EventHandler

Barracuda Web Server Plugin

The EventHandler makes it possible to create real-time graphical user interfaces, which run inside a browser such as Internet Explorer.

The Barracuda EventHandler plug-in allows a user to remotely control and supervise any kind of device, in real-time. No software needs to be installed on the client (browser) side, thus making it possible to use anything from a PC to the latest PDA's for the graphical user interface.

Features

- Plugs into the Barracuda Web-Server.
- Full duplex asynchronous communication.
- JavaScript stack works with popular browsers such as IE, Firefox and Safari.
- Java stack works with any Java client application or Java applet.
- Interface stub compiler produces C/C++, Java or JavaScript code.
- Provides real-time, remote, browser-based or Java application GUI's.
- Send asynchronous events directly from controller in device to far side GUI.
- Works through firewalls and proxies.
- No client-side installation required.
- Reduces client/server traffic.
- Simultaneously controll multiple devices.
- Supports distributed applications with unicast and multicast messages.
- Uses HTTP as the transport layer.
- Authentication and Authorization
    - HTTP Basic
    - HTTP Digest
- SSL support

The Barracuda EventHandler is a protocol stack that enables real-time data exchange between a DHTML application in a client browser or from a Java application and an embedded server. The protocol stack, which is implemented in JavaScript code and Java code for the client side and C code for the server side, maintains a persistent, full duplex bi-directional communication layer (over HTTP or HTTPS) between the server and the connected client, or clients. Because Barracuda EventHandler is tunneled on top of HTTP it works through corporate firewalls. The server EventHandler can accept any number of DHTML clients and Java client applications. A message from a JavaScript application looks identical to a message from a Java application and is handled by the same user code installed in the server.

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Persistent Full Duplex Connection

The Hypertext Transfer Protocol (HTTP) is a stateless protocol, initiated from the client side. Ordinary web pages and web-services are limited by the constraints in the HTTP protocol. It is impossible to design true, rich-client interfaces using web-services like XML-RPC or SOAP since the server closes the communication link each time it sends a response message for a client request. In contrast to this, Barracuda EventHandler (Barracuda EventHandler) keeps the communication link open, thus making it possible for the server, or client to send messages at any time.

Two client stack implementations:

JavaScript client stack (for WEB 2.0 browser applications):

The Barracuda EventHandler JavaScript client gives Web developers the ability to add server-based notification functions and two-way, real-time data exchange to browser interfaces. This improves the functionality of a wide range of Web applications, and extends their capabilities to such functions as alarm handling, live monitoring of devices, etc.

Java client stack (for Java programs):

The Barracuda EventHandler Java client can be used by any type of Java application, including Java Web-Start applications and applets. The full duplex stack makes it very easy to update the User Interface from asynchronous events in one or multiple devices. The Java stack can authenticate and authorize users by using the HTTP authentication and authorization mechanism. The Java stack can also use the SSL client library provided by the Java platform. The stub compiler makes it very easy for the client to call methods in the server and for the server to call methods in the client. Java stub code and C/C++ stub code is generated from our Event Handler Interface definition language.