpd.conf file in the SiWA environment. If these LoadModule statements already exist be sure they are not commented out.

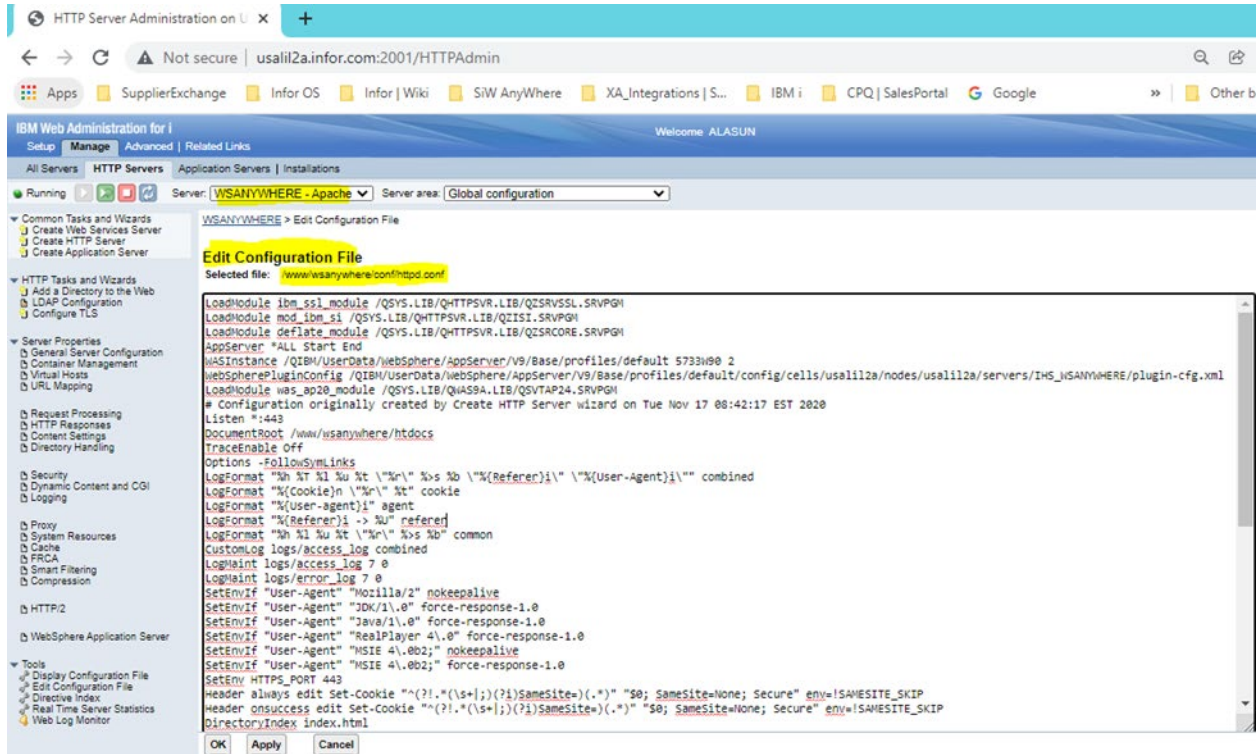
LoadModule proxy_module /QSYS.LIB/QHTTSPVR.LIB/QZSRCORE.SRVPGM

LoadModule proxy_http_module /QSYS.LIB/QHTTSPVR.LIB/QZSRCORE.SRVPGM

The screenshot shows the IBM Web Administration console interface. The main window displays the 'Edit Configuration File' dialog for the file `www/wsanywhere/conf/httpd.conf`. The file content is shown in a text area, with the following lines highlighted in yellow:

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LoadModule proxy_module /QSYS.LIB/QHTTSPVR.LIB/QZSRCORE.SRVPGM
LoadModule proxy_http_module /QSYS.LIB/QHTTSPVR.LIB/QZSRCORE.SRVPGM
```

The console interface includes a navigation pane on the left with categories like 'Common Tasks and Wizards', 'HTTP Tasks and Wizards', 'Server Properties', and 'Tools'. The top of the console shows the server name 'WSANYWHERE' and the configuration area 'Global configuration'.



6 Add the below statements to the virtual host section for SSL for SiWA. The virtual host section would be between the **<VirtualHost.443>** and **</VirtualHost>** lines. There will be other statements in this section as well.

Note: The Net-Link proxypass would point to the IDF SSL web server and port if NetLink.war is deployed in an app server connected to an SSL enabled HTTP server. If not, use the standard IDF Net-link server and port.

