

Deployment Guide

**Deploying the F5 WebAccelerator with Siebel
Business Applications**



Deploying the F5 WebAccelerator with Siebel Business Applications

Welcome to the F5 WebAccelerator™ - Siebel® Business Applications Deployment Guide. This guide provides detailed procedures on how to deploy the WebAccelerator with Siebel to increase performance for end users of Siebel.

F5 WebAccelerator is an advanced web application delivery solution that provides a series of intelligent technologies designed to overcome problems with browsers, web application platforms and WAN latency issues which impact user performance.

For more information on Siebel Systems, see <http://www.siebel.com>.

Prerequisites and configuration notes

The following are prerequisites for this deployment:

- ◆ We assume that you have already configured the BIG-IP LTM system for directing traffic to the Siebel devices. If you have not performed this configuration, see the Siebel Deployment Guides on <http://www.f5.com/solution-center/deployment-guides/>.
- ◆ This document is written with the assumption that you are familiar with the BIG-IP LTM system, WebAccelerator and Siebel Business Applications. Consult the appropriate documentation for detailed information
- ◆ You must have purchased and licensed the WebAccelerator module on the BIG-IP LTM system, version 9.4 or later. If you are using a stand-alone WebAccelerator device, see *Appendix A: Configuring a stand-alone WebAccelerator device*, on page 8.

Configuration overview

Using the configuration in this guide, the BIG-IP LTM system with WebAccelerator module is optimally configured to accelerate traffic to Siebel devices. The WebAccelerator, and the BIG-IP LTM with WebAccelerator module both increases end user performance as well as offloads the servers from serving repetitive and duplicate content.

In our example, a remote client with WAN latency logs onto the Siebel site via the WebAccelerator. The user's request is accelerated on repeat visits by the WebAccelerator instructing the browser to use the dynamic or static

object that is stored in its local cache. Additionally, dynamic and static objects are cached at the WebAccelerator so that they can be served quickly without requiring the server to re-serve the same objects.

The following graph shows the response times for the end user on their first visit to the Siebel deployment, with and without using the WebAccelerator. These tests were performed using T1 access with 600ms latency, and a symmetrical WebAccelerator configuration.

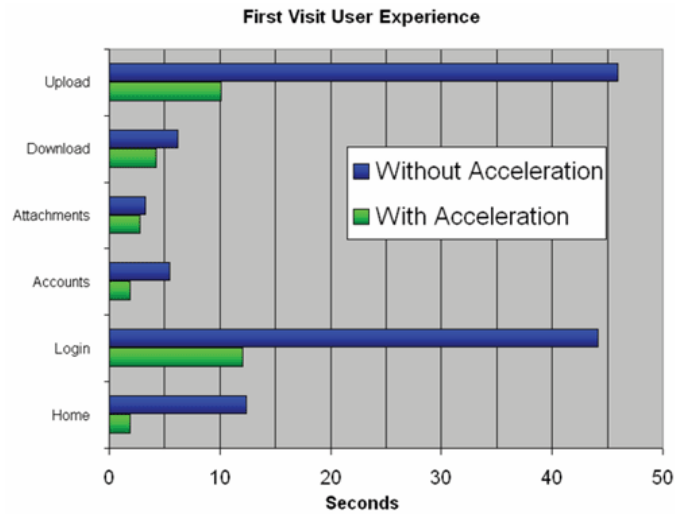


Figure 1 End user response times on their first visit

The next graph shows the response times for the end user on subsequent visits to the Siebel deployment.

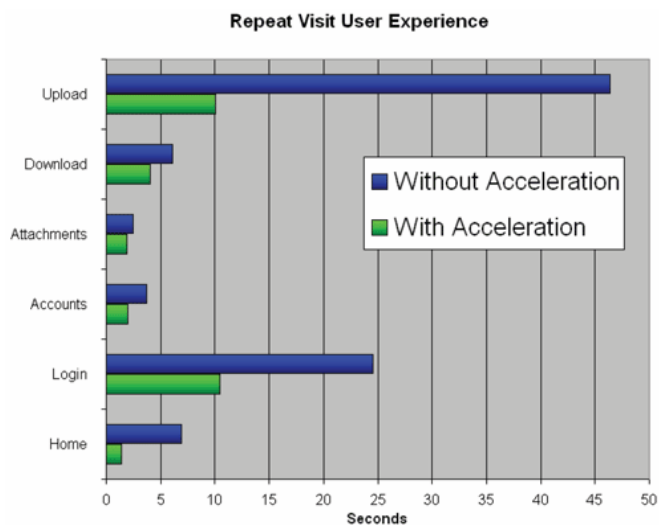


Figure 2 End user response times on repeat visits

Configuring the WebAccelerator module

Configuring the WebAccelerator module requires creating an HTTP class profile and creating an Application. The WebAccelerator device has a large number of other features and options for fine tuning performance gains, see the *WebAccelerator Administrator Guide* for more information.

