



About EdgeSuite Booster





© 2004 by Akamai Technologies, Inc. All Rights Reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form by any means without the written permission of Akamai Technologies, Inc. While every precaution has been taken in the preparation of this document, Akamai Technologies, Inc. assumes no responsibility for errors, omissions, or for damages resulting from the use of the information herein. The information in these documents is subject to change without notice.

Akamai is a registered trademark and service mark. EdgeSuite and the Delivering a Better Internet slogan are Akamai service marks. Products or corporate names may be trademarks or registered trademarks of other companies and are used only for the explanation and to the owner's benefit, without intent to infringe.



Contents

INTRODUCTION.....	4
HARDWARE & SOFTWARE REQUIREMENTS.....	5
MINIMUM HARDWARE REQUIREMENTS.....	5
SOFTWARE REQUIREMENTS	5
DOWNLOAD AND INSTALLATION.....	6
USAGE.....	7
ESB: HTTP REQUEST MAKER.....	7
ESB: VIEW IMAGES.....	8
ESB: VIEW HYPERLINKS.....	8
LIMITATIONS	9
PROXY SUPPORT FOR EDGESUITE BOOSTER	9
APPENDIX A AKAMAI CUSTOM HTTP HEADERS.....	11
X-CACHE HTTP RESPONSE HEADER.....	11
X-CACHE-KEY HTTP RESPONSE HEADER.....	11



Introduction

EdgeSuite Booster is a set of JavaScript scripts developed by Akamai Technologies, Inc. that integrate into Microsoft's Internet Explorer browser allowing extended functionality offered by commercial software. EdgeSuite Booster was initially developed as an internal tool for troubleshooting Web sites and related EdgeSuite products.

Once installed EdgeSuite Booster (ESB) is integrated into the context menu of Microsoft's Internet Explorer (IE) and can be accessed by right clicking the mouse on an IE window. All components included in EdgeSuite Booster can be easily identified as they are preceded by the text **ESB:**

- HTTP Request Maker: Shows the low level communication between the Web browser (client) and the Web Server it connects when making an HTTP request.
- Show Images: Shows a table containing all the images embedded on the page and their corresponding URLs
- Show Images (ETN): Shows a table containing all the images embedded on the page and their corresponding URLs
- View Hyperlinks: Shows a table containing all the hyperlinks embedded on the page and their corresponding URLs

NOTE: *EdgeSuite Booster is given as is at no charge. Technical Support is not available other than the existing documentation and related articles located on the Ask Akamai Knowledge base available at <http://control.akamai.com>.*



Hardware & Software Requirements

Minimum Hardware Requirements

Processor	Pentium 233 MHz or higher processor
Memory	128 MB RAM
Disk space	6 MB, including 15 MB of available space on the hard disk that contains the operating system
Monitor	Super VGA (800 x 600) or higher resolution with 256 colors or higher
Pointing device	Microsoft Mouse or compatible pointing device

Software Requirements

Operating system	Microsoft Windows 2000 Service Pack 3, or Windows XP Service pack 1
XML	Microsoft's XML Parser and SDK version 4.1 (needed to display the XML output generated by EdgeSuite booster)
Web browser	Microsoft's Internet Explorer 6.0 or later.
IE security settings	IE security settings must allow the running of ActiveX controls and JavaScript code



Download and Installation

You can download the latest version of EdgeSuite Booster on Akamai's portal (<https://control.akamai.com>) under Support > Documentation > EdgeSuite > Tools.

EdgeSuite Booster installation package size (EdgeSuiteBooster.exe) is approximately 5.7 MB and includes the Microsoft XML parser (5 MB), although it is installed separately because of its license agreement.

NOTE: *Before installing ESB, you need to close all open Internet Explorer Windows.*

NOTE: *If you upgrade from a previous version of EdgeSuite Booster, it is recommended that you remove the old version first (and the Microsoft XML parser) to avoid any conflicts.*

Open the EdgeSuiteBooster.exe file and follow the default installation. Please ensure to install also the Microsoft XML parser (default installation).



