Deployment Guide

Oracle WebLogic Server



Deploying the BIG-IP v11 with Oracle WebLogic

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Welcome to the F5 and Oracle WebLogic® Server (formerly BEA WebLogic) deployment guide. F5 provides a highly effective way to optimize and direct traffic for WebLogic Server with the BIG-IP Local Traffic Manager (LTM) and WebAccelerator.

BIG-IP version 11.0 introduces i App^{TM} Application templates, an extremely easy and accurate way to configure the BIG-IP system for WebLogic deployments.

Why F5?

F5 provides a secure, highly available, and scalable application delivery networking device for WebLogic deployments. F5 and Oracle have collaborated on delivering market-leading application delivery solutions for WebLogic Server. F5 has designed an integrated, agile and adaptable network platform for delivering WebLogic applications across the LAN and WAN. The result is an intelligent and powerful solution that secures and speeds your WebLogic deployment today, while providing an optimized architecture for the future.

To provide feedback on this deployment guide or other F5 solution documents, contact us at *solutionsfeedback@f5.com*.

Products and versions tested

Product	Version
BIG-IP LTM	v11
Oracle BEA WebLogic	5.1, 8.1, 10.3

What is F5 iApp™?

New to BIG-IP version 11, F5 iApp is a powerful new set of features in the BIG-IP system that provides a new way to architect application delivery in the data center, and it includes a holistic, application-centric view of how applications are managed and delivered inside, outside, and beyond the data center. The iApp template for Oracle WebLogic acts as the single-point interface for building, managing, and monitoring Oracle WebLogic deployments.

For more information on iApp, see the F5 iApp: Moving Application Delivery Beyond the Network White Paper: http://www.f5.com/pdf/white-papers/f5-iapp-wp.pdf.

Document Version

Prerequisites and configuration notes

The following are general prerequisites and configuration notes for this guide:

- ➤ For this Deployment Guide, the WebLogic Server must be running version 5.1, 8.1 or 10.3.
- ➤ This document is written with the assumption that you are familiar with both F5 devices and WebLogic products. For more information on configuring these devices, consult the appropriate documentation.
- ➤ For this deployment guide, the BIG-IP LTM system *must* be running version 11.0 or later. If you are using a previous version of the BIG-IP LTM system, see the Deployment Guide index on F5.com. The configuration described in this guide does not apply to previous versions.
- > This deployment guide provides detailed guidance for using the iApp for Oracle WebLogic found in version 11.0 and later. For advanced users extremely familiar with the BIG-IP, there is a manual configuration table at the end of this guide. However, we strongly recommend using the iApp template.
- ➤ If you are using the BIG-IP system to offload SSL, we assume you have already obtained an SSL certificate and key, and it is installed on the BIG-IP LTM system. When you configure the iApp, you are asked for the SSL Certificate and Key you imported for Oracle WebLogic.
- ➤ This deployment guide contains guidance on optional modules, including Application Visibility Reporting and WebAccelerator. To take advantage of these modules, they must be licensed and provisioned before starting the iApp template. For more information on licensing modules, contact your sales representative. Note that AVR is licensed on all systems, but must be provisioned before beginning the iApp template.

Important: Make sure you are using the most recent version of this deployment guide, available at http://www.f5.com/pdf/deployment-guides/weblogic-iapp-dg.pdf.

Configuration example

Using the configuration in this guide, the BIG-IP system is optimally configured to load balance traffic to Oracle WebLogic servers.