If you have a stand-alone WebAccelerator device, and not the module, see *Appendix A: Configuring a stand-alone WebAccelerator device*, on page 8.

Connecting to the BIG-IP device

Use the following procedure to access the BIG-IP LTM system's web-based Configuration utility using a web browser.

To connect to the BIG-IP system using the Configuration utility

1. In a browser, type the following URL:
https://<administrative IP address of the BIG-IP device>
A Security Alert dialog box appears, click **Yes**.
The authorization dialog box appears.
2. Type your user name and password, and click **OK**.
The Welcome screen opens.

Once you are logged onto the BIG-IP system, the Welcome screen of the Configuration utility opens. From the Configuration utility, you can configure and monitor the BIG-IP system, as well as access online help, download SNMP MIBs and Plug-ins, and even search for specific objects.

Creating an HTTP Class profile

The first procedure is to create an HTTP class profile. When incoming HTTP traffic matches the criteria you specify in the WebAccelerator class, the system diverts the traffic through this class. In the following example, we create a new HTTP class profile, based on the default profile.

To create a new HTTP class profile

1. On the Main tab, expand **WebAccelerator**, and then click **Classes**.
The HTTP Class Profiles screen opens.
2. In the upper right portion of the screen, click the **Create** button.
The New HTTP Class Profile screen opens.
3. In the **Name** box, type a name for this Class. In our example, we type **wa_class**.
4. From the Parent Profile list, make sure **httpclass** is selected.

5. In the Configuration section, from the **WebAccelerator** row, make sure **Enabled** is selected.
6. In the Hosts row, from the list select **Match Only**. The Host List options appear.
 - a) In the **Host** box, type the host name that your end users use to access the Siebel site. In our example, we type **siebel.company.com** (see Figure 3).
 - b) Leave the Entry Type at **Pattern String**.
 - c) Click the **Add** button.
 - d) Repeat these sub-steps for any other host names users might use to access the Siebel deployment.
7. The rest of the settings are optional, configure them as applicable for your deployment.
8. Click the **Finished** button. The new HTTP class is added to the list.

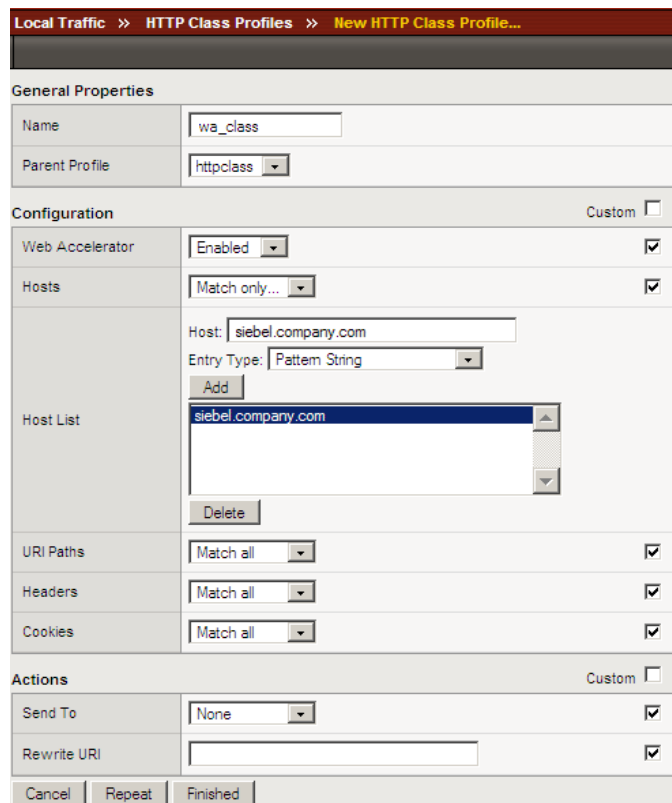


Figure 3 Creating a new HTTP Class profile

Modifying the Virtual Server to use the Class profile

The next step is to modify the virtual server for your Siebel deployment on the BIG-IP LTM system to use the HTTP Class profile you just created.

