# Adding WAN Access to Existing Install RecTrac 3.1

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## Adding WAN Access to Existing Install of 3.1

**Note:** This document assumes an already-configured WebServer in your DMZ that is currently servicing webtrac.

3.1 WAN access for RecTrac essentially functions as a web site similar to WebTrac. The following steps would be used to add RecTrac WAN access in a scenario where there is already a publicly available WebTrac website configured. In the scenario below, *webtrac.somecity.com* would be replaced with your WebTrac domain. This document also assume the WebServer is dedicated to WebTrac/RecTrac (running as its own site in IIS and that when originally configured, the home directory was selected as \VSI3\RecTrac\WebServer\WEB)

For Example: Preconfigured WebTrac site:

https://webtrac.somecity.com/wbwsc/webtrac.wsc/splash.html

## On the WebServer

- 1 Navigate to IIS on your WebTrac WebServer stationed in the DMZ.
- 2 Right-click on the website representing your WebTrac site (*For Example: webtrac.yourcity.com*) and choose Add Virtual Directory. Set the Alias to GUI, and browse to the GUI folder via X:\VSI3\RecTrac\WebServer\GUI where X:\ represents the drive the VSI product is installed on. Click OK.

Add Virtual Directory	? ×
Site name: Default Web Site Path: /	
Alias:	
GUI	
Example: images	
Physical path:	
X\$\VSI3\RecTrac\WebServer\GUI	
Pass-through authentication	
Connect as Test Settings	
OK Ca	incel



**3** Beneath the newly created GUI folder within your website in IIS, there will be wbwsc folder. Select this folder and then double click **Handler Mappings**.



- 4 Remove the CGI-EXE and ISAPI-DLL disabled features if applicable.
  - If "CGI-EXE" is listed as disabled, then highlight/select and click **Remove**.
  - If "ISAPI-DLL" is listed as disabled, then highlight/select and click **Remove**.
- 5 On the right-hand side of the screen (under the Actions heading), select Add Module Mapping.
  - Req Path = \*.exe
  - Module = Select CgiModule from the drop-down list.
  - Name = CGI-exe
  - Click Request Restrictions. Select the Invoke Handler and File Options. Click OK.
- 6 On the right-hand side of the screen (under the Actions heading), select Add Script Map.
  - Request Path = cgiip.exe
  - Executable = <x>:\VSI3\Progress\DLC117\bin\cgiip.exe %s %s
  - Name = CLIENT
  - Click **Request Restrictions**. Select the *Invoke Handler* and *File or Folder options*. Click **OK**.
  - After clicking OK to add this map; a message box pops asking "Would you like to enable this ISAPI extension?" answer **Yes**.
- 7 On the right-hand side of the screen (under the Actions heading), select **Add Script Map**.
  - Request Path = \*.wsc
  - Executable = <x>:\VSI3\Progress\DLC117\bin\cgiip.exe %s %s
  - Name = CLIENTWSC
  - Click Request Restrictions. Select the Invoke Handler and File options. Click OK.



- After clicking OK to add this map; a message box pops asking "Would you like to enable this ISAPI Extension" answer **Yes**.
- **8** Through file explorer, browse to X:\VSI3\RecTrac\WebServer\GUI\wbwsc where X:\represents the installation drive on the VSI products.
- **9** Edit the client.wsc and clientdemo.wsc files respectively to point to the RecTrac server. The standard port for the client and clientdemo are 4033 and 4034 respectively.

								clie	nt.ws	c - N	lote	pad	
File	Edit	Format	View	/ Help									
Red	Trac	SRVR 4	033										
						c	client	dem	o.wsc	- N	otep	ad	
File	Edit	Format	View	Help									
Rec	TraxS	rvr 40	34										

**10** If you intend to use Peripherals in your WAN configuration. Please continue with the steps from RT 3 1 VIC AIA WAN Config-w.pdf