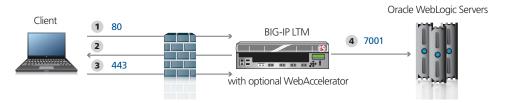


Figure 1: Logical configuration example

Traffic Flow:

- 1. The client machine makes a connection to the BIG-IP LTM virtual server IP address of the WebLogic Server to access a resource.
- 2. Depending on the configuration, the BIG-IP may use an iRule to redirect the client to an encrypted (HTTPS) form of the resource.
- 3. The client machines makes a new connection to the virtual server IP address of the WebLogic Server to access the resource over an encrypted connection.
- 4. The BIG-IP establishes a connection to an WebLogic Server, translating the destination port, based on the selected Load Balancing algorithm and will persist the connection to the same WebLogic Server while optimizing the connection.
 - Depending on the configuration, the BIG-IP may also provide the following:
 - Compression and Caching via Web Accelerator
 - Terminate the SSL connection and insert a WL-Proxy-SSL cookie into the client request so that the WebLogic server will continue to build its URIs to use HTTPS.
 - Rewrite content flowing to and from the WebLogic server to use the hostname of the Virtual Server instead of the real hostname of the WebLogic server.

Preparation Worksheet

In order to use the iApp for WebLogic, you need to gather some information, such as WebLogic server IP addresses and domain information. Use the following worksheet to gather the information you will need while running the template. The worksheet does not contain every question in the template, but rather includes the information that is helpful to have in advance. More information on specific template questions can be found on the individual pages.

You might find it useful to print this table and then enter the information.

Note: Although we show space for 10 pool members, you may have more or fewer members in each pool.

IP Addresses/FQDN	SSL Offload	Pool Members	Sync/Failover Groups	TCP request queuing	WAN or LAN clients
IP address for the Oracle WebLogic LTM virtual server: FQDN that will resolve to the virtual server address:	Offloading SSL? Yes No If offloading SSL, import a certificate and key into the BIG-IP LTM before running the template. Certificate: Key:	Oracle WebLogic IP addresses: 1: 2: 3: 4: 5: 6: 7: 8: 9: 10: Port used by WebLogic Server (default is 7001)	If using the Advanced feature of Sync/Failover Groups, you must already have a Device Group and a Traffic Group Device Group name: Traffic Group name:	If using TCP request queuing, you should know the queue length and timeout, as well as the connection limit for the node. Request queue length: Timeout: Node Connection limit:	Most clients connecting through BIG-IP to Oracle WebLogic are coming over a: LAN WAN
Optional Modules (ye	ou must have provisioned modul	es before running the template)	1	J.	I
Application Visibility Reporting (AVR)		WebAccelerator			
If using AVR, we strongly recommend you first create an custom Analytics profile before running the template. Analytics profile name:		All FQDNs for Oracle WebLogic: 1: 2: 3:			

Configuring the BIG-IP iApp for Oracle WebLogic

Use the following guidance to help configure the BIG-IP system for Oracle WebLogic using the BIG-IP iApp template.

Getting Started with the iApp for WebLogic Server

To begin the WebLogic iApp Template, use the following procedure.

- 1. Log on to the BIG-IP system.
- 2. On the Main tab, expand iApp, and then click Application Services.
- 3. Click **Create**. The Template Selection page opens.
- 4. In the **Name** box, type a name. In our example, we use **Oracle-WebLogic_**.
- 5. From the **Template** list, select **f5.bea_weblogic**. The Oracle WebLogic iApp template opens.

Advanced options

If you select **Advanced** from the **Template Selection** list, you see Sync and Failover options for the application. This feature, new to v11, is a part of the Device Management configuration. If you enable sync and failover, you can select a device group that synchronizes BIG-IP configuration data among devices and a traffic group of related objects that fail over to another device if the current device becomes unavailable.

If you plan on using Device and Traffic Groups with the iApp for Oracle WebLogic, you must have configured the Device Group and Traffic Group before beginning the iApp. For more information on Device Management, see the Online help or product documentation.

1. Configure Device and Traffic Groups?

If you want to configure the Application for Device and Traffic groups, select **Advanced** from the **Template Selection** list.

a. Device Group

If you select Advanced from the list, the Device Group and Traffic Group options appear. If necessary, uncheck the Device Group box and then select the appropriate Device Group from the list.

b. Traffic Group

If necessary, uncheck the Traffic Group box and then select the appropriate Traffic Group from the list.