To modify the Virtual Server to use the Class profile

1. On the Main tab, expand **Local Traffic**, and then click **Virtual Servers**. The Virtual Servers screen opens.
2. From the **Virtual Server** list, click the name of the virtual server you created for your Siebel deployment. In our example, we click **SiebelAppVS**.
The General Properties screen for the Virtual Server opens.
3. On the Menu bar, click **Resources**.
The Resources screen for the Virtual Server opens.
4. In the HTTP Class Profiles section, click the **Manage** button.
5. From the **Available** list, select the name of the HTTP Class Profile you created in the preceding procedure, and click the Add (<<) button to move it to the Enabled box. In our example, we select **wa_class** (see Figure 4)
6. Click the **Finished** button. The HTTP Class Profile is now associated with the Virtual Server.

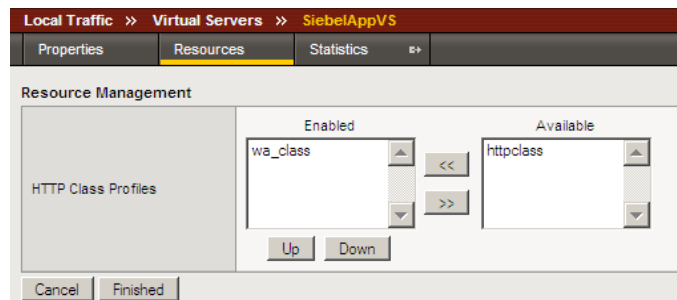


Figure 4 Adding the HTTP Class Profile to the Virtual Server

Creating an Application

The next procedure is to create a WebAccelerator Application. The Application provides key information to the WebAccelerator so that it can handle requests to your application appropriately.

To create a new Application

1. On the Main tab, expand **WebAccelerator**, and then click **Applications**.
The Application screen of the WebAccelerator UI opens in a new window.

2. Click the **New Application** button.
3. In the Application Name box, type a name for your application.
In our example, we type **siebel**.
4. In the **Description** box, you can optionally type a description for this application.
5. From the **Local Policies** list, select **Oracle Siebel CRM**. This is a pre-defined policy created specifically for Siebel.
6. In the **Requested Host** box, type the host name that your end users use to access the Siebel site. This should be the same host name you used in Step 6a in the preceding procedure. In our example, we type **siebel.company.com**
If you have additional host names, click the **Add Host** button and enter the host name(s).
7. Click the **Save** button.

The screenshot shows the 'New Application' configuration page. The breadcrumb trail is 'Configuration » Applications » New Application'. The page is divided into three main sections: 'General Options', 'Policies', and 'Hosts'.
 - **General Options:** 'Application Name' is 'Siebel'. 'Description (optional)' is 'This application points to our Siebel Deployment'.
 - **Policies:** 'Local Policies' is set to 'Oracle Siebel CRM'.
 - **Hosts:** A table with columns 'Requested Host' and 'Action'. The 'Requested Host' contains 'siebel.company.com'. The 'Action' column has 'Options' and 'Delete' links.
 At the bottom right, there are buttons for 'Add Host', 'Save', and 'Cancel'.

Figure 5 Configuring an Application on the WebAccelerator

The rest of the configuration options on the WebAccelerator are optional, configure these as applicable for your network. With this base configuration, your end users will notice a marked improvement in performance after their first visit.

Preventing session hijacking by protecting the Siebel Session Cookie

For an added level of protection for your Siebel deployment, you can use the WebAccelerator to encrypt the Siebel Session cookie, and further to examine the IP address of the client presenting the cookie before decrypting

it. This ensures that the WebAccelerator system decrypts a cookie only if it is presented by the client to which the cookie was originally set, preventing any possible hijacking or cross site scripting attack. Normally Siebel session cookies are not keyed to IP address.

◆ **Important**

*This procedure requires command line access to the WebAccelerator, and familiarity with manually editing configuration files (**pvsystem.conf**).*

To protect the Siebel Session cookie

1. Open an SSH client and log onto the WebAccelerator or the BIG-IP LTM system with the WebAccelerator module as a **root** user.
2. Using a text editor (PICO in our example), open the **pvsystem.conf** file for editing in the **/config/wa** directory.

```
pico /config/wa/pvsystem.conf
```

3. Ensure the **<encryptCookieValues>** configuration option is set to **true**. The entry should look like the following example:

```
<encryptCookieValues>true</encryptCookieValues>
```

4. Find the **<encryptCookieVerifyIP>** option, and set it to **true**. The entry should look like the following example:

```
<encryptCookieVerifyIP>true</encryptCookieVerifyIP>
```

