Deployment Guide

Oracle E-Business Suite 12

Deploying the BIG-IP v11 with Oracle E-Business Suite

What's inside:

Welcome to the F5 and Oracle® E-Business Suite 12 Deployment Guide. When deployed with Oracle E-Business Suite (EBS), F5 ensures secure, fast and always available access for applications running on Oracle.

BIG-IP version 11.0 introduces iApp™ Application templates, an extremely easy and accurate way to configure the BIG-IP system for Oracle E-Business Suite deployments.

Oracle E-Business Suite is a fully integrated, comprehensive suite of business applications for the enterprise. Whether you implement one module at a time, multiple modules, or the complete suite - Oracle E-Business Suite provides better business information for effective decision-making and enables an adaptive enterprise for optimal responsiveness.

Why F5?

F5 provides a secure, highly available, and scalable application delivery networking device for E-Business Suite deployments. F5 and Oracle have collaborated on delivering market-leading application delivery solutions for E-Business Suite. F5 has designed an integrated, agile and adaptable network platform for delivering E-Business Suite applications across the LAN and WAN. The result is an intelligent and powerful solution that secures and speeds your E-Business Suite 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 E-Business Suite	12

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

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 E-Business Suite acts as the single-point interface for building, managing, and monitoring Oracle E-Business Suite 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*.

Prerequisites and configuration notes

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

➤ The Oracle E-Business Suite must be running version 12.

➤ This document is written with the assumption that you are familiar with both F5 devices and Oracle E-Business Suite. 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 E-Business Suite 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.

➤ See the following Oracle Support Note (ID 380489.1) for important information about using load balancing devices with Oracle E-Business Suite Release 12: *http://metalink.oracle.com/metalink/plsql/ml2_documents.showDocument?p_database_ d=NOT&p_id=380489.1*

➤ If the BIG-IP system is performing SSL offload (also known as SSL acceleration or termination) for EBS, you must make the following modification as described in Oracle Support Note 376700.1: *Enabling SSL in Oracle E-Business Suite Release 12 (https:// support.oracle.com/epmos/faces/ui/km/SearchDocDisplay.jspx?_afrLoop=40705984369 2300&recommended=true&type=DOCUMENT&id=376700.1)*. Steps 8 and 9 in Section 3: *Middle Tier Setup* must be completed to remove the value of **#** from the **s_enable_ sslterminator** variable in the EBS context file. For more information, see the Oracle documentation.

➤ 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 E-Business Suite. For information on SSL certificates on the BIG-IP system, see *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*.

➤ 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.

Configuration example

The BIG-IP system provides intelligent traffic management and fail-over for Oracle E-Business Suite application servers. Through advanced health checking capabilities, the BIG-IP LTM recognizes when resources are unavailable or under-performing and directs traffic to another resource. The BIG-IP LTM can also track Oracle E-Business Suite Application Server end-user sessions, enabling the application server to maintain client session data. The following diagram shows an example deployment with Oracle E-Business Suite and the BIG-IP LTM system.
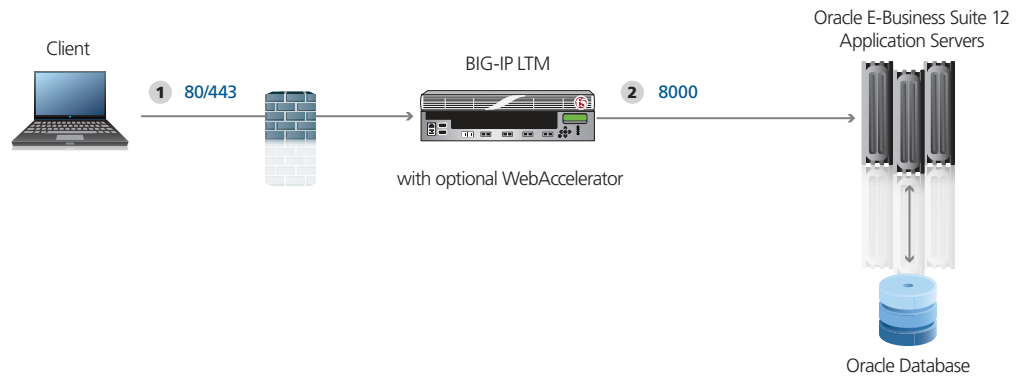

Figure 1: *Logical configuration example*

Traffic Flow:

1. The client machine makes a connection to the BIG-IP LTM virtual server IP address for the Oracle E-Business Suite 12 Application Server to access a resource.