```

<VirtualHost *:443>
# Set SSL application for NetLink proxy if using SSL
SSLProxyAppName QIBM_HTTP_SERVER_WSANYWHERE
SSLProxyEngine on

# NetLink
ProxyPass /NetLink https://myibmi.infor.com:port/NetLink
ProxyPassReverse /NetLink https://myibmi.infor.com:port/NetLink

</VirtualHost>
    
```

(Where *myibmi* is the hostname of IBMi server and *port* is Net-Link running port, for example shown as below)

```

WSANYWHERE > Edit Configuration File

Edit Configuration File
Selected file: /www/wsanywhere/conf/httpd.conf

SetEnvIf "User-Agent" "RealPlayer 4\.\0" force-response-1.0
SetEnvIf "User-Agent" "MSIE 4\.\0b2;" nokeepalive
SetEnvIf "User-Agent" "MSIE 4\.\0b2;" force-response-1.0
SetEnv HTTPS_PORT 443
Header always edit Set-Cookie "^(?!.*(\s+|;)(?i)SameSite=)(.*) "$0; SameSite=None; Secure" env=!SAMESITE_SKIP
Header onsuccess edit Set-Cookie "^(?!.*(\s+|;)(?i)SameSite=)(.*) "$0; SameSite=None; Secure" env=!SAMESITE_SKIP
DirectoryIndex index.html
<Directory />
  Require all denied
</Directory>
<Directory /www/wsanywhere/htdocs>
  Require all granted
</Directory>
<VirtualHost *:443>
  # Set SSL application for NetLink proxy if using SSL
  SSLProxyAppName QIBM_HTTP_SERVER_WSANYWHERE1
  SSLProxyEngine on
  SSLEngine On
  SSLAppName QIBM_HTTP_SERVER_WSANYWHERE1
  SSLProtocolDisable SSLV2 SSLV3
  # NetLink
  ProxyPass /NetLink https://usali12a.infor.com:36201/NetLink
  ProxyPassReverse /NetLink https://usali12a.infor.com:36201/NetLink
</VirtualHost>
AddOutputFilterByType DEFLATE text/html
AddOutputFilterByType DEFLATE text/css
AddOutputFilterByType DEFLATE text/javascript
AddOutputFilterByType DEFLATE application/javascript
AccessFileName .htaccess
  
```

Caution: The parameter value of *SSLProxyAppName* should match with *SSLAppName*.

For example shown as below:

WSANYWHERE > Edit Configuration File

Edit Configuration File
Selected file: /www/wsanywhere/conf/httpd.conf

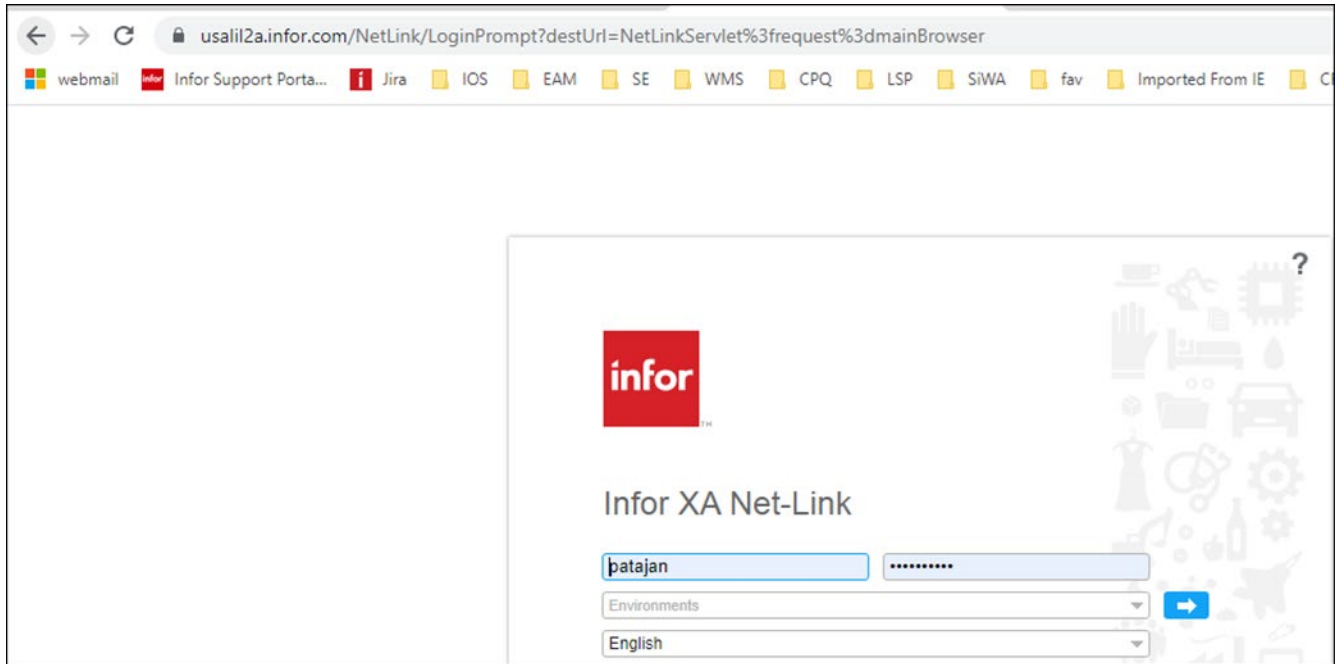
```

