



NetFront™ v3.1

For Series 60

User Manual

Edition 2004-06-21

ACCESS

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Introduction

1.1 About NetFront for Series 60

NetFront is a sophisticated Internet browser that sets a new global standard for Internet usage on mobile devices. It offers the most comprehensive feature set currently available in the market including support for WAP 2.0 and the latest W3C specifications.

As a fully featured Web browser, NetFront gives you advanced access to the Internet from your Series 60 phone. It supports Symbian OS 6.1 and 7.0s and is compatible with Nokia 7650, 3650, 3660, 3620, 6600 and N-Gage, as well as other Series 60 devices.

Additional information is available on the Internet at: www.access-netfront.com

NetFront – the most advanced feature set for mobile devices.

Support for all important Internet and OMA standards

- ☞ HTML 4.01, XHTML 1.1
- ☞ XHTML Mobile Profile, cHTML, iHTML
- ☞ CSS1, CSS2 (including CSS Mobile Profile)

Secure Internet

- ☞ SSL (128-bit encryption), authentication, DRM

Dynamic Internet

- ☞ Dynamic HTML, DOM 1, 2
- ☞ ECMAScript (JavaScript 1.5)

Flexible View settings

- ☞ Smart-Fit Rendering: optimizes standard Web pages for display on a Series 60 device screen
- ☞ TextOnly: only text is downloaded, cost effective information access
- ☞ ImageOnDemand: loads images only when needed. This gives you maximum control over download performance and costs.

Small-Image Mode:

Minimum formatting and small resized images minimize the memory consumption and limit the amount of transmitted data and speeds up rendering of large websites

Rapid-Render™:

Loads text elements first to speed up browsing and enhance usability

Zoom:

Allows for the quick display of web pages at various zoom levels

Picture Zoom:

Any picture can be zoomed up to screen size

File Download: Program and image download

Image Select: Select any picture, zoom it up to screen size and save it

Full screen mode:

Switches on/off the display of the title and menu bar

Different scrolling modes:

- Jump from link to link
- Image select mode
- fast scroll

Download:

- faster download transfer rate
- new download mechanism to enable large file download

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1.2 About this Manual

1.2.1 Typographical conventions

[TEXT] Text enclosed in square brackets refers to a soft key.

bold Text set in bold letters denotes elements of the user interface.

< *Soft keys are special keys on your mobile phone with variable functions. These functions are dependant upon the current application being used.*

1.2.2 Navigating within NetFront

Selecting items

To select an item on a web page or in a menu, navigate to the respective item by using the cursor control.

< *The cursor control can be a joystick or a 4-way key.*

Select the desired item by pressing the cursor control. The menu item is selected and will be executed. When you arrive at the item - usually it will be highlighted - you select it by pressing the selection key.

< *Depending on what device you are using the selection key might be located in different places.*

Changing tabs

Sometimes information or dialogs are organized into several tabs. Small arrows in the navigation panel indicate that further tabs are available. You can toggle between tabs using the cursor control.

Moving focus

If you are asked to move the focus to an object, scroll to the adequate location by using the cursor control. If an object is in focus, this will be indicated by a highlighted rectangular frame or some background color.

Dynamic menus

Some menus in NetFront change dynamically depending on what functions are currently available to the user.

For example, Text-Only mode does not support JavaScript and CSS. Hence the JavaScript and user style sheet setting is not available from the settings dialog while Text-Only is activated.

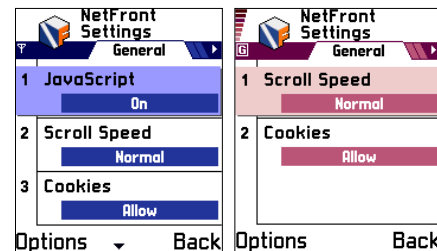


Fig. 1:
General settings in normal mode and Text-Only mode

1.2.3 Help notes

When selecting several tools or changing between different modes, information boxes will pop up and display context based help. If you press **OK**, the help notes are kept as reminders and will appear again the next time you choose the specific option. If you press **Hide**, this information window will not pop up again.