2. The BIG-IP establishes a connection to an Application Server, translating the destination port, based on the Predictive Load Balancing algorithm and will persist the connection to the same Application Server while optimizing the connection. Depending on the configuration, the BIG-IP may also provide compression and caching using Web Accelerator and terminate the SSL connection.

Preparation Worksheet

In order to use the iApp for Oracle E-Business Suite, you need to gather some information, such as Oracle 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/Bridging	Pool Members	Sync/Failover Groups	TCP request queuing	WAN or LAN clients
IP address for the Oracle EBS 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 EBS IP addresses: 1: 2: 3: 4: 5: 6: 7: 8: 9: 10:	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 EBS are coming over a: LAN WAN

Optional Modules (you must have provisioned modules before running the template)

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 E-Business Suite: 1: 2: 3:

Configuring the BIG-IP iApp for Oracle E-Business Suite 12

Use the following guidance to help you configure the BIG-IP system for Oracle E-Business Suite using the BIG-IP iApp template.

Getting Started with the iApp for Oracle E-Business Suite

To begin the Oracle E-Business Suite iApp, 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-EBS_**.
5. From the **Template** list, select **f5.oracle_ebs**.
   The Oracle E-Business Suite 12 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.

Important → *If you plan on using Device and Traffic Groups with the iApp for Oracle E-Business Suite, 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

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

This section of the template asks questions about Analytics. The Application Visibility Reporting (AVR) module allows you to view statistics specific to your Oracle EBS 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.

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 Oracle E-Business Suite (or a FQDN will resolve to this address). You need an available IP address to use here.

2. **Routes or secure network address translation**
   If the Oracle E-Business Suite 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 #3) to translate the client's source address to an address configured on the BIG-IP.

   If you indicate that the Oracle E-Business Suite 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 E-Business Suite 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 E-Business Suite servers -- where the BIG-IP virtual server(s) and the E-Business Suite 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.

3. **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 the next section.

   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.

SSL Encryption questions

Before running the 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.

Critical

See Modifying the Oracle E-Business Suite configuration on page 10 for important, required modifications to your Oracle E-Business Suite configuration for SSL encryption on the BIG-IP system.

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

1. **Certificate**
   Select the certificate for you imported for E-Business Suite 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 E-Business Suite 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 E-Business Suite devices.

2. **Load balancing method**
   While you can choose any of the load balancing methods from the list, we recommend **Predictive (member)**.

3. **Address/Port**
   Type the IP Address and Port for each Oracle E-Business Suite 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 queuing enables those connection requests to reside within a queue according to defined conditions until capacity becomes available. For more information on TCP Request Queuing, see the *Preventing TCP Connection Requests From Being Dropped* chapter in the **BIG-IP Local Traffic Manager: Implementations** guide, available on Ask F5.

Important

TCP Request Queuing is an advanced feature and should be used only if you understand how it will affect your deployment, including application behavior and BIG-IP performance.
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 for the nodes.

If you want the BIG-IP to queue TCP requests, select **Yes**. Additional questions appear.

   a. *Maximum number of TCP requests to be queued*
      Type the maximum number of requests you want to queue. We do **not** recommend using 0, which means unlimited and is only constrained by available memory.

   b. *How long before requests expire*
      Type a number of milliseconds for the TCP request timeout value.

5. **Health Monitor**
   Choose **Create New Monitor** unless you have already made a health monitor on the LTM
   for the E-Business Suite devices.

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.
   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 E-Business Suite. 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 E-Business Suite. 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 E-Business Suite. 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 **Oracle E-Business Suite 11 & 12** policy to achieve the best results for Web acceleration of Oracle 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, **Oracle E-Business Suite 11 & 12**.

Finished

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

Modifying the iApp template configuration

This section contains required modifications to the configuration produced by the template.

Modifying the Web Acceleration profile

You must modify the Web Acceleration profile produced by the template to exclude certain URIs from being cached by the BIG-IP system.