### In Your Firewall

1 The appropriate ports need to be open between the WebServer and the RecTrac server. In standard installations you will need 4033, 4034 are the broker TCP ports, and dynamic range is either using 2701-2751 if the server was installed prior to 3.1.06.00 and is using 2700-2750 if the server was installed after on version 3.1.06.00 or higher. The dynamic range being used by the client live broker on the RecTrac server can be verified by calling VSI support.

```
WebServer -----> RecTrac Server
4033
4034
2701-2751 (if installation media prior to 3.1.06.00 is used)
2700-2750 (if installation media 3.1.06.00 or later is used)
```



### On the RecTrac Server

- 1 If you have the Windows firewall enabled on this server, make the same exception you made on your physical firewall.
- 2 Under Start Programs VSI3: Run DB\_Utilities as an Administrator.
- 3 Choose Update Interface Parameters and click Next>.

V Database U	tilities Setup 📃 🗖 🗙
Database Utilities Please select the utility to run.	
O Truncate Bi	O Apply Patch File
O Index Rebuild	
<ul> <li>Update Interface Parameters</li> </ul>	
O Update VIC Deployment	
Online Database Backup	Update Interface Parameters
O Repair Database	This utility is used to update the interface parameters of your database
O Restore Database	include parameters of your database.
O Refresh Database	
Database Utilities 3,1 Vermont Systems Inc. ——	Next > Cancel

4 Create and Interface Parameter record "RecTrac\_WAN" and choose Process.



**Database must be running**		
Please select the parameter type:	Parameter Name	
RecTrac	RecTrac_WAN	
VIC Weblinac	Parameter Description	
Mobile RecTrac	3.1 LIVE WAN	
O Mobile Webtrac		
Base HREF		
https://webtrac.somecity.com/gui/	/wbwsc/dient.wsc/	
Database File	Tenant	
x WSI3 RecTrac Data LIVE rect	Browse VSI	

**5** At this time if your firewall rules are correct, you should now be able to access RecTrac through the WAN using the following URL, replacing *webtrac.mycity.com* with your WebTrac domain information.

https://webtrac.mycity.com/gui/wbwsc/client.wsc/index.html?interfaceparameter=RecTrac\_WAN



## AIA VIC Configuration RecTrac 3.1

**Note:** This doc should be used for a WAN installation. This is <u>NOT</u> the regular Aia VIC document. The regular Aia VIC doc is available via the RecTrac 3.1 Help • VIC profile • Full Page ("?") Help.

## Configure Ubroker.properties file and update web.xml

You will need to make sure the following entries exist in your ubroker.properties file under E:\vsi3\Progress\DLC117\properties (relative to your server install).

Verify under [AIA] the following value exists

### httpsEnabled=0

Copy and paste the following entry into the ubroker file, and update the log file path so it is valid in your install:

[AIA.Aiavic]

controllingNameServer=vsins1

logAppend=1

allowAiaCmds=0

logFile=E:\VSI3\logs\Aiavic.aia.log

loggingLevel=2

Navigate to E:\VSI3\Tomcat\webapps\aia\WEB-INF (relative to your server install) and Update the four (4) highlighted lines below in the Web.xml file.

**Note:** Ensure you include the values all of the way down to </web-app>, and update the paths for your server install.

<web-app>

<servlet>

<servlet-name>



### Aiavic

</servlet-name>

<servlet-class>

com.progress.aia.Aia

</servlet-class>

<init-param>

<param-name>InstallDir</param-name>

<param-value>E:\VSI3\Progress\DLC117</param-value>

</init-param>

<init-param>

<param-name>instanceName</param-name>

<param-value>Aiavic</param-value>

</init-param>

<init-param>

<param-name>propertyFileName</param-name>

<param-value>E:\VSI3\Progress\DLC117/properties/ubroker.properties</param-value>

</init-param>

</servlet>

<servlet-mapping>

<servlet-name>

Aia<mark>vic</mark>

</servlet-name>

<url-pattern>

/Aia<mark>vic</mark>

</url-pattern>



</servlet-mapping>

</web-app>

### AIA on the WebTrac Server for VIC

If installing AIA on the *WebTrac* Server for VIC, verify the following values are in the ubroker.properties file:

[NameServer.VSINS1]

autoStart=1

environment=VSINS1

portNumber=4032

srvrLogFile=C:\VSI3\Logs\vsins1.ns.log

hostName=SERVERNAME or IP (of the Server running the VIC AppServer)

location=remote

If this entry does not exist, it will need to be added

Also: UDP port 4032 needs to be open bidirectionally for VIC to communicate.