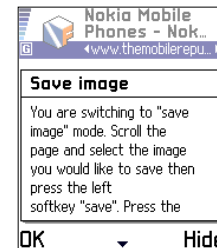


Fig. 2:
Help notes

1.2.4 Help

The **Help** command in the main menu brings you to the help pages stored on the phone or alternatively to other help pages on the Internet, if defined so in NetFront's **Pages settings**.

Installing NetFront

There are two ways to install NetFront on your mobile phone:

- < Using the PC Suite application of your mobile phone.
- < Transferring the "netfront_s60.sis" installation file to the phone via a Bluetooth or an infrared connection. Before you start the installation make sure you have enough free memory on your phone. During the installation process you will need at least 1.8 MB of memory.

NetFront for Series 60 has been tested on Nokia 7650, Nokia 3650, Nokia 3660, Nokia N-Gage and Nokia 6600.

If your phone has a memory card (like Nokia 3650) it is highly recommended to install NetFront on the memory card.

If you already installed NetFront on your phone, it is recommended to first uninstall the existing version by using the application manager and the install the new version.

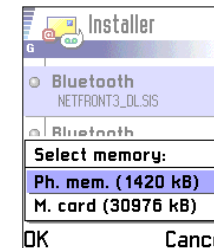


Fig. 3:
Installing location

< *There are some limitations on 6600, for example you cannot define a default Internet connection.*

2.1 Installing via PC application

Start the PC Suite application on your computer.

Choose the menu command Tools/Install application and follow the instructions on the screen.

2.2 Installing NetFront via file transfer

Start the infrared or Bluetooth client application on your computer and send the "netfront_s60.sis" file to the phone. It will then arrive as a new message in your phones' inbox. Go to your Inbox and select the message containing the installation file. The file will be automatically saved to the installer application.

Select Install and press [OK].

< *If NetFront is already installed, the installer asks whether to replace the existing installation. The previous version will be uninstalled, but existing bookmarks are kept with the new version.*

If your phone has a memory card inserted, you will be asked where you want to install the application.

Next, the installer will ask you to read and to accept the license agreement terms and conditions. Read the agreement and if you accept, press [OK]. If you do not accept the agreement, press [Cancel], and the installation will be aborted.

< *If your phone is low on free memory, you may receive an "out-of-memory" message on screen. In this case, delete the netfront_s60.sis file from your inbox after it has been copied to the installer. Go to "Tools/Manager" and install NetFront manually.*

2.3 Defining your Internet connection

To access the Internet, the Internet connection on your phone needs to be configured correctly. This connection differs from operator to operator.

< *The connection for browsing the Internet is usually different from your WAP or MMS connections.*

< *A default Internet connection is not available on the Nokia 6600!*

Please make sure that your SIM card is data services enabled. NetFront benefits from fast data services like GPRS or HSCSD, for which you might need a special subscription depending on your operator.

You have to ask your operator what account information to use. Most operators have supporting Web pages where you can find the required information.

< *Some operators provide services that send the settings as a message directly to your phone. You also will find a list of operator's settings on our website www.access-sys-eu.com.*

2.3.1 Basic settings

To define the basic settings of your connection, select Tools, Settings, Connection and Access points from your phone's main menu.

Press [Options], and select **New access point** and Use default settings.

Enter the respective settings:

Connection name

Random name that helps you to identify the appropriate connection

Data bearer

GPRS select GPRS for "always on" connections charged on transfer volume basis

High speed GSM select HSCSD for high speed GSM connections. If HSCSD is selected you have to enter additional settings: Dial-up-number, data call type

GSM data GSM data is the slowest connection type. It should only be used when GPRS or HSCSD is not available

Access point name

Ask your provider about this setting

User name

Ask your provider about this setting

Prompt password

No

Password

Ask your provider about this setting

Authentication

Ask your provider about this setting

Gateway IP address

0.0.0.0

< *For a HSCSD connection, you also need to define the phone number to call and the data call type.*

2.3.2 Advanced settings

Advanced settings allow for additional settings. Please refer to your operator's instructions for data connections.

Phone IP address:

Ask your operator about this setting, usually it is dynamic

Primary name server (DNS)

Ask your operator about this setting

Secondary name server (DNS)

Ask your operator about this setting

When NetFront is installed and you have configured your connection you can define it as default in your browser settings. Otherwise you will be asked to select an access point each time you make a connection to the Internet.

