



Deploying the BIG-IP LTM with Oracle ATG

Welcome to the F5 deployment guide for Oracle® ATG and the BIG-IP system. This guide shows administrators how to configure the BIG-IP Local Traffic Manager (LTM) for directing traffic, ensuring application availability, improving performance and providing a flexible layer of security for Oracle ATG Web Commerce application deployments.

Oracle's ATG Web Commerce is the industry's top-ranked commerce solution that powers the world's best brands, and delivers a consistent, personalized cross-channel customer experience. ATG Web Commerce offers a complete commerce software platform that enables you to deliver a personalized customer buying experience across all customer touch points, including the web, contact center, mobile devices, social media, physical stores, and more.

Why F5?

The BIG-IP LTM provides high availability, load balancing, enhanced performance, simple scalability and high operational resiliency for Oracle ATG Web Commerce Application implementations. In an ATG environment, the BIG-IP LTM provides intelligent traffic management and high availability by monitoring and managing connections to the Web, Business Control, and Endeca services. In addition, the built-in performance optimization capabilities of the LTM provide faster operations to facilitate a better end-user experience. The LTM also keeps persistence records for connections to always be directed to the same server for a specified period of time, to ensure that the workflow in the ATG environment is preserved.

For more information on Oracle ATG see <http://www.oracle.com/us/products/applications/commerce/atg/index.html>

For more information on the BIG-IP system see <http://www.f5.com/products/big-ip/>

Products and applicable versions

Product	Version
BIG-IP LTM	11.1 - 11.4
Oracle ATG Web Commerce	10.2
Oracle Endeca Commerce	3.1.2
Deployment guide version	1.1 (see <i>Document Revision History</i> on page 8)

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

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

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Prerequisites and configuration notes

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

- You must have administrative access to the BIG-IP LTM web-based Configuration utility.
- This guide assumes you have already initially configured the BIG-IP system with Interfaces, VLANs, self IPs, and IP Routes, and that the LTM is installed, licensed, and running in your network. For basic LTM configuration and installation instructions, please consult the appropriate F5 documentation.
- You must have administrative access to the ATG and Endeca Services. Root level access may be required for some installation or configuration tasks.
- You must have access to both DNS and NTP network services; for name resolution and to establish a singular time reference.

Configuration example

The following is a logical configuration example with the BIG-IP system intelligently directing traffic to Oracle ATG Servers, ATG Business Control Center servers, and Oracle Endeca servers.

