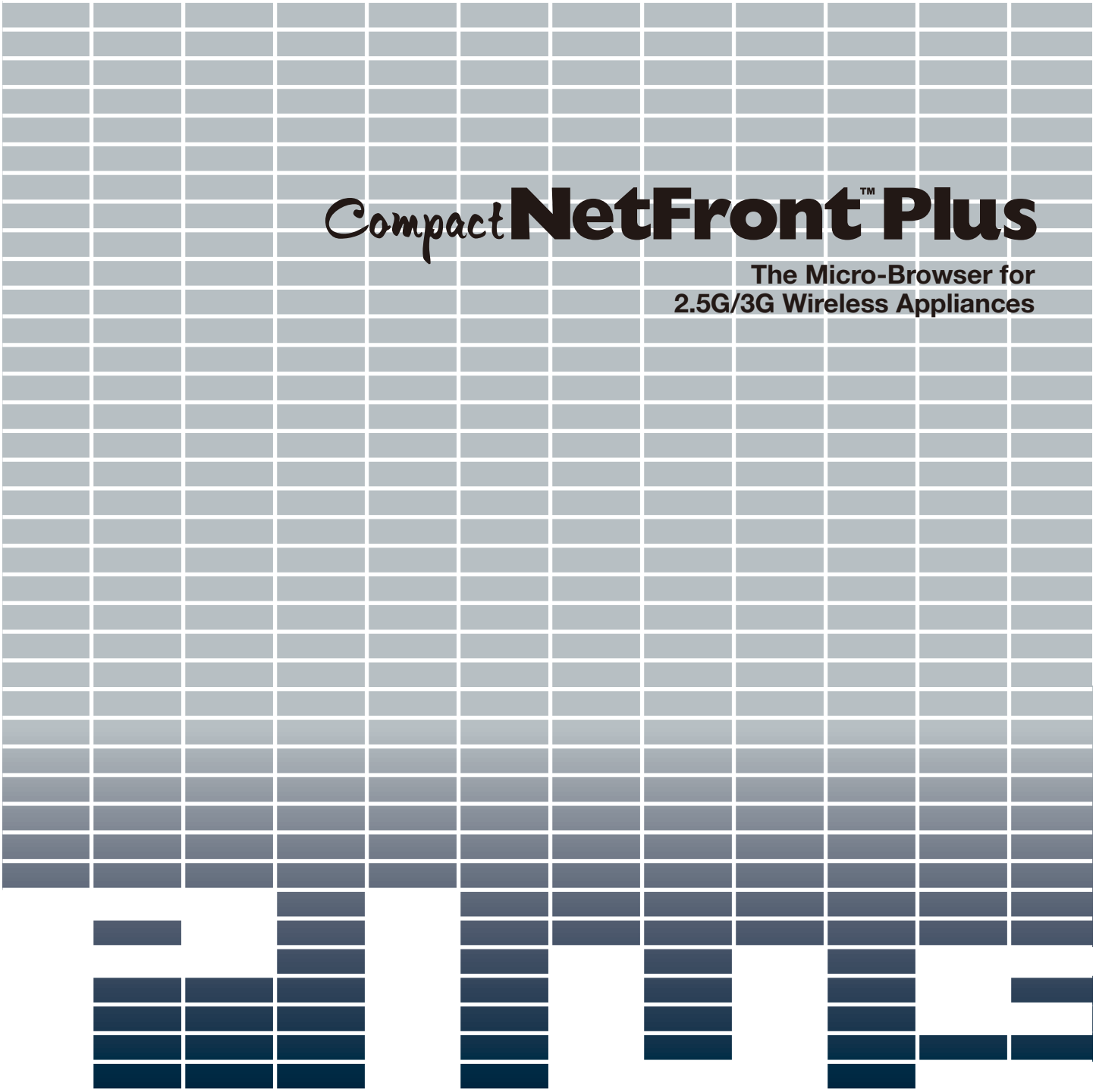


Compact NetFront™ Plus

The Micro-Browser for 2.5G/3G Wireless Appliances

Compact NetFront Plus is a micro-browser optimized for small mobile devices with limited display resources.

Its development was based on ACCESS' proven Compact NetFront, the industry's first and most popular i-mode browser.

Compact NetFront Plus is the extended version of Compact NetFront.

It provides native and seamless support for multiple markup languages like WML 1.3,

xHTML Basic, and Compact HTML (i-mode HTML).

Combined with ACCESS' Internet standard stacks such as TCP/IP, SSL and Java,

it ensures that handset manufacturers can develop the most advanced wireless Internet appliances

with minimal hardware expense and development time.