### IIS 7.0

### Configuration of ARR

### Notes:

1. If using Server 2016 or Server 2012, then go to <u>Appendix A</u> for ARR Installation instructions before proceeding here.

2. Ensure TLS 1.0 is ENABLED both on the server and firewall. This will normally be disabled for locations who follow the new November 2016 PCI Compliance, which requires TLS 1.0 to be disabled. Verify that you can get to the VSI Application Center with the following URL: https://<yourdomainname>/aia/Aia

The VIC portion of the setup will result in a timeout if TLS 1.0 is disabled.

1 Install Application Request Routing 2.0 (ARR) by running the executable on the WebServer. Accept all defaults.



- This executable is available from the I drive/FTP Site: File Updates And Drivers\RecTrac\3.1\ARR
- **2** Open IIS and expand the WebServer. A successful installation will result in a Server Farm folder being created underneath the server beneath the Sites folder:

Hie Action View Help	
🗢 🔿 🖄 🖬 🛛	
<ul> <li>Server Manager (DPDF51)</li> <li>Roles</li> <li>File Services</li> <li>Web Server (IIS)</li> <li>Internet Information Services (IIS) Managet</li> <li>Windows Server Update Services</li> <li>Features</li> <li>Teatures</li> <li>Configuration</li> <li>Storage</li> </ul>	Internet Information Services (IIS) Manager

- **3** Highlight Server Farm and under the actions tab in the right corner off IIS 7 click **Create Server Farm**.
- 4 Enter *Tomcat* as the farm name and *ENSURE* online *NOT* enabled as shown below:

OPDF51 → Servel	r Farms 🔸		
Connections			
💐 - 🔚   🖄   🕵	Create Server Farm		? ×
Start Page DPDF51 (DECPARKS\administrator)	Specify Server Farm Name		
	Server farm name:		
	Tomcat		
	, Online		
	Previ	ous Next Einish	Cancel
	1107		Cancol

Internet Information Services (IIS) Manager



- 5 Click Next.
- 6 Enter localhost (Not External IP).
- 7 Click Advanced Settings.
- 8 Click the + symbol next to applicationRequestRouting
- 9 Enter 8085 in http Port and 8443 in the support fields respectively.

Internet Information Services (IIS) M	lanager	
G S II + DPDF51 + Server	Farms 🕨	
Connections		
🔍 - 📙   🖄   😣	Create Server Farm	? ×
Start Page DPDF51 (DECPARKS\administrator) Application Pools	Add Server	
	Server address:	
	localhost	Add
	, I▼ Online	
	Hide advanced settings	Remove
	Advanced Settings	
	httpPort 8085	
	weight 100	-
	-	
	Server Address Status	
	Previo	ous Next Finish Cancel

- 10 Click Add at the top right.
- 11 Click Finish.
- **12** Answer **NO** to the challenge message for creating the default rule. Failure to answer 'No' will create a default rule at the WebServer root level in IIS directing all traffic to Tomcat which will essentially break all IIS functions until the rule is removed manually.
- 13 Click on the newly created Tomcat server under the Server Farm.



Internet Information Services (IIS) Manager						
COC II > DPDF51 > Server Farms > To	omcat 🕨					
Connections Start Page DPDF51 (DECPARKS)administrator) Application Pools Server Farms Connections Start Page Start Page	smcat > Server F Group by: Area Server Farm Caching Routing Rules	Farm	Load Balance	Monitoring and Management	Proxy	

- 14 Double click on Proxy.
- **15** Make sure that under custom headers *Include TCP port from client* is not enabled and that under buffer settings the *Response buffer threshold* is set to 0.