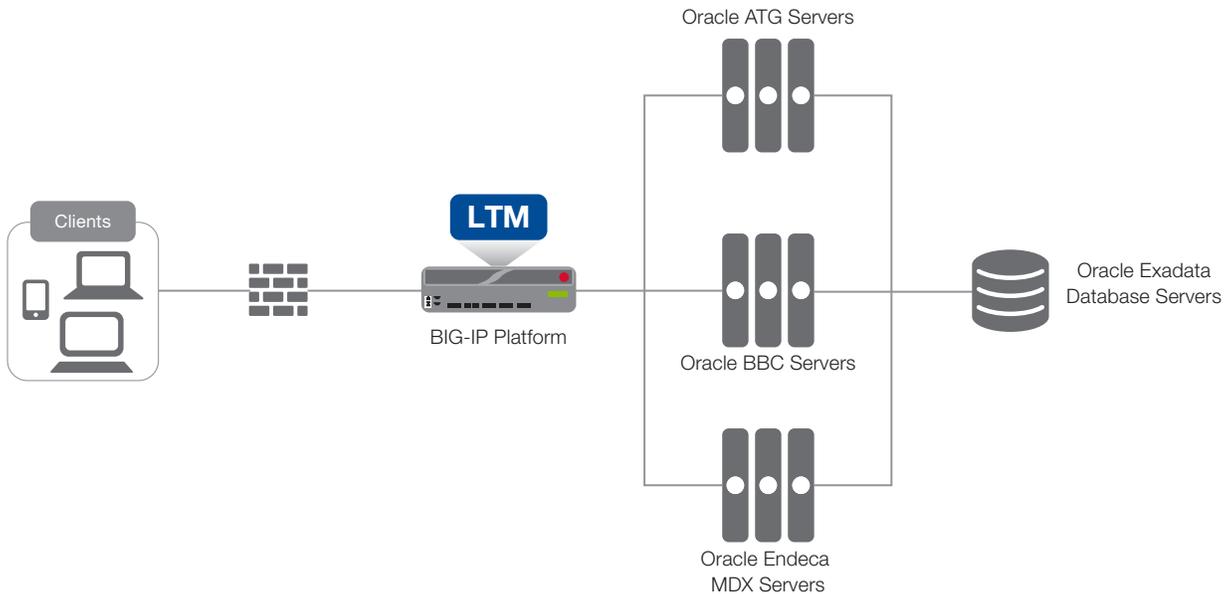


Figure 1: Logical configuration example

Configuring the BIG-IP LTM for Oracle ATG Web Commerce

Use the following tables for guidance on configuring the BIG-IP system for the Oracle ATG. These tables contains any non-default setting you should configure as a part of this deployment. Settings not contained in the table can be configured as applicable. For specific instructions on configuring individual objects, see the online help or product manuals.

ATG Web/Application tier configuration table

BIG-IP object	Non-default settings/Notes		
Health Monitor (Local Traffic-->Monitors)	Name	Type a unique name	
	Type	HTTP	
	Interval	30	
	Timeout	91	
	Send String	GET /crs/index.jsp HTTP/1.1\r\nHost: \r\nConnection: Close\r\n\r\n	
	Receive String	200 OK	
Pool (Local Traffic -->Pools)	Name	Type a unique name	
	Health monitor	Add health monitor above	
	Slow Ramp Time¹	60	
	Load Balancing Method	Least Connections (member) recommended	
	Address	IP address of the ATG Managed Server	
	Service Port	7777 Repeat Address and Port for all servers	
Profiles (Local Traffic-->Profiles)	HTTP (Profiles-->Services)	Name	Type a unique name.
		Parent Profile	http
	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	
<i>The following profile is only necessary if using the BIG-IP system to offload SSL</i>			
Client SSL³ (Profiles > SSL)	Name	Type a unique name	
	Parent Profile	clientssl	
	Certificate and Key	Select the Certificate and Key you imported from the associated list	
iRule (optional) (Local Traffic-->iRules)	<i>This is an URI helper iRule which provides an HTTP redirect to the correct application home path, if the user does not type it in the browser's address bar. This iRule is OPTIONAL.</i>		
	Name	Type a unique name.	
	Definition	<pre>when HTTP_REQUEST { if {[HTTP::path] eq "/"}{ HTTP::redirect "http://[HTTP::host]/crs/index.jsp" } }</pre>	

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

² If you expect more than 64,000 concurrent connections, configure a SNAT Pool. For more information on SNAT Pools, see the BIG-IP documentation

³ To perform SSL offload on the BIG-IP system (optional), you must already have a valid SSL certificate and key, and imported it onto the BIG-IP system. See System > File Management > SSL Certificate list.

BIG-IP object	Non-default settings/Notes	
Virtual Servers <i>(Local Traffic-->Virtual Servers)</i>	Name	Type a unique name.
	Destination Address	IP address for the virtual server (clients use this address to access ATG via the BIG-IP system)
	Service Port	80
	Protocol Profile (Client)¹	Select the TCP WAN profile you created above
	Protocol Profile (Server)¹	Select the TCP LAN profile you created above
	HTTP Profile	Select the HTTP profile you created above
	SNAT Pool ²	Auto Map (this field is Secure Address Translation in version 11.3 and later)
	Default Pool	Select the pool you created above
	Default Persistence Profile	Select the Cookie persistence profile you created above
iRule	Optional: If you created the URI helper iRule, enable it	

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

² If you expect more than 64,000 concurrent connections, configure a SNAT Pool. For more information on SNAT Pools, see the BIG-IP documentation

This completes the configuration for the Oracle ATG Web tier.

Front-end ATG Business Control Center (BBC) configuration table

Use the following table for guidance on configuring the BIG-IP LTM for Oracle ATG Business Control Center.