Usage

The main benefit of EdgeSuite Booster against similar tools is that it is integrated into Microsoft Internet Explorer's context menu and therefore you do not need to provide parameters as it works on the current page which is loaded into Internet Explorer in the moment of calling ESB.

Because ESB is made of several tools the usage may differ from one tool to the other. Some explanation for each tool is included below.

ESB: HTTP Request Maker

HTTP Request Maker is the most powerful of all tools included in ESB. It allows making a HTTP request (get a Web page or another object from a Web server) and displays the low level information returned by the Web Server as a result of the HTTP request. It is also possible to see Akamai debug and custom headers.

NOTE: *You may need to be familiar with the HTTP protocol in order to use this tool*

Several parameters can be passed to the HTTP request and are described below. If you want to learn more about those parameters try reading some of the many tutorials available on the WWW about the HTTP protocol.

URL	The URL for which you want to run the HTTP request (e.g., <code>http://www.example.com</code>).
HTTP Method	One of the available HTTP methods (i.e., GET will return the full HTTP response of the URL; while HEAD will return just the headers of the HTTP response)
Host	The host name (or IP address) of the Web server to run the HTTP request. For example, this can be used to test a specific machine. (Known Web sites often serve the content using a group of several Web servers and use load balancing to serve requests, meaning that 2 consecutive requests from the same client can be answered by different Web servers)
User Agent	A header that identifies the Web browser (client) to the Web server. For example, this can be used to troubleshoot sites that give back different content depending on the Web browser software used (e.g., IE, Netscape).
Cookies	You can use this field to pass cookies to the Web server. Many Web sites return different content depending on the cookies passed.
If-Modified-Since	
Custom	Can be used to pass a custom header as a part of the HTTP request
Custom	Can be used to pass a custom header as a part of the HTTP request



User	Used to pass the username for a HTTP request that requires authentication
Password	Used to pass the password for a HTTP request that requires authentication
Body	Information you want to send using POST method (using POST protocol format)
Output type	<p>There are two output types:</p> <ul style="list-style-type: none">• View Source – to see the low-level information the Web browser receives before parsing it and showing it to the user.• Display HTML - to see the normal HTML output as it will be normally displayed by IE

Once you fill in all the fields with the information you want, press the **GO** button to send the HTTP request.

Note: Depending on the security settings of your IE, you will see a Warning message the first time you press the GO button. You will need to press **Yes** in order of ESB to work.

ESB: View Images

By selecting this option, HTTP Response headers for a page and each image within the page are shown, such as the pages Cookies. Akamai debug headers are sent so that you can view the page and image cache key and if the image was served from cache or not).

ESB: View Hyperlinks

By selecting this option, all the hyperlinks within the page are shown.



Limitations

There are a few limitations as a result of using Microsoft Server XMLHTTP Object ("MSXML2.ServerXMLHTTP.4.0"):

- It is not possible to remove a request header, such as the Connection header.
- It is not possible to turn off chase redirects when making requests.
- It is not possible to view HTTP request headers.
- It is not possible to get HTTP response protocol (HTTP/1.0 or HTTP/1.1).
- It is not possible to set HTTP request protocol (HTTP/1.0 or HTTP/1.1).

In a SSL site, if the SSL certificate common name does not match the hostname, the ActiveX control will generate an error message stating that the two names do not match.

Proxy Support for EdgeSuite Booster

Today, the EdgeSuite Booster tool does not have automatic support for proxy servers. Customers who use this tool are require a proxy server in order to access the Internet, will need to run the Microsoft proxycfg.exe command line tool in order to use EdgeSuite Booster while behind their proxy. If the customer cannot run the proxycfg.exe tool because of permissions, the EdgeSuite Booster code can be modified to support their proxy server settings. Ideally, the EdgeSuite Booster program and install program should be updated to add support for proxy servers. We will investigate to see what can be done to make this a seamless process. In the meantime, here are the manual instructions.

proxycfg.exe Command Line Tool

To use the current Microsoft Internet Explorer settings, run the proxycfg.exe program from the command line using the -u option. Note, you may need certain administrative privileges in order to run this command.

```
C:\>proxycfg -u
```