Analytics

This section of the template asks questions about Analytics. The Application Visibility Reporting (AVR) module allows you to view statistics specific to your WebLogic implementation. AVR is available on all BIG-IP systems v11 and later, however you must have the AVR provisioned for this option to appear. Note that these are only for application visibility reporting, you can view object-level statistics from the BIG-IP without provisioning AVR.

If you plan on using AVR for analytics, we recommend creating a custom Analytics profile before beginning the template. To create a new profile, from the Main tab, select profiles and then click Analytics. Click New and then configure the profile as applicable for your configuration. See the online help or product documentation for specific instructions.

Important

(i) Tip

If using AVR, create a new Analytics profile before beginning the iApp for more specific reporting

1. Enable Analytics

Choose whether you want to enable AVR for Analytics.

2. Analytics Profile

You must decide whether to use the default Analytics profile, or create a new one. As mentioned previously, we recommend creating a new profile to get the most flexibility and functionality out of AVR. If you choose to create a new profile after starting the template, you must exit the template, create the profile, and then restart the template.

To use the default Analytics profile, choose **Use Default Profile** from the list.

To choose a custom profile, leave the list set to **Select a Custom Profile**, and then from the Analytics profile list, select the custom profile you created.

Virtual Server Questions

The next section of the template asks questions about the BIG-IP virtual server. A virtual server is a traffic-management object on the BIG-IP system that is represented by an IP address and a service. Clients can send application traffic to a virtual server, which then directs the traffic according to your configuration instructions.

1. IP address for the virtual server

This is the address clients use to access WebLogic (or a FQDN will resolve to this address). You need an available IP address to use here.

2. Port

This is the service port for the virtual server.

3. Routes or secure network address translation

If the Oracle WebLogic servers do not have a route back for clients through the BIG-IP, (i.e. if they do not use the BIG-IP as the default gateway), the BIG-IP uses Secure Network Address Translation (SNAT) Automap (one exception, see #4) to translate the client's source address to an address configured on the BIG-IP.

If you indicate that the Oracle WebLogic servers do have a route back to the clients through the BIG-IP, the BIG-IP does not translate the client's source address; in this case, you must make sure that the BIG-IP is configured as the gateway to the client networks (usually the default gateway) on the WebLogic servers.

We recommend choosing **No** from the list because it does not require you to configure routing manually.

If you are configuring your BIG-IP LTM in a "one-armed" configuration with your Oracle Weblogic servers -- where the BIG-IP virtual server(s) and the WebLogic server have IP addresses on the same subnet – you must choose No.

If you do select Yes from the list, the following question about 64,000 connections does not appear.

4. More than 64,000 simultaneous connections

If you do not expect more than 64,000 simultaneous connections, leave this answer set to **No** and continue with #5.

If you have a large deployment and expect more than 64,000 connections at one time, the iApp creates a SNAT Pool instead of using SNAT Automap. With a SNAT Pool, you need one IP address for each 64,000 connections you expect. Select **Yes** from the list. A new row appears with an IP address field. In the **Address** box, type an IP address and then click **Add**. Repeat with an additional IP address for each multiple of 64,000 simultaneous connections.

NTLM

If you have configured the WebLogic servers to use NTLM authentication, select Yes from the list. If the WebLogic servers do not use NTLM, leave the list set to No.

SSL Encryption questions

Before running the iApp template you should have already imported a certificate and key onto the BIG-IP system. While the BIG-IP system does include a self-signed SSL certificate that can be used internally or for testing, we strongly recommend importing a certificate and key issued from a trusted Certificate Authority.

For information on SSL certificates on the BIG-IP system, see the online help or the *Managing SSL Certificates for Local Traffic* chapter in the *Configuration Guide for BIG-IP Local Traffic Manager* available at http://support.f5.com/kb/en-us.html.

To configure the BIG-IP to offload SSL, select **Yes** from the list.