SetEnvIf "User-Agent" "RealPlayer 4\.0" force-response-1.0
SetEnvIf "User-Agent" "MSIE 4\.0b2;" nokeepalive
SetEnvIf "User-Agent" "MSIE 4\.0b2;" force-response-1.0
SetEnv HTTPS_PORT 443
Header always edit Set-Cookie "^(?!.*(\s+|);)(?i)SameSite=)(.*)" "$0; SameSite=None; Secure" env=!SAMESITE_SKIP
Header onsuccess edit Set-Cookie "^(?!.*(\s+|);)(?i)SameSite=)(.*)" "$0; SameSite=None; Secure" env=!SAMESITE_SKIP
DirectoryIndex index.html
<Directory />
    Require all denied
</Directory>
<Directory /www/wsanywhere/htdocs>
    Require all granted
</Directory>
<VirtualHost *:443>
    # Set SSL application for NetLink proxy if using SSL
    SSLProxyAppName QIBM_HTTP_SERVER_WSANYWHERE1
    SSLProxyEngine on
    SSLEngine On
    SSLAppName QIBM_HTTP_SERVER_WSANYWHERE1
    SSLProtocolDisable SSLV2 SSLV3
    # NetLink
    ProxyPass /NetLink https://usall12a.infor.com:36201/NetLink
    ProxyPassReverse /NetLink https://usall12a.infor.com:36201/NetLink
</VirtualHost>
AddOutputFilterByType DEFLATE text/html
AddOutputFilterByType DEFLATE text/css
AddOutputFilterByType DEFLATE text/javascript
AddOutputFilterByType DEFLATE application/javascript
AccessFileName .htaccess

```

OK Apply Cancel

- 7 Click on **Apply** and **OK**.
- 8 Restart the SIWA configured HTTP server and its associated Application server.
- 9 Verify if NetLink application is launching with same 443 port or without port as now.



SiW Anywhere Admin settings

Once the above settings are deployed and validated, log into SiWA Admin and update the Net-Link URL to use the same server and port that SiWA is using.

For example, if you had Net-Link set to `https://usalil2a.infor.com:36201/NetLink`, then it should be changed to `https://usalil2a.infor.com/NetLink`, to use the SiWA server and port that will be opened in the firewall.

