

Setting up and Administering the Broker HTTP(S) Agent

The Broker HTTP(S) Agent is a Java-based component that implements a Java servlet for servlet-enabled Web servers. It builds the bridge between a Web server and EntireX Broker in the intranet. This component was formerly referred to as "Tunnel Servlet".

This chapter covers the following topics:

- HTTP(S) Tunneling with EntireX
 - Configuring the HTTP(S) Agent
 - Using Internationalization with the HTTP(S) Agent
 - Activating Tracing for the HTTP(S) Agent
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HTTP(S) Tunneling with EntireX

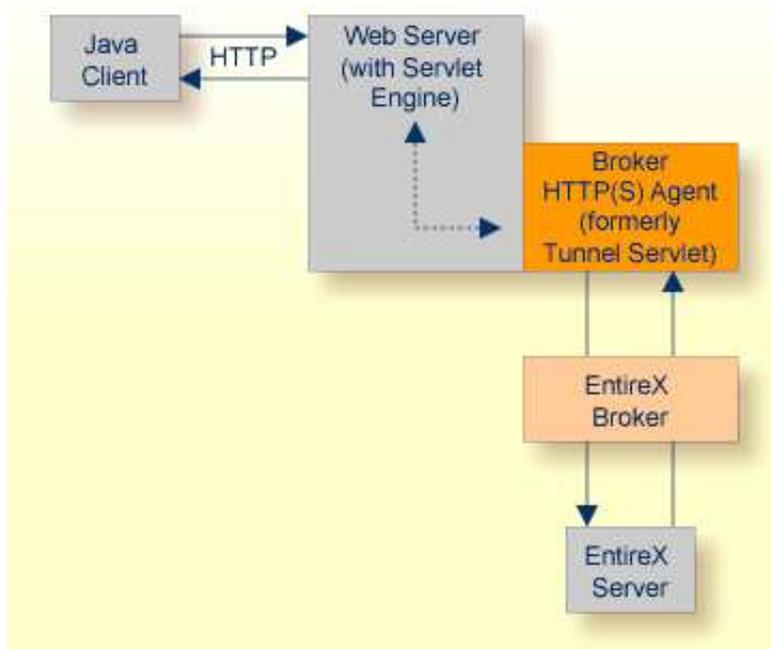
Introduction

When communicating with EntireX Broker over the internet, direct access to the EntireX Broker's TCP/IP port is necessary. This access is often restricted by proxy servers or firewalls. With EntireX, Java-based communication components can pass communication data via HTTP or HTTPS. This means a running EntireX Broker in the intranet is made accessible by a Web server without having the need to open additional TCP/IP ports on your firewall (HTTP tunneling). HTTP or HTTPS tunneling can also be used for Java RPC.

How the Communication Works

The EntireX Java ACI is able to send and receive data via an HTTP protocol controlled by constructor `com.softwareag.entirex.aci.Broker`. See *How to Enable HTTP Support in a Java Component* under *Writing Advanced Applications - EntireX Java ACI*.

The EntireX Java component `com.softwareag.entirex.aci.TunnelServlet.class` implements a Java servlet for servlet-enabled Web servers. It builds the bridge between Web server and EntireX Broker in the intranet.



The figure above shows how the communication works. In this scenario, a Java client program communicates via HTTP and EntireX Broker with an EntireX server. By using a Broker ID starting with `http://` (passing the URL of the installed HTTP(S) Agent) each Broker request is sent to a Web server, which immediately processes the HTTP(S) Agent, passes the contents to EntireX Broker, receives the response and sends it back via HTTP. For the two partners (client and server) it is transparent that they are communicating through the Web. Java server programs can also communicate via HTTP if necessary.

Configuring the HTTP(S) Agent

To use the HTTP(S) Agent you need a servlet-enabled Web server.

| Parameter | Description |
|-----------|---|
| broker | The broker you want to address (syntax: as Broker ID in Java). |
| log | <p>Yes Default. Servlet writes logging information to its standard output.</p> <p>No No log is created.</p> |

In the following, "tunnel" is used as the agent name.

> To adapt the HTTP(S) Agent

The following steps describe the deployment with the Web archive *entirex.jar* in detail. You can test the HTTP(S) Agent with `http://<host>:<port>/entirex/tunnel`, where *entirex* is the name of the Web application.

1. Create the new subfolders in the Web application directory of your Web server, e.g. *tunnel*, *tunnel/WEB-INF*, *tunnel/WEB-INF/lib*.
2. Copy the *entirex.jar* into *tunnel/WEB-INF/lib*.
3. Create a file named *web.xml* in the folder *tunnel/WEB-INF* with the following content:

```
<web-app>
  <servlet>
    <servlet-name>tunnel</servlet-name>
    <servlet-class>com.softwareag.entirex.aci.TunnelServlet</servlet-class>
    <init-param>
      <param-name>broker</param-name>
      <param-value>yourbroker</param-value>
    </init-param>
    <init-param>
      <param-name>log</param-name>
      <param-value>yes</param-value>
    </init-param>
  </servlet>
  <servlet-mapping>
    <servlet-name>tunnel</servlet-name>
    <url-pattern>/*</url-pattern>
  </servlet-mapping>
</web-app>
```

4. Restart your Web server and test the installation by calling the HTTP(S) Agent in your Web browser. The URL is: *http://<yourhost>/tunnel*. If the agent is installed properly, an information page is displayed.
5. Run the Java ACI client/server example or the Java RPC example delivered with EntireX and use the agent's URL for client or server or both.

Using Internationalization with the HTTP(S) Agent

Internationalization is transparent for the HTTP(S) Agent. The client sending the EntireX ACI request with HTTP over the Web server through the HTTP(S) Agent fully controls Internationalization. No configuration is necessary for the HTTP(S) Agent.

Activating Tracing for the HTTP(S) Agent

➤ To switch on tracing for the HTTP(S) Agent

- Set the system property `entirex.trace` to one of the values 1, 2, or 3. See *Tracing*.

➤ To switch on logging

- Set the configuration parameter `log=yes`.

This logs the parameters from the HTTP header, the HTTP messages and error messages to the logging facility of the Web server.