To modify the Web Acceleration profile

1. On the Main tab, expand **iApp** and then click **Application Services**.

2. Click the name of your Oracle E-Business Suite 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.

    In order to make changes to the configuration produced by the iApp template, you must disable the Strict Updates feature.

    By disabling Strict Updates, if you re-enter the iApp template and modify the configuration within the iApp, you must any changes again manually.

5. Click the **Update** button.

6. On the Main tab, expand **Local Traffic** and then click **Profiles**.

7. On the Menu bar, from the **Services** menu, click **Web Acceleration**.

8. Click the name of the Web Acceleration profile created by the template. This profile is preceded by the name you gave the iApp template, followed by **_caching profile**.

9. In the **URI Caching** row, click a check in the **Custom** box on the right.

10. From the **URI List** section, in the **URI** box, type **/OA_HTML/AppsLogin** and then click the **Exclude** button.

11. Repeat Step 10 to exclude the URIs: **/OA_HTML/AppsLogout** and **/OA_HTML/OA.jsp**.

12. Optional: If your users are accessing the Oracle E-Business Suite implementation through Oracle Portal, you must also exclude:
    /pls/portal/!PORTAL.wwpro_app_provider.do_object_signon

13. Click the **Update** button.

Critical

14. If you are using a BIG-IP version prior to 11.2 only:
    In BIG-IP versions prior to 11.2, after performing any modification that requires disabling
    Strict Updates feature on the Application Service, you must restart the bigd daemon from the
    BIG-IP command line. We recommend restarting bigd during a maintenance window or other
    scheduled downtime.

    To restart bigd

    a. From the command line, log into the BIG-IP system.

    b. From the prompt, run the following command:

        `bigstart restart bigd`

    c. Exit the command line interface.

Modifying the Oracle E-Business Suite configuration

Use this section for guidance on modifying the Oracle E-Business Suite configuration for use with
the BIG-IP system.

➤ See Oracle Support Note ID 380489.1 (*http://metalink.oracle.com/metalink/plsql/ml2_
   documents.showDocument?p_database_d=NOT&p_id=380489.1*) to set the appropriate
   values in the Applications Context file on each application tier server. Use the AutoCon-
   fig Context Editor and follow the instructions for updating the file based on whether you
   have a single web entry point, or multiple points:

   » *Single Web Entry Point*
      Use the configuration table in section 2.1.3 to update the Applications Context File.

   » *Multiple Web Entry Points*
      Use the configuration table in section 2.2.4 to update the Applications Context File.

   For specific instructions, see the Oracle documentation.

➤ Additionally, as described in the prerequisites, if the BIG-IP system is performing SSL
   offload for EBS, you must make the following modifications as described in Oracle Sup-
   port Note 376700.1: *Enabling SSL in Oracle E-Business Suite Release 12 (https://support.
   oracle.com/epmos/faces/ui/km/SearchDocDisplay.jspx?_afrLoop=407059843692300&rec
   ommended=true&type=DOCUMENT&id=376700.1)*.

   In Section 3: Middle Tier Setup, you must complete Step 8 - Update the Context File to
   remove the value of **#** from the **s_enable_sslterminator** variable in the EBS context
   file.

   You must then perform Step 9 - Run Autoconfig. For more information, see the Oracle
   documentation.

Next Steps

After completing the iApp Template, the BIG-IP Application Services page opens for the Oracle E-Business Suite service you just created. To see the list of all the configuration objects created to support Oracle E-Business Suite, on the Menu bar, click **Components**. The complete list of all Oracle E-Business Suite 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 E-Business Suite 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 Strict Updates feature of the iApp prevents users from manually modifying the iApp configuration Strict Updates 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 E-Business Suite 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 E-Business Suite 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 E-Business Suite 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 E-Business Suite 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 E-Business Suite 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: Some of my EBS Applications appear to not be load balanced or appear to be routing around the BIG-IP system.

A: Your Oracle E-Business Suite installation needs to be configured in *Servlet* mode, as opposed to *Socket* mode. Oracle E-Business Suite R12 uses Servlet mode by default and we recommend not changing it to Socket mode, even though it is possible to do so. If your installation is configured to use Socket mode, you will likely continue to experience irregular behavior trying to use Oracle E-Business Suite through your BIG-IP system.

