

Openwave SDK Technical Bulletin #3

Determining the Capabilities of Openwave Mobile Browser Devices

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Retrieving Device Information

When the Mobile Access Gateway (MAG) Server makes an HTTP request to a mobile application or service, it adds headers that provide information about the subscriber, the Mobile Browser device, and the MAG Server. These headers are converted by the Web server to environment variables, which you can retrieve using facilities such as the C function, getenv(), or the special Perl array, @ENV.

Environment variable	Description
HTTP_ACCEPT_LANGUAGE	Specifies the language(s) in use on the device. The variable specifies a comma-separated list of language-country identifiers as defined in ISO 639 and the two character country codes as defined in ISO 3166. A list of these codes is provided at:
	http://www.unicode.org/
	The following are some examples
	en: English en-gb: Great Britain English ja: Japanese
	WML services should check this variable and attempt to deliver localized content in the specified language.
HTTP_COOKIE	Contains HTTP cookies in the standard format compatible with RFC-2109. The MAG and SDK Mobile Browser Simulator both store persistent cookies. The Simulator manages cookies in HTTP direct mode. When the SDK Simulator is set to proxy mode, the MAG server manages cookies and never delivers them to the Simulator.
	For more information on Simulator modes, see the SDK online help.
HTTP_REFERER	Specifies the URL of the deck originating the request. This variable is set only if you specify sendreferer="true" when you define the <go> statement that generates the request. For more information on this option, see "Checking the HTTP Referer Header" in the WML Developer's Guide.</go>
HTTP_USER_AGENT	Contains a string with the format:
	Browser/Browser_version UP.Link/uplink_version
	If the browser is a GUI browser, the returned string includes the substring "gui."
	An example is:
	SEC-SPHN300 UP.Browser/4.1.22bl UP.Link/4.3.3.1
HTTP_X_UP_DEVCAP_ IMMED_ALERT	Specifies whether the device does (1) or does not (0) support immediate alerts. If this variable is not included, no support for immediate alerts is assumed.

The following table lists the environment variables set by the MAG HTTP request headers.

Environment variable	Description
HTTP_X_UP_DEVCAP_ MAX_PDU	Specifies the maximum packet size supported by the device (normally 2984 but configurable by the MAG operator).
HTTP_X_UP_DEVCAP_GUI	Specifies whether the device is (1) or is not (0) using a GUI browser. If this variable is not included, a text based browser is assumed.
HTTP_X_UP_DEVCAP_ SCREENPIXELS	Specifies the width and height of the display in pixels. For example, the value 264,116 indicates the display is 264 pixels wide by 116 pixels high. This variable is reported only for proportional font displays.
HTTP_X_UP_DEVCAP_ SCREENCHARS	Specifies the width and height of the display in characters. The fixed character width and height are the units of measurement. This variable is reported only for fixed width font displays.
HTTP_X_UP_DEVCAP_ SCREENDEPTH	Specifies the color depth of the display in pixels. Black and white devices report a value of 1. If this variable is not included, a color depth of 1 is assumed.
HTTP_X_UP_DEVCAP_MSIZE	Specifies the width and height in pixels of the character, "M." This variable is reported only for proportional font displays.
HTTP_X_UP_DEVCAP_ NUMSOFTKEYS	Specifies the number of softkeys supported by the device.
HTTP_X_UP_DEVCAP_ SOFTKEYSIZE	Specifies the maximum number of characters allowed for softkey labels. If this variable is not included, a size of five characters is assumed.
HTTP_X_UP_DEVCAP_ISCOLOR	Specifies whether the display is grayscale (0) or color (1). If this variable is not included, grayscale is assumed.
HTTP_X_UP_FAX_ACCEPTS	Contains a comma-delimited string of acceptable fax types (MIME content types). MAG Servers (version 3.0 and above) commonly support the following types:
	<pre>text/plain application/postscript application/msword application/rtf application/pdf</pre>
HTTP_X_UP_FAX_ENCODINGS	Contains a comma-delimited list of the fax encoding types that the MAG Server accepts. By default, the MAG Server always accepts faxes with 7-bit encoding. If you omit this HTTP header, that is the only type it accepts. Other types MAG Servers may accept are: 8-bit, base64, or quoted-printable

Environment variable	Description
HTTP_X_UP_FAX_LIMIT	Specifies the maximum fax size (in bytes) that the MAG Server accepts.
HTTP_X_UP_SUBNO	Specifies the subscriber ID. The ID is globally unique (in other words, across all MAG Servers throughout the world). The ID has a maximum length of 32 characters, which includes the "_" character and the fully-qualified host name of the MAG Server.
HTTP_X_UP_UPLINK	Specifies the host on which the MAG is installed.

IMPORTANT Because the HTTP request headers are set by the MAG Server, they are simulated when you run the SDK Mobile Browser Simulator in HTTP Direct mode.