To specify a specific proxy configuration, run the proxycfg.exe with the -p command line option and specify the http and https proxy server settings. Note, you do not need to specify the https settings if https is not supported.

```
C:\>proxycfg -p "http=http://proxy.example.com:8080 https=https://proxy.example.com:443"
Updating proxy settings
```

Current WinHTTP proxy settings under

```
HKEY_LOCAL_MACHINE\
SOFTWARE\Microsoft\Windows\CurrentVersion\Internet Settings\Connections\
WinHttpSettings :
```



```
Flags          = PROXY_TYPE_DIRECT | PROXY_TYPE_PROXY
Proxy Server   = http=http://proxy.example.com:8080 https=https://proxy.example.com:443
Bypass List    = -not set-
```

To unset the proxy settings, run the -d command.

```
C:\>proxycfg -d
Updating proxy settings
```

Current WinHTTP proxy settings under

```
HKEY_LOCAL_MACHINE\
SOFTWARE\Microsoft\Windows\CurrentVersion\Internet Settings\Connections\
WinHttpSettings :

Flags          = PROXY_TYPE_DIRECT
Proxy Server    = -not set-
Bypass List     = -not set-
```

setProxy method

The EdgeSuite Booster uses the Microsoft MSXML HTTP ActiveX object to fetch the page and objects within the page. To programmatically configure a proxy to use when making HTTP requests, you can use the setProxy method after instantiating the object. See the attached test case file as an example. If you wish to modify the EdgeSuite Booster program, see the functions.js file.

```
var xmlhttp = new ActiveXObject("MSXML2.ServerXMLHTTP.4.0");
xmlhttp.setProxy(2,"http=http://proxy.example.com:8080");
```

Microsoft Proxy References

For more details, please read the following two Microsoft knowledge base articles.

<http://msdn.microsoft.com/library/default.asp?url=/library/en-us/xmlsdk/html/ServerXMLHttpProxy.asp>

<http://support.microsoft.com/default.aspx?scid=kb;EN-US;289481>



Appendix A Akamai Custom HTTP Headers

X-Cache HTTP Response Header

Returned from request using "Pragma: akamai-x-cache-on":

- **TCP_HIT:** The object was fresh in cache and object from disk cache.
- **TCP_MISS:** The object was not in cache, server fetched object from origin.
- **TCP_REFRESH_HIT:** The object was stale in cache and we successfully refreshed with the origin on an If-Modified-Since request.
- **TCP_REFRESH_MISS:** Object was stale in cache and refresh obtained a new object from origin in response to our IF-Modified-Since request.
- **TCP_REFRESH_FAIL_HIT:** Object was stale in cache and we failed on refresh (couldn't reach origin) so we served the stale object.
- **TCP_IMS_HIT:** IF-Modified-Since request from client and object was fresh in cache and served.
- **TCP_NEGATIVE_HIT:** Object previously returned a "not found" (or any other negatively cacheable response) and that cached response was a hit for this new request.
- **TCP_MEM_HIT:** Object was on disk and in the memory cache. Server served it without hitting the disk.
- **TCP_DENIED:** Denied access to the client for whatever reason
- **TCP_COOKIE_DENY:** Denied access on cookie authentication (if centralized or decentralized authorization feature is being used in configuration)

X-Cache-Key HTTP Response Header

Returned from request using "Pragma: akamai-x-get-cache-key"; the value is the internal cache key for the page or object on the Akamai server.

Example HTTP Request and Response:

HTTP Request

```
wget -d --header="Pragma: akamai-x-get-cache-key" --header="Pragma: akamai-x-cache-on"
http://www.example.com/
```

HTTP Response

```
HTTP/1.0 200 OK
Server: Netscape-Enterprise/3.6 SP3
Content-Type: text/html
Last-Modified: Mon, 29 Apr 2002 15:58:52 GMT
Content-Length: 12670
Accept-Ranges: bytes
Date: Thu, 02 May 2002 14:04:09 GMT
X-Cache: TCP_MEM_HIT from a12-159-80-21.deploy.akamaitechnologies.com
(AkamaiGHost/4.3.2.2-233916) (-)
X-Cache-Key: /L/200/1/12h/origin.www.example.com/
Connection: keep-alive
```