Appendix: Manual configuration table

We strongly recommend using the iApp template to configure the BIG-IP LTM for E-Business Suite. Users familiar with the BIG-IP system can use the following table to manually configure the BIG-IP system. This 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 BIG-IP documentation.

BIG-IP LTM Object	Non-default settings/Notes		
Health Monitor (*Main tab-->Local Traffic -->Monitors*)	*Name*	Type a unique name	
	Type	**HTTP**	
	Interval	**30** (recommended)	
	Timeout	**91** (recommended)	
Pool (*Main tab-->Local Traffic -->Pools*)	*Name*	Type a unique name	
	Health Monitor	Select the monitor you created above	
	Slow Ramp Time¹	**300**	
	Load Balancing Method	Choose a load balancing method. We recommend **Least Connections (Member)**	
	Address	Type the IP Address of the E-Business Suite nodes	
	Service Port	**8000** (click **Add** to repeat Address and Service Port for all nodes)	
Profiles (*Main tab-->Local Traffic -->Profiles*)	**HTTP** (*Profiles-->Services*)	Name	Type a unique name
		Parent Profile	**http**
		Rewrite Redirect²	**Matching**
	TCP WAN (*Profiles-->Protocol*)	Name	Type a unique name
		Parent Profile	**tcp-wan-optimized**
		Idle Timeout	**1800**
	TCP LAN (*Profiles-->Protocol*)	Name	Type a unique name
		Parent Profile	**tcp-lan-optimized**
		Idle Timeout	**1800**
	Persistence (*Profiles-->Persistence*)	Name	Type a unique name
		Persistence Type	**Cookie**
	OneConnect (*Profiles-->Other*)	Name	Type a unique name
		Parent Profile	**oneconnect**
	Client SSL² (*Profiles-->SSL*)	Name	Type a unique name
		Parent Profile	**clientssl**
		Certificate and Key	Select the Certificate and Key you imported from the associated list
	Web Acceleration (*Profiles-->Services*)	Name	Type a unique name
		Parent Profile	**optimized-caching**
		URI Caching	**URI List** Add these URIs to the **Exclude** List: **/OA_HTML/AppsLogin**, **/OA_HTML/AppsLogout** and **/OA_HTML/OA.jsp**. If users are accessing EBS via Oracle Portal, you must also exclude: **/pls/portal/!PORTAL.wwpro_app_provider.do_object_signon**
	HTTP Compression (*Profiles-->Services*)	Name	Type a unique name
		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-excel)
			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|x-mspowerpoint|vnd.powerpoint|vnd.mspowerpoint |vnd.ms-powerpoint|vnd.ms-pps)
			application/(mpp|msproject|x-msproject|x-ms-project|vnd.ms-project)
			application/(visio|x-visio|vnd.visio|vsd|x-vsd|x-vsd)
			application/(pdf|x-pdf|acrobat|vnd.pdf)

¹ You must select **Advanced** from the **Configuration** list for these options to appear
² Only required if offloading SSL on the BIG-IP LTM

Configuration Table continued

BIG-IP LTM Object	Non-default settings/Notes	
	HTTP	
	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* *-->Virtual Servers*)	*iRule*[4]	If offloading SSL only: Enable the built-in **_sys_https_redirect irule**
	HTTPS[5]	
	Name	Type a unique name.
	Address	Type the IP Address for the virtual server
	Service Port	**443**
	Protocol Profile (client)[1]	Select the WAN optimized TCP profile you created above
	Protocol Profile (server)[1]	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 [2])
	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 E-Business Suite 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	Date
1.0	New Version	N/A
1.1	Added the *Modifying the iApp template configuration on page 9* to add specific URIs to the Exclude list of the Web Acceleration profile produced by the template. Added the same URIs to the manual configuration table.	03-06-2013
1.2	- Added the section *Modifying the Oracle E-Business Suite configuration on page 10* with important modifications to the E-Business Suite configuration for use with the BIG-IP system. - Added bullet points related to the Oracle modifications to the prerequisites section on *page 2*.	04-23-2013