2.4 Registering NetFront

After installing NetFront you are working on an unregistered version of NetFront.

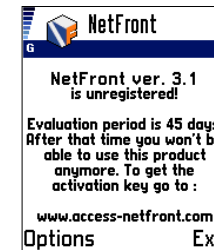


Fig. 4: Start screen when NetFront is not registered

Press [Options] to continue with the unregistered version or register your NetFront version.

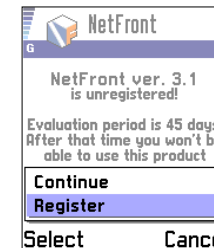


Fig. 5: Request for registering

The NetFront demo version can be used for 45 days from the first time you started the NetFront browser.

Selecting **Register** takes you to the activation dialog where you can enter your activation key.

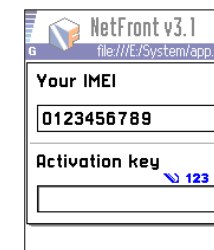


Fig. 6: Activation key dialog

< *Please note that this serial number is slightly different from the IMEI. You might be asked for your IMEI when buying from a web shop. To obtain this number, enter *#06# on the phone interface. Your device's IMEI number will appear on the screen.*

< *You can buy a license for NetFront from popular web shops. NetFront is currently available from www.softwaremarket.nokia.com and www.handango.com*

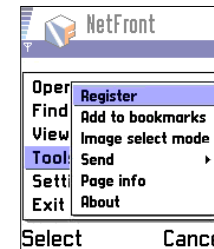


Fig. 7: Registering via tools menu

This dialog is also accessible from the **Tools** menu.

Once NetFront is successfully registered both the startup screen and the Tools/register menu item will no longer be available.

2.5 Add links to bookmarks

At the first start of NetFront you are offered the possibility to add bookmarks specially related to NetFront and the company ACCESS. Bookmarks include NetFront web page, frequently asked questions and company pages. Those bookmarks will not be removed automatically when you uninstall NetFront from your phone.

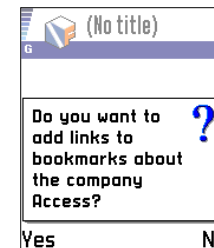


Fig. 8: Add bookmarks about the company ACCESS

NetFront Settings

Once NetFront is installed and your access point is configured you are ready to browse the internet. However, the settings dialogs allow you to further customize NetFront.

Settings are organized in the following tabs:

- ☰ General
- ☰ Display
- ☰ Pages
- ☰ Shortcuts
- ☰ Connection
- ☰ Certificate

< *Some settings in other parts of the software can dynamically change the appearance of the settings dialogs, e.g. with Text-Only set to On in the View menu the JavaScript setting is invisible because JavaScript is not available in Text-Only mode*

3.1 General settings

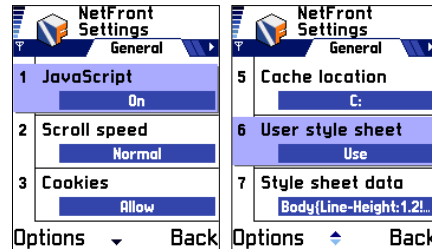


Fig. 9: General settings

JavaScript On/Off

JavaScript can be enabled or disabled. Many pages on the Internet use JavaScript for dynamic features. To save memory you might want to switch off JavaScript support. If switched to **Off** NetFront will simply ignore Java Script elements.

Scroll speed Normal/Fast

This switch changes the speed by which you can scroll through pages. The default value is **Normal**.

Cookies Allow/Reject/Ask

Cookies are small files created by some Web servers which are supposed to be saved to the local memory on your device. Cookies are used to store for example user data for certain Web services so that such data does not have to be entered every time you visit the page.

NetFront gives you full control over cookie handling. If set to **Allow** cookies are always stored to your device. **Reject** disables cookies so that they cannot be stored.

Ask forces the browser to show a dialog whenever a server tries to send a cookie. Each time a cookie is sent you can decide whether you want to store or to reject it.