1. Certificate

Select the certificate for you imported for WebLogic from the certificate list.

2. **Key**

Select the associated key from the list.

Server Pool, Load Balancing, and Service Monitor questions

In this section, you add the WebLogic servers, and configure the health monitor and pool.

1. New Pool

Choose **Create New Pool** unless you have already made a pool on the LTM for the WebLogic devices.

2. Load balancing method

While you can choose any of the load balancing methods from the list, we recommend **Least Connections (member)**.

3. Address/Port

Type the IP Address and Port for each Oracle WebLogic server. You can optionally add a Connection Limit. Click **Add** to include additional servers to the pool.

4. TCP Request Queuing

TCP request queuing provides the ability to queue connection requests that exceed the capacity of connections for a pool as determined by the connection limit. Consequently, instead of dropping connection requests that exceed the capacity of a pool, TCP request queueing enables those connection requests to reside within a queue in accordance with defined conditions until capacity becomes available. For more information on TCP Request Queueing, see the *New Features Guide for BIG-IP Version 11*, available on Ask F5.

If you want the BIG-IP to queue TCP requests, select $\bf Yes$ from the list. Additional options appear.

- a. Type a queue length in the box. Leave the default of 0 for unlimited.
- b. Type a number of milliseconds for the timeout value.

5. Health Monitor

Choose **Create New Monitor** unless you have already made a health monitor on the LTM for the WebLogic devices.

Important

If you enable TCP Request Queuing, you must have a Connection Limit set on at least one of the nodes when configuring the Address/Port

6. Interval

Specifies how often the system checks the health of the servers. We recommend the default of 30 seconds.

7. HTTP Request

This is optional. You can configure the template to retrieve a specific page by typing the path here. Leaving the default (GET /) marks the node up if anything is returned from the web page.

8. HTTP version

Unless the majority of your users are using HTTP 1.0, we recommend selecting **Version 1.1** from the list.

• FQDN: When you select Version 1.1, a new row appears asking for the FQDN the clients use to access WebLogic. Type it here.

9. Monitor response string

Optional. If you configured a unique HTTP Request, this is where you enter the expected response.

Protocol Optimization and Security Questions

In this section, you configure security and protocol optimizations.

1. WAN or LAN

Specify whether most clients are connecting over a WAN or LAN.

2. WebAccelerator

If you have licensed and provisioned the WebAccelerator module, you have the option of using it for Oracle WebLogic. The WebAccelerator provides application acceleration for remote users.

a. DNS names

If you select Yes, an additional row appears in the template asking for the fully qualified domain names used for Oracle WebLogic. The BIG-IP system uses these entries for the Requested Hosts field, allowing the WebAccelerator module to accelerate the traffic to these virtual hosts.

In the **Host** box, type the **FQDN**. If you have additional FQDNs, click the **Add** button.

b. X-WA-info Header

By default, the WebAccelerator X-WA-info header is not included in the response from the BIG-IP. This header is useful for debugging WebAccelerator behavior. There are two additional options:

- Standard: If you choose Standard, the BIG-IP inserts a HTTP header that includes numeric codes which indicate if and how each object was cached.
- Debug: If you choose Debug, the BIG-IP includes extended information which may help for extended troubleshooting.

c. WebAccelerator Performance monitor

While the BIG-IP Dashboard provides statistics and performance graphs related to WebAccelerator, you can choose to enable the WebAccelerator performance monitor for legacy WebAccelerator performance monitoring for debugging purposes. The results can be found in the Main tab of the navigation page, under WebAccelerator, by clicking Traffic Reports.

In our example, we leave the performance monitor **Disabled**.

d. WebAccelerator policy

For this template, F5 recommends the **Generic Policy - Enhanced** policy to achieve the best results for Web acceleration of WebLogic traffic. Should F5 publish an updated policy to DevCentral that you have downloaded and imported, or if a custom policy is created for your environment (locally), you can select that custom policy from the list. In our example, we leave the default.