Internet Information Services (I	IS) Manager
🚱 💿 🛛 👢 🕨 DPDVSI 🔸 Serv	er Farms 🔸 Tomcat 🕨
File View Help	
Connections Start Page DPDVSI (DPDVSI \Administrator) Application Pools Sites Server Farms Tomcat	Proxy         Use this feature to configure proxy settings for Application Request Routing.         HTTP version:         Pass through         Ime-out (seconds):         30         Reverse rewrite host in response headers         Custom Headers         Preserve client IP in the following header:         X-Forwarded-For         Include TCP port from client IP         Forward encoded client certificate in the following header:         X-ARR-ClientCert         Mark request logs with GUIDs in the following header:         X-ARR-LOG-ID         Buffer Setting         Response buffer (KB):         4096         Response buffer threshold (KB):         0

- **16** Once these settings are implemented click **Apply** in the top right corner under the Actions tab.
- **17** Click back on Tomcat under Server Farms on the left.
- **18** Next double click on **Routing Rules**. The screen should be set as follows:



Internet Information Services (IIS) Manager						
OPDF51 → Server Farms → To	amcat 🕨					
Connections	Routing Rules         Use this feature to define simple URL Rewrite rules in Application Request Routing. For advanced scenarios, follow the URL Rewrite link.         Routing         Use URL Rewrite to inspect incoming requests         Enable SSL offloading         Requests with the following extensions are not forwarded:         Example: *.jpg, *.css, *.gif         Requests with the following patterns are not forwarded:         Example: //mages/*, */templates/*					

- **19** From the screen above in the right side under the Actions tab click **URL Rewrite** under Advanced Routing.
- 20 From the URL Rewrite screen in the top right under the Actions tab, click Add Rule.
- 21 Choose Blank Rule under Inbound Rules.
- 22 Enter VSI AIA Traffic as the name, and configure the rule as follows:



③ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	
Connections	Edit Inbound Rule     Name:     VSI AIA TRAFFIC     Match URL     Match uRL:     Using:     Matches the Pattern     Pattern:   *aia/Aia*   Test pattern   Ignore case
	Conditions        Server Variables
	Action Action type: Route to Server Farr Action Properties Scheme: Server farm: Path: http:// Tomcat //(R:0) Stop processing of subsequent rules

**Note:** If using an https connection, choose http:// under Action properties->Scheme when creating the rule.

- **28 ENSURE** that the toggle below the Action Properties box shown above *Stop processing of subsequent rules* **IS** enabled.
- 29 Click Apply in the top right under the Actions tab.
- **30** Click **Back** to rule under the Actions tab on the right.
- **37** After verifying the above rule is correct click on **Tomcat** under Server Farms on the left. To bring the request routing online click **Bring Server Farm Online** under the Actions tab to the right.

Now go into Services.msc:

If Apache Tomcat 8 is not running, start it, if it is, running, restart it.



For your VIC Profile, you will need to select the appropriate WAN version selected, which should include your domain name with /aia/Aiavic?AppService=(Name of VIC Appserver), as well as the other pertinent values which should be automatically populated.

## Steps Required Regardless of IIS version

### Verifying Redirect Configuration IIS6/IIS7

- 1 Verify that AIA is functinoing by visiting the following URLs:
  - WAN: <u>https://<yourdomainname>/aia/Aiavic</u>.
  - LAN: <u>http://<yourservername>:4180/aia/Aiavic</u>.

A successful test will result in a message of: Internal commands restricted: access denied.