User stylesheet Use/Don't use

Style sheets are a powerful concept to control the look and feel of a webpage. NetFront supports both style sheets on the web pages itself and local style sheets. The local user style sheet can be used to define the appearance of Web page elements. Those definitions can overwrite the definitions in a web page or set default values for cases where there is no information given on the web page. For example you can predefine how links or headlines look like.

If you want to apply a user style sheet, select **Use** in **User style sheet**. If you select **Don't use**, the user style sheet will not be applied to the pages you open in your browser.

You can use this switch to temporarily switch off your user style sheet without losing the information entered in the style sheet.

Style sheet data

In **Style sheet data** you can define a style sheet to be applied in NetFront. A style sheet is a collection of several settings, you can change corresponding to your favorite settings. These settings concern the appearance of a page, like color of text, hyperlinks or background, as well as different heading formats or the representation of highlighted frames.

4 *Information about CSS on the Web:*
<http://www.w3.org/style/css>

Cache size (KB)

Allows size definition of cache, a buffering space, for accessing retrieved data. Cache allowance depends on the available phone memory. Default cache size is 256 KB.

Cache location

Select where cache must be located:

- C: flash memory
- D: RAM
- or E: Memory card

Drive E: is only available when a memory card is installed.

3.2 Display Settings

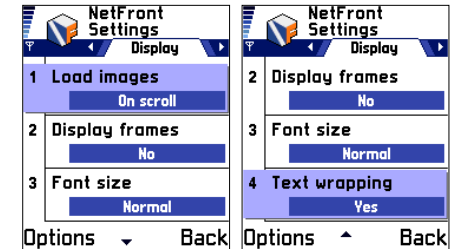


Fig. 10: Display settings

Load images

Images are typically among the most memory consuming elements on a web page. To reduce data traffic – thus saving costs – you might want to disable the automatic download of images.

If **Load images** is set to **None** place holder icons are shown instead of images.

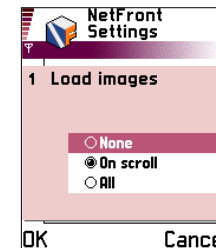


Fig. 11: Load images settings

< *"TextOnly" and "Load images" = "None" are different rendering modes. Text-Only is even faster but it does not try to maintain the intended layout and drops images.*

If you want to load an image while automatic loading of images is disabled press the respective shortcut key. By default, this functionality is assigned to key "4". If **Load images** is set to **On scroll** only those images that are currently visible on the screen are loaded. This allows you to access elements and links on a page much faster than with loading all the images first.

< *You might want to change this setting when not using always on connections. Since during scrolling other images appear in the visible display area and the browser tries to load them. If you are not using an always on connection this might lead to the annoying situation where you have to reconnect several times during scrolling.*

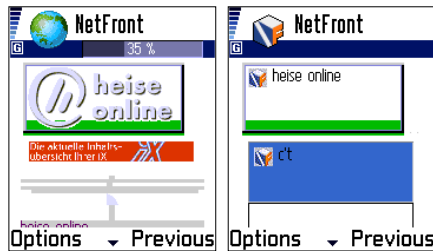


Fig. 12: Images and placeholders display

Setting **Load images** to **all** forces the browser to first completely load all images of a webpage. This setting provides the most accurate rendering but depending on the complexity and "weight" of the respective page it is also the slowest mode.

Font size Normal/Large

In **Font size** you can set the displayed font to **Normal** or **Large**.

Text wrapping Yes/No

You can control the arrangement of text on a page with the Text wrapping setting. If you select **Yes** each last word not fitting into a line will be moved to the next line. If you select **No**, the last word of each line will be separated, without consideration of hyphenation rules.

3.3 Pages settings

In the Pages settings you can define your home, search and start page.

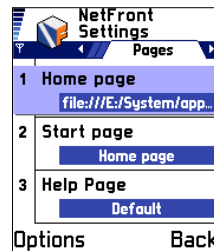


Fig. 13: Pages settings

Home page

In **Home page** you can enter the URL of a page. The corresponding page will be opened if you select **Open** and **Home page** in main menu. You can choose e.g. a portal page like Yahoo or any other page.