Finished

Review your answers to the questions. When you are satisfied, click the **Finished** button. The BIG-IP system creates the relevant objects.

Next Steps

After completing the iApp Template, the BIG-IP Application Services page opens for the Oracle WebLogic service you just created. To see the list of all the configuration objects created to support Oracle WebLogic, on the Menu bar, click **Components**. The complete list of all Oracle WebLogic related objects opens. You can click individual objects to see the settings. Once the objects have been created, you are ready to use the new deployment.

Modifying DNS settings to use the BIG-IP virtual server address

Before sending traffic to the BIG-IP system, your DNS administrator may need to modify any DNS entries for the Oracle WebLogic implementation to point to the BIG-IP system's virtual server address.

Modifying the iApp configuration

The iApp application service you just created can be quickly and easily modified if you find it necessary to make changes to the configuration. The Strictness feature of the iApp prevents users from manually modifying the iApp configuration (Strictness can be turned off, but use extreme caution). As a safer option, the iApp allows you to re-enter the template, make changes, and then update the template. The modifications are automatically made to any of the associated objects.

To modify the configuration

- 1. On the Main tab, expand **iApp** and then click **Application Services**.
- 2. Click the name of your Oracle WebLogic Application service from the list.
- 3. On the Menu bar, click **Reconfigure**.
- 4. Make the necessary modifications to the template.
- 5. Click the **Finished** button.

Viewing statistics

You can easily view a number of different statistics on the BIG-IP system related to the Oracle WebLogic configuration objects created by the iApp template. You can get statistics specific to the Application Service if you have provisioned AVR. Otherwise, you can always get object-level statistics.

AVR statistics

If you have provisioned AVR, you can get application-level statistics for your Oracle WebLogic application service.

To view AVR statistics

- 1. On the Main tab, expand **iApp** and then click **Application Services**.
- 2. From the Application Service List, click the Oracle WebLogic service you just created.
- 3. On the Menu bar, click **Analytics**.
- 4. Use the tabs and the Menu bar to view different statistics for your Oracle WebLogic iApp.

Object-level statistics

If you haven't provisioned AVR, or want to view object-level statistics, use the following procedure.

To view object-level statics

- 1. On the Main tab, expand **Overview**, and then click **Statistics**.
- 2. From the **Statistics Type** menu, you can select **Virtual Servers** to see statistics related to the virtual servers.
- 3. You can also choose **Pools** or **Nodes** to get a closer look at the traffic.
- 4. To see Networking statistics in a graphical format, click **Dashboard**.

For more information on viewing statistics on the BIG-IP system, see the online help or product documentation.

Troubleshooting

- **Q**: My Weblogic installation is redirecting users to host names of the back end servers instead of using the BIG-IP Virtual Server name
- **A**: In some Weblogic configurations, especially in older versions, the Weblogic servers would not honor the host name used in the client request. In these cases, you need to use a Stream Profile on your Virtual Server to rewrite content flowing from the Weblogic servers back to the client.

The Stream profile performs a search and replace procedure for all occurrences of a string in a data stream efficiently and with minimal buffering. For more information on the Stream Profile, see Solution 8115, Overview of the Stream Profile, on Ask F5:

https://support.f5.com/kb/en-us/solutions/public/8000/100/sol8115.html?sr=565906.

This procedure uses the host name of the virtual server created by the template.

To create a new Stream profile

- 1. On the Main tab, expand Local Traffic, and then click Profiles.
- 2. On the Menu bar, select **Other**, and then click **Stream**. The Stream Profiles screen opens.
- 3. Click the **Create** button. The New Stream Profile screen opens.
- 4. In the **Name** box, type a name for this profile. In our example, we type **wls-stream**.
- 5. In the **Target** box, use the following syntax to type the target:

@<search>@<replace>@@<search>@<replace>@

In our example, we type:

@web0.weblogic10.example.com:7041@web.weblogic10.example.com@@web1.weblogic10.
example.com:7041@web.weblogic10.example.com@

In this example, we are searching for the host name of the WebLogic Server, and replacing it with the host name of the virtual server created by the template.