ACCESS ComponentWare

Build Your Internet Appliance Right & Light

ACCESS™

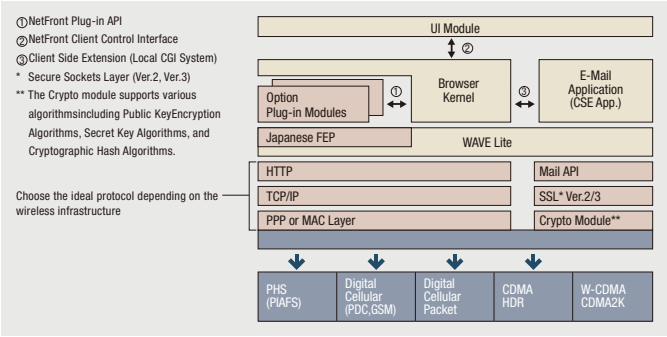
Compact NetFront™ Plus

The Micro-Browser for 2.5G/3G Wireless Appliances

Functions and Features

- Supports Compact HTML (HTML 4.0 subset, W3C Note 2nd February, 1998)
- Supports XHTML Basic 1.0 (XHTML subset, W3C Recommendation 19 December 2000)
- Supports WML 1.3 (Parse and interpret WML 1.3 text data)
- Supports of HTTP/1.1
- Support of GIF/JPEG/WBMP/BMP/PNG image formats
- Small memory size (ROM: 550KB~, RAM: 420KB~)
- Designed for low-power CPU (Runs on 20-40 MIPS CPU)
- CPU/OS independent
- Wireless communication protocol independent (PDC, PDC-P, PHS, GSM/GPRS, CDMA/HDR, W-CDMA, CDMA2000....)
- WAVElite window system brings superior portability
- Flexible UI customization
- Bookmark and URL entry functions
- Easy button operation for focused navigation, data selection and character input
- Direct key assignment using numerical keys to specify anchors ("accesskey" in HTML 4.0)
- Support of Japanese FEP
- Telephony URL (tel:81-3-5295-3771)
- Extensionability with Client Side Extension (CSE) and Plug-in features
- Internet mail protocols (SMTP, POP3, IMAP4, HTTP-mail) [optional]
- Mail arrival notify function (Push) [optional]
- JV-Lite2 (J2ME CLDC/MIDP) Java™ Virtual

Modular Configuration

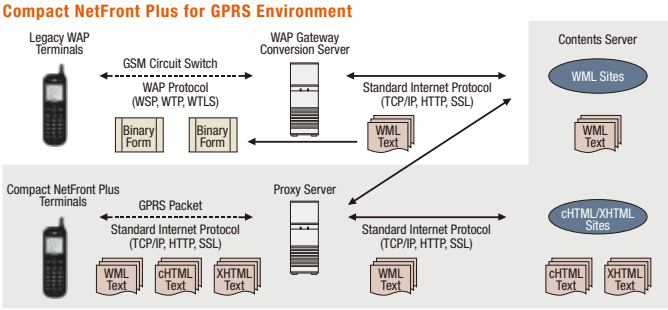


Integration with WAP 1.x environment

Handsets with ACCESS' Compact NetFront Plus browser can access existing WML 1.x content. These handsets also can access rich and colorful content based on Compact HTML/XHTML. Compact NetFront Plus can parse and interpret WML 1.x text data that is seamlessly transferred from a WAP 1.x content server through a proxy server. It does not generate binary conversion of existing WML content, and it can connect via a standard HTTP proxy server. A WAP 1.x legacy gateway server is no longer necessary.

The proxy server does not generate any protocol conversion, and an end-to-end SSL connection can be established between the handset and the content server through the SSL tunneling function of the proxy server. This means that an existing secure server on the Internet can be used without modification. Compact NetFront Plus can be integrated with HTML/HTTP base e-mail applications or SMTP/POP3 or IMAP4 based e-mail applications. And it can be integrated with 'Push message' E-Mail arrival notification based on SMS.Handsets with ACCESS' Compact

Compact NetFront Plus for GPRS Environment



Independent of CPUs or Operating Systems

Compact NetFront Plus can easily be ported to various CPU and OS Platforms, and supports numerous protocols, including wireless TCP/IP, dedicated simplified protocol, and WAP, it is thus available for both wired and wireless environments.

Easily Customizable User Interface, Rich Options

The user interface (UI) part is separated form the browser engine so the UI can be easily customized depending on the target device. A wide range of optional modules are available, including the JV-Lite2 (J2ME CLDC/MIDP) and the SSL encryption module. CSE (Client Side Extension) allows the creation of a local CGI. CSE is a convenient interface for using the browser as a UI for other applications. Mail applications, setup screens, address books and other applications can be called up and displayed. For high-speed wireless data communication environments like 2.5G/3G, streaming video and audio playback, etc. can be considered as expanded browser functions. In Compact NetFront Plus, such expansion functions can be implemented as plug-in modules.Compact NetFront Plus can

About ACCESS

ACCESS is a leading provider of innovative embedded software solutions for Internet appliances. The company's embedded browser software powers over 130 different commercial products including televisions, set top boxes, game consoles, PDAs, car navigation systems, web phones, kiosk terminals and intranet terminals.

ACCESS' Compact NetFront micro browser software is most widely deployed in phones for NTT DoCoMo's i-mode. Over 53 million commercial devices with NetFront/Compact NetFront have been shipped from more than 40 major consumer appliance manufacturers.

ACCESS developed Compact HTML as a subset of HTML suitable for the small screen and button operation of a mobile phone. In conjunction with five major manufacturers (Fujitsu, Matsushita, Mitsubishi, NEC and Sony) in February of 1998, ACCESS proposed the Compact HTML specification with W3C (World Wide Web Consortium). Recently, ACCESS served as Co-Editor in defining the specification of XHTML Basic at W3C, which became a W3C recommendation in December 2000. In addition, ACCESS is serving as the Editor of the markup language of WAP 2.0 standardization activity at the WAP Forum.

ACCESS Co. Ltd. (Tokyo Stock Exchange: 4813) is headquartered in Tokyo, Japan, with ACCESS Systems America, its US subsidiary, in Fremont, California and Access Systems Europe GmbH, its European subsidiary, in Oberhausen, Germany.ACCESS is a leading provider of innovative

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