Start page

Start page is the page which is automatically loaded when NetFront is started. You can choose between **Home page** and **Blank page** as start page.

Help page

Help page is the start page to a set of help pages locally stored on the phone or to a page on the Internet. You can choose between **Default** (locally) and **User defined** for some different page on the web.

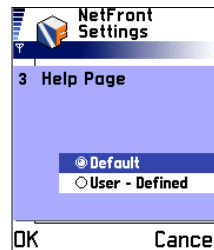


Fig. 14: Defining a Help Page

3.4 Shortcuts

Shortcuts – sometimes called hot keys or accelerators – provide quick access to certain browser functionality.

In NetFront you can toggle between using numeric keys (plus * and #) as shortcuts to browser functionality or as access keys. Access keys are used in some i-mode or WAP pages as shortcuts to items on a page.

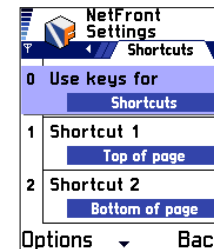


Fig. 15: Shortcuts

< *When shortcuts are enabled, access keys on i-mode or WAP pages are not functional.*

NetFront comes with the following shortcuts predefined:

- (0) Shortcuts configuration
- (1) (Go to) Top of page
- (2) (Go to) Bottom of page
- (3) Add (page) to bookmarks
- (4) Load visible images
- (5) Select images
- (6) Open URL
- (7) Find on the Web
- (8) Bookmarks
- (9) Find next
- (*) Full screen on/off
- (#) Rotate rendering (switch display modes)

The shortcuts tab in the settings dialog allows you to remap the respective keys to other commands or functionality.

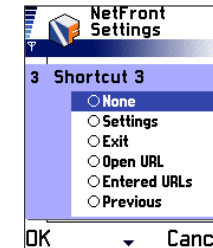


Fig. 16: Shortcuts to commands

When you are on the shortcuts tab simply press the key to which you want to assign some new functionality. A list of available commands is shown. The current assignment may be only visible after scrolling since the list is quite long. To assign new functionality just select the respective command from the list. If this command was already assigned to some other key, a dialog shows up asking you whether you want to reassign this functionality. If you confirm with **Yes**, the old assignment is cleared and set to none.

< *You cannot assign the same command to multiple keys.*

3.5 Connection settings

< After changing any proxy setting, you have to re-start NetFront for this setting to take effect.

Default Connection

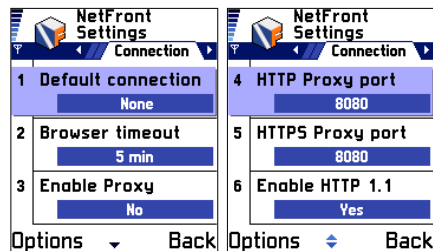
Access points are needed for Internet connections or messaging services like MMS. Some access points may be defined on your device.

< Connections for MMS or WAP are usually different from the Internet connections needed for NetFront.

4 More on access points and connection in chapter 2.3 "Defining your Internet connection".

To make browsing the Internet with NetFront more convenient you can define a default connection which is automatically used for Internet connections. If you leave **Default connection** to **None** you will always be asked which access point to use when an Internet connection needs to be established.

< Default Internet connection is not available on Nokia 6600.



Browser timeout

You can specify a period, after which NetFront will disconnect from the Internet. NetFront will close an Internet connection when there is no user interaction.

This helps you to avoid incurring unnecessary costs for wasted/inactive time online. This is particularly important when using GSM/HSCSD connections (GPRS is charged for data packets transferred). If you forget to close a connection after finishing your browser session (NetFront still open), NetFront will automatically stop any online activities after the time specified. You have the choice between 0s, 30s, 1min, 2min, 5min and never.

Enable Proxy Yes/No setting

You can force NetFront to use a specific proxy server independent from the access points setting. A proxy server "sits" between the client application (like NetFront) and a real server. It intercepts requests to the real server to see whether it can fulfill them itself. If not, such requests are forwarded to the real server.

Proxy servers are used to improve performance and to filter requests. Performance can be improved because the proxy server caches certain data for groups of users thus reducing network operations. The filtering functions of a proxy server can be used to limit user access to a specific set of websites or to control access to certain web services.