The second search and replace pattern (following the @@) is for our second WebLogic Server.

6. Click the **Finished** button.

The next task is to modify the virtual server created by the template to use the stream profile. Before modifying the virtual server, you must turn off Strict Updates on the template.

To turn off Strict Updates

- 1. On the Main tab, expand **iApp** and then click **Application Services**.
- 2. Click the name of your WebLogic Application service from the list.
- 3. From the **Application Service** list, select **Advanced**.
- 4. In the **Strict Updates** row, clear the check from the box to disable Strict Updates.
- 5. Click the **Update** button.

To modify the virtual server to use the Stream profile

- 1. On the Main tab, expand **iApp** and then click **Application Services**.
- 2. Click the name of your WebLogic Application service from the list.
- 3. On the Menu bar, click **Components**. The BIG-IP objects for the iApp appear.
- 4. From the list, click the name of the virtual server on port 80. The virtual server is preceded by the name you gave the iApp, followed by **_http**.
- 5. If necessary, from the **Configuration** list, select **Advanced**.
- 6. From the **Stream Profile** list, select the name of the Stream profile you just created.
- 7. Click the **Update** button.
- 8. If you are offloading SSL on the BIG-IP system, you need to repeat this entire procedure for the virtual server on port 443. This virtual server is preceded by the name you gave the iApp, followed by **_https**.

Next, we recommend you turn Strict Updates back on.

To turn on Strict Updates

- 1. On the Main tab, expand **iApp** and then click **Application Services**.
- 2. Click the name of your WebLogic Application service from the list.
- 3. From the **Application Service** list, select **Advanced**.
- 4. In the **Strict Updates** row, check the box to enable Strict Updates.
- 5. Click the **Update** button.

Note that if you reconfigure your iApp using the Reconfigure menu, you will need to add the Stream profile to the virtual server manually, using the three procedures above.

Appendix: Manual configuration table

We strongly recommend using the iApp template to configure the BIG-IP system for Oracle WebLogic. Advanced users extremely familiar with the BIG-IP system can use the following table to manually configure the BIG-IP system.

The following table contains a list of BIG-IP LTM configuration objects along with any non-default settings you should configure as a part of this deployment. Unless otherwise specified, settings not mentioned in the table can be configured as applicable for your configuration. For specific instructions on configuring individual objects, see the online help or product manuals.

BIG-IP LTM Object	Non-default settings/Notes				
	Name	Type a unique name			
Health Monitor (Main tab>Local Traffic >Monitors)	Туре	НТТР			
	Interval	30 (recommended)			
	Timeout	91 (recommended)			
	Name	Type a unique name			
	Health Monitor	Select the monitor you created above			
Pool (Main tab>Local	Slow Ramp Time ¹	300			
Traffic>Pools)	Load Balancing Method	Choose a load balancing method. We recommend Least Connections (Member)			
	Address	Type the IP Address of the WebLogic nodes			
	Service Port	7001 (click Add to repeat Address and Service Port for all nodes)			
		Name	Type a unique name		
	НТТР	Parent Profile	http		
	(Profiles>Services)	Request Header Insert ²	WL-Proxy-SSL: true		
		Rewrite Redirect ²	Matching		
	TCP WAN	Name	Type a unique name		
	(Profiles>Protocol)	Parent Profile	tcp-wan-optimized		
	TCP LAN	Name	Type a unique name		
	(Profiles>Protocol)	Parent Profile	tcp-lan-optimized		
	Persistence (Profiles>Persistence)	Name	Type a unique name		
		Persistence Type	Cookie		
	OneConnect	Name	Type a unique name		
	(Profiles>Other)	Parent Profile	oneconnect		
	Client SSL ² (Profiles>SSL)	Name	Type a unique name		
B. Cl.		Parent Profile	clientssl		
Profiles (Main tab>Local Traffic		Certificate and Key	Select the Certificate and Key you imported from the associated list		
>Profiles)	Web Acceleration (Profiles>Services)	Name	Type a unique name		
		Parent Profile	optimized-caching		
		Name	Type a unique name		
	HTTP Compression (Profiles>Services)	Parent Profile	wan-optimized-compression		
		Content List>Include List (Add each entry to the Content Type box and then click Include)	application/vnd.ms-publisher		
			application/(xls excel msexcel ms-excel x-excel x-xls xmsexcel x-ms-excel vnd.excel vnd.msexcel vnd.ms		
			application/(word doc msword winword ms-word x-word x-msword vnd.word vnd msword vnd.ms-word)		
			application/(xml x-javascript javascript x-ecmascript ecmascript)		
			application/(powerpoint mspowerpoint ms-powerpoint x-powerpoint vnd.ms-powerpoint vn		
			application/(mpp msproject x-msproject x-ms-project vnd.ms-project)		
			application/(visio x-visio vnd.visio vsd x-vsd x-vsd)		
			() () () () () () () () () ()		