**Note:** No port number (8085) is needed in the URL when using ARR. Tomcat port 8085 SHOULD NOT be open to the outside world for RecTrac WAN purposes

## Appendix A - Loading ARR on Server 2016

- **1** Determine whether Web Platform Installer is loaded already as an application on the machine.
  - Open the search field and type *web platform* and ensure Apps is selected.
  - If Web Platform Installer is loaded, launch the application and then continue to Step 3 below. If Web Platform Installer is not loaded, go to Step 2.
- 2 If Web Platform Installer is not loaded, then visit the following URL through a browser on the web server to load the Web Platform Installer:

https://docs.microsoft.com/en-us/iis/install/web-platform-installer/web-platform-installerdirect-downloads



## Web Platform Installer Direct Downloads

🖬 02/20/2015 • 🕒 2 minutes to read • Contributors 🍘 😨

#### by Chris Sfanos

#### WebPI Direct Download Links

In some cases, it may be helpful to be able to download the Web Platform Installer directly vs using the launcher to get started. Below are the links for the current version (WebPI 5.0) and the previous version (WebPI 4.6)

#### WebPI 5.0

x86: https://download.microsoft.com/download/C/F/F/CFF3A0B8-99D4-41A2-AE1A-496C08BEB904/WebPlatformInstaller x86 en-US.msi

x64: https://download.microsoft.com/download/C/F/F/CFF3A0B8-99D4-41A2-AE1A-496C08BEB904 /WebPlatformInstaller amd64 en-US.msi

- When prompted, choose Run
- This will launch and install the Web Platform Interface.
- Accept the License Agreement, click **Install**, and follow the installation prompts on the Setup Wizard.
- **3** Once the Web Platform Installer App is loaded, launch it from the Start menu Microsoft Web Platform Installer.

0	Web Platform	Installer 5.0		- 🗆	×
	Spotlight	Products Applications	application	on request routing	×
		Name	Released	Install	
	Ω	Microsoft Azure Service Fabric SDK and Tools - 3.0.467 (VS2015)	2/20/2018	Add	
	Ω	Microsoft Azure Service Fabric SDK - 3.0.467	2/20/2018	Add	
		Microsoft Azure PowerShell	2/13/2018	Add	

	iled Options Install F		
0 Items to be installed	Options	Install	Exit



**4** Enter "Application Request Routing" in the Search window and press <ENTER>. This will return a result set similar to what is shown below.

	Name	Released	Install
	Application Request Routing 2.5 with KB2589179	9/3/2010	Add
/	Application Request Routing 2.5	3/29/2011	Add
/	KB2589179 for Application Request Routing 2.5	9/3/2010	Add
	Application Request Routing 3.0	5/27/2015	Add

	0 Items to be installed	Options Install Exit
--	-------------------------	----------------------

5 Highlight/Select the most recent version of *Application Request Routing X.x* and click **Add**.

0 Web Platfor	m Installer 5.0		- 🗆 X
😋 Searc	h results for application request routing		٩
	Name	Released	Install
	Application Request Routing 2.5 with KB2589179	9/3/2010	Add
1 de	Application Request Routing 2.5	3/29/2011	Add
. She	KB2589179 for Application Request Routing 2.5	9/3/2010	Add
	Application Request Routing 3.0	5/27/2015	Add

0 Items to be installed	Options	Install	<u>E</u> xit

- 6 This will illuminate the Install button on the bottom right. Click Install.
- 7 When prompted to agree to the License terms. Click **I Accept**.



Web Platform Installer 5.0			×	:	
PREREQUISITES	INSTALL	CONFIGURE	FINISH	l Add	
✓ The following produ External Cache 1.1	ucts were successfully i	nstalled.		Add	
URL Rewrite 2.1 Application Request	Routing 3.0			Add	
				Remove	
			Finish		

8 The install will run. When the install completes, click **Finish**.

9 Click Exit.

**Note:** If you running **Server 2012**, then you also need to install Web Farm prior to exiting Web Platform Installer. Enter "Web Farm" in the Search window, select the most recent version, click **Add**, click **Install**, follow the prompts and click **Finish** when done. Then **Exit**.

**10** You are now ready to proceed with the ARR configuration through IIS. Go to <u>IIS 7.0</u> above.