Enable Proxy allows you to switch on/off the use of a proxy server without losing the defined proxy settings.

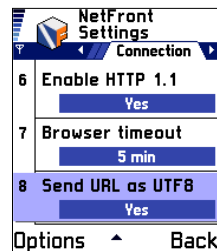


Fig.17: Connection settings

Proxy host

In Proxy host you can specify the URL of the proxy server which will be used for Internet connections when Proxy is enabled. Normally the proxy host is specified by its IP address. However, it is also possible to use the URL.

HTTP Proxy port

HTTP Proxy port specifies the port used for normal Internet connections.

HTTPS Proxy port

HTTPS Proxy port specifies the port used for secure Internet connections.

Enable HTTP 1.1

Select **No** if you want NetFront to use the HTTP 1.0 protocol over proxy connection instead of HTTP 1.1 protocol.

Send URL as UTF-8

If set **Send URL as UTF-8** to **Yes**, 16-bit-characters (used for example in Chinese or Japanese) will be transformed to 8-bit characters according to the UTF-8 standard. Applying this function will increase the compatibility.

3.6 Certificates settings

The Certificates settings allow you to view details of a certificate and change its validity status.

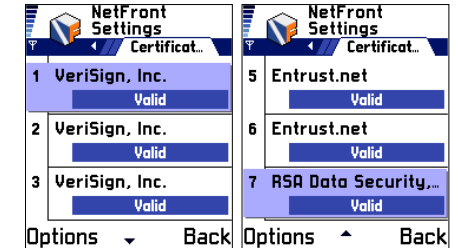


Fig. 18: Certificates settings

Using NetFront

It is highly recommended to close other applications before starting NetFront.

When NetFront is started, pressing [Options] takes you to the main menu of NetFront. This main menu is the control center of NetFront. Here you will start to get to all settings, commands and options.

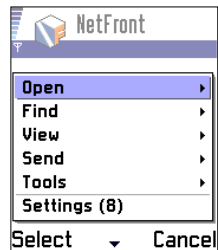


Fig. 19: Main menu

The browser title bar shows the title of a currently displayed page, the bar beyond it shows its current URL.

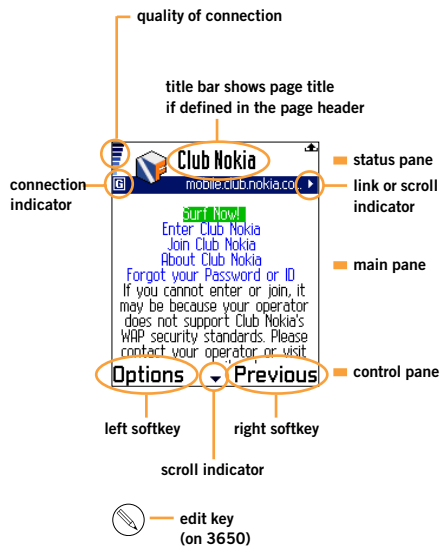


Fig. 20: Series 60 screen

4.1 Opening a Web page

If there is no active Internet connection, the browser will try to connect and ask you, which access point to use, if you did not define a default access point. (see 3.5 connection settings)

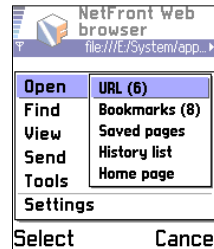


Fig. 21: The Open menu

- < If you have defined a default access point, the connection will be established automatically
- < A default access point is not available on the Nokia 6600!
- < The phone display indicates connection activities with blinking letter "G" for GPRS connections or D for GSM or HSCD connections. The indicator is not visible in full screen mode. As long as data is downloaded from a web page, an animated globe icon indicates ongoing data transfer.

NetFront provides several ways to open a page. You can enter a URL, open a list of previously entered URLs, go to previous or next page, use the bookmarks or history list. You can also open pages that have been saved to the phone's local storage.

Entering a URL

After selecting **Open/URL** you can enter the address of a web page.

Entered URLs

Entered URLs keeps a list of web pages for which you manually entered the URL in the open URL dialog. Other than the history list it does not remember web pages you visited when following links.