 $^{^{\}mbox{\tiny 1}}$ You must select Advanced from the Configuration list for these options to appear

 $^{^{\}rm 2}\,$ Only required if offloading SSL on the BIG-IP LTM

Configuration table continued

BIG-IP LTM Object	И	Ion-default settings/Notes			
	НТТР				
	Name	Type a unique name.			
	Address	Type the IP Address for the virtual server			
	Service Port	80			
	Protocol Profile (client) ^{1,2}	Select the WAN optimized TCP profile you created above			
	Protocol Profile (server) ^{1,2}	Select the LAN optimized TCP profile you created above			
	HTTP Profile ²	Select the HTTP profile you created above			
	Web Acceleration profile ²	Select the Web Acceleration profile you created above			
	HTTP Compression profile ²	Select the HTTP Compression profile you created above			
	OneConnect ²	Select the OneConnect profile you created above			
	SNAT Pool ³	Automap (optional; see footnote ³)			
	Default Pool ²	Select the pool you created above			
	Persistence Profile ²	Select the Persistence profile you created			
Virtual Servers (Main tab>Local Traffic	iRule⁴	If offloading SSL only: Enable the built-in _sys_https_redirect irule			
>Virtual Servers)	HTTPS ⁵				
	Name	Type a unique name			
	Address	Type the IP Address for the virtual server			
	Service Port	443			
	Protocol Profile (client)	Select the WAN optimized TCP profile you created above			
	Protocol Profile (server)	Select the LAN optimized TCP profile you created above			
	HTTP Profile	Select the HTTP profile you created above			
	Web Acceleration profile	Select the Web Acceleration profile you created above			
	HTTP Compression profile	Select the HTTP Compression profile you created above			
	OneConnect	Select the OneConnect profile you created above			
	SSL Profile (client)	Select the Client SSL profile you created above			
	SNAT Pool ²	Automap (optional; see footnote ³)			
	Default Pool	Select the pool you created above			
	Persistence Profile	Select the Persistence profile you created			

¹ You must select **Advanced** from the **Configuration** list for these options to appear

² Do not enable these objects on the HTTP virtual server if offloading SSL. The HTTP virtual server is only used for redirecting users to the HTTPS virtual server, and only requires a name, IP address, Port, and the redirect iRule.

³ If want to use SNAT, and you have a large WebLogic deployment expecting more than 64,000 simultaneous connections, you must configure a SNAT Pool with an IP address for each 64,000 simultaneous connections you expect. See the BIG-IP documentation on configuring SNAT Pools.

⁴ Only enable this iRule if offloading SSL

⁵ Only create this virtual server if offloading SSL

Document Revision History

Version	Description
1.0	New Version

F5 Networks, Inc. 401 Elliott Avenue West, Seattle, WA 98119 888-882-4447 www.f5.com

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