BIG-IP object	Non-default settings/Notes	
Health Monitor (Local Traffic-->Monitors)	Name Type Interval Timeout Send String	Type a unique name. HTTP 30 91 GET /atg/index.jsp HTTP/1.1\r\nHost: \r\nConnection: Close\r\n\r\n
Pool (Local Traffic -->Pools)	Name Health monitor Slow Ramp Time¹ Load Balancing Method Address Service Port	Type a unique name. Add health monitor above 60 Least Connections (member) recommended IP address of the ATG BBC server 7779 Repeat Address and Port for all servers
Profiles (Local Traffic-->Profiles)	HTTP (Profiles-->Services)	Name Parent Profile Type a unique name. http
	TCP WAN (Profiles-->Protocol)	Name Parent Profile Idle Timeout Type a unique name. tcp-wan-optimized 1800
	TCP LAN (Profiles-->Protocol)	Name Parent Profile Idle Timeout Type a unique name. tcp-lan-optimized 1800
	Persistence (Profiles-->Persistence)	Name Persistence Type Type a unique name. Cookie
iRules (Local Traffic-->iRules)	Name Definition	Type a unique name. This is an URI helper iRule which provides an HTTP redirect to the correct application home path, if the user does not type it in the browser's address bar. This iRule is OPTIONAL. <pre> when HTTP_REQUEST { if {[HTTP::path] eq "/"}{ HTTP::redirect "http://[HTTP::host]/atg/index.jsp" } } </pre>
Virtual Servers (Local Traffic-->Virtual Servers)	Name Destination Address Service Port Protocol Profile (Client)¹ Protocol Profile (Server)¹ HTTP Profile SNAT Pool² iRule Default Pool Default Persistence Profile	Type a unique name. IP address for the virtual server (clients use this address to access ATG via the BIG-IP system) 7779 Select the TCP WAN profile you created above Select the TCP LAN profile you created above Select the HTTP profile you created above Auto Map (this field is Secure Address Translation in version 11.3 and later) Enable the URI helper iRule you created above Select the pool you created above Select the Cookie persistence profile you created above

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

² If you expect more than 64,000 concurrent connections, configure a SNAT Pool. For more information on SNAT Pools, see the BIG-IP documentation

This completes the configuration for the Oracle ATG Business Control Center configuration.

ATG Endeca MDX configuration table

Use the following table for guidance on configuring the BIG-IP LTM for Oracle ATG Endeca MDX.

BIG-IP object	Non-default settings/Notes		
Health Monitor (Local Traffic-->Monitors)	Name	Type a unique name.	
	Type	HTTP	
	Interval	30	
	Timeout	91	
	Send String	GET /admin/?op=ping HTTP/1.1\r\nHost: \r\nConnection: Close\r\n\r\n	
Pool (Local Traffic -->Pools)	Name	Type a unique name.	
	Health monitor	Add health monitor above	
	Slow Ramp Time¹	60	
	Load Balancing Method	Least Connections (member) recommended	
	Address	IP address of the ATG Endeca MDX server	
	Service Port	9001 Repeat Address and Port for all servers	
Profiles (Local Traffic-->Profiles)	HTTP (Profiles-->Services)	Name Parent Profile	Type a unique name. http
	TCP WAN (Profiles-->Protocol)	Name Parent Profile Idle Timeout	Type a unique name. tcp-wan-optimized 1800
	TCP LAN (Profiles-->Protocol)	Name Parent Profile Idle Timeout	Type a unique name. tcp-lan-optimized 1800
	Persistence (Profiles-->Persistence)	Name Persistence Type	Type a unique name. Cookie
Virtual Servers (Local Traffic-->Virtual Servers)	Name	Type a unique name.	
	Destination Address	IP address for the virtual server (clients use this address to access ATG via the BIG-IP system)	
	Service Port	9001	
	Protocol Profile (Client)¹	Select the TCP WAN profile you created above	
	Protocol Profile (Server)¹	Select the TCP LAN profile you created above	
	HTTP Profile	Select the HTTP profile you created above	
	SNAT Pool ²	Auto Map (this field is Secure Address Translation in version 11.3 and later)	
	Default Pool	Select the pool you created above	
	Default Persistence Profile	Select the Cookie persistence profile you created above	

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

² If you expect more than 64,000 concurrent connections, configure a SNAT Pool. For more information on SNAT Pools, see the BIG-IP documentation

This completes the configuration.

Document Revision History

Version	Description	Date
1.0	New guide	09-13-2013
1.1	- Changed the version of ATG Web Commerce in the Products and Versions table on page 1 from 10.1.1 to 10.2 - Added Endeca Commerce 3.2.1 to the same table	09-18-2013

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