5. The next step is to add the Siebel cookie to the configuration. Find the **<encryptCookieMatching>** option, which looks like the following:

```
<encryptCookieMatching>^(pv_ntlm.*)|(pv_track)</encryptCookieMatching>
```

Change the setting using the following syntax, replacing **siebelcookieName** with the name of the Siebel cookie:

```
<encryptCookieMatching>^(pv_ntlm.*)|(pv_track)|(siebelcookieName)</encryptCookieMatching>
```

6. Restart the pvsystem process using the following command:

```
bigstart restart pvac
```

Appendix A: Configuring a stand-alone WebAccelerator device

Use this section if you have a WebAccelerator device, and not the module on the BIG-IP LTM system. Configuring a stand-alone device is quite simple, and only requires you create a WebAccelerator application.

The WebAccelerator device has a large number of other features and options for fine tuning performance gains, see the *WebAccelerator Administrator Guide* for more information.

Connecting to the WebAccelerator device

Use the following procedure to access the WebAccelerator system's web-based Configuration utility using a web browser.

To connect to the WebAccelerator using the Configuration utility

1. In a browser, type the following URL:
https://<IP address of the device>:8443
2. Type your user name and password, and click **OK**.
Currently, the default user name is **administrator** and the password is **ncwebacc999**.
The Home screen opens.

Creating a Cluster

WebAccelerators can be grouped into clusters, and the clusters are assigned to your web applications to handle the requests directed to them. Clusters make it easier to manage multiple Accelerators. All the Accelerators handling the requests for one application can be managed as a group, with the same characteristics and configuration, instead of configuring each Accelerator individually.

To create a new cluster

1. On the top navigation bar, click **Clusters**.
The Clusters screen opens.
2. From the left pane, click **Create new Cluster**.
3. In the Cluster Name box, type a name for this cluster. In our example, we type **Datacenter**.
4. In the **Description** box, you can type a description of the cluster that is meaningful to your scenario. This step is optional.
5. In the **Public Address** box, type the IP address or host name of the cluster (see Figure 6).

-
6. Click **Save**. The new Cluster appears in the list.
 7. From the Accelerator table, find the Web Accelerator by MAC address, and select the cluster name you just created from the Cluster list. In our example, we choose **Datacenter** from the list.
 8. Click the **Save** button.

« Back to Clusters Save Cancel

GENERAL OPTIONS

Cluster Name:

Description: (optional)

Public Address:
The public address is required if the cluster front-ends an application.

UNMAPPED HOSTS SETTINGS

Process requests for unmapped hosts

Figure 6 Creating a new WebAccelerator Cluster

Creating an Application

The next procedure is to create a WebAccelerator application. The Application provides key information to the WebAccelerator so that it can handle requests to your application appropriately.

To create a new Application

1. On the top Navigation bar, click **Applications**.
2. Click the **New Application** button.
3. In the Application Name box, type a name for your application. In our example, we type **Siebel**.
4. In the **Description** box, you can optionally type a description for this application.
5. From the **Local Policies** list, select **Siebel CRM**. This is a pre-defined policy created specifically for Siebel.
6. In the **Requested Host** box, type the host name that your end users use to access Siebel. This should be the same host name you used in Step 6a in the preceding procedure. In our example, we type **siebel.company.com** (see Figure 7).

Figure 7 Creating a new WebAccelerator application

7. In the Destination Host section, click the **New** button to the right of the list. The New Destination Host dialog box appears.
 - a) In the **Address** box, type the IP address or host name of the Siebel devices (separate multiple entries with a comma).
 - b) Leave all other settings at their default level.
 - c) Click the **Create** button.

Figure 8 Creating a new Destination Host

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8. If you have additional host names, click the **Add More** button and repeat steps 6 and 7.
 9. Click the **Save** button.

The rest of the configuration options on the WebAccelerator are optional, configure these as applicable for your network. With this base configuration, your end users will notice a marked improvement in performance after their first visit.

Preventing session hijacking by protecting the Siebel Session Cookie

If you want to use the WebAccelerator to help prevent session hijacking by protecting the Siebel Session Cookie, see *Preventing session hijacking by protecting the Siebel Session Cookie*, on page 6. The only difference is the command you use to restart the pvsystem process in step 6. For a standalone WebAccelerator, use the following command to restart the pvsystem process:

```
service pivia restart
```

To start or stop the service on a standalone device, use the following commands:

```
service pivia stop_pvac
```

```
service pivia start_pvac
```