Previous/Next

Previous and **Next** lets you navigate back and forth within pages already visited during your current browser session.

- < *Previous and next menu items are only available if you already navigated between other pages during the current browser session.*

Bookmarks

Open/Bookmarks takes you to the bookmark list.

Select the page you want to open and press the cursor control or **Options/Open**.

Saved pages

NetFront allows you to save Web pages to the phone's local storage. (**Tools/Save page**) To open a previously stored page go to **Open/Saved pages** and select the respective page from the list.

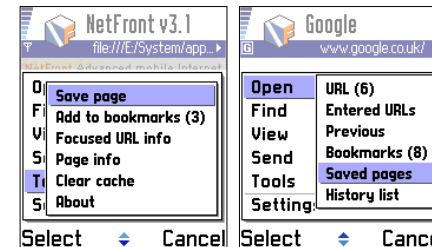


Fig. 22: Save/Saved pages

History list

NetFront keeps a list of visited web sites in the history list. Other than the **entered URLs** list the **history list** additionally remembers web sites which have been opened from links.

Home page

If defined in the settings, this menu item always takes you back to your home page.

4.2 Navigating within pages

Normal navigation within a web page is done by using the cursor control. When using the "Smart-Fit" display setting to supersede horizontal scrolling, the "up" and "down" arrow lets you scroll through the page. The "right" and "left" arrow moves the focus from one anchor (link/image) to another. The focus on anchors is marked by a highlighting green background color.

- < *This setting for the highlight color and others can be changed in the user style sheet*

You can keep the cursor control pushed for fast scrolling.

- < *Scrolling speed can be changed in the browser settings.*

Top of page / Bottom of page

You can use the **Top of page** or the **Bottom of page** shortcuts to quickly navigate through a page. Per default those are set to 1 and 2 respectively.

Forms

You will probably enter forms while surfing. For example this might happen if you want to subscribe to a newsletter. In this case you have to fill in input fields. To do so, move the focus to the input field. After pressing the cursor control you can enter your text.

- < *Like in other applications you can change the input mode by pressing the edit button (3650: pencil symbol). Choose alpha-, number- or dictionary mode and use T9 predictive input.*

Frames

Some complex websites use frames to organize their content to be viewed on a PC browser. When displaying such a website, NetFront is providing a preview of each frame displayed one after another. Selecting a preview and pressing the navigation key will open the respective frame in a separate window.

4.3 Select images / save images

With the predefined shortcut "5" or from the **Tools** menu you can activate **Select image** mode. Scroll the page and select the image you would like to enlarge or save and press the joystick center. Now the image is zoomed to screen width in a floating window. Press the left softkey to save the image into your phones photo album. Press **back** to go back to normal browsing mode



Fig. 23: Selecting images

Note that only images that have been loaded already can be saved. Placeholder icons cannot be selected.

4.4 Searching and Finding

Using the **Find** menu item you can find words within an opened Web page. Enter the respective string and press (OK). NetFront will search for occurrences of this string. If the search pattern is found within the page, it will be highlighted within the text.

To search for another occurrence of a search string select **Find next**. The default setting in shortcuts assigns the "a" key to the **Find next** function.

To search on the Internet for certain information select **Find on the Web** to open the predefined search page.

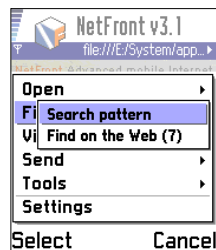


Fig. 24: Find options

See "pages" for information how to define your default search page

If a search pattern is not contained in the current page, NetFront displays a "Not found" message. This message disappears after a few seconds.

4.5 Downloading files

With NetFront you can download all kind of files. File types known by the system are downloaded and handed over to the respective application (e.g. .wav files go to the recorder). When the download is complete, select **Options/Open**. MIME type and related application are indicated in an information screen. If the file type is not known and no application is related you can select **Options/Save** and choose whether to store the file on the phone or on MMC (e.g. .xls, .doc)

4.6 View options

Selecting the View menu provides options related to the display of a page. Here you can toggle between different page rendering modes.

Note: Switching the mode does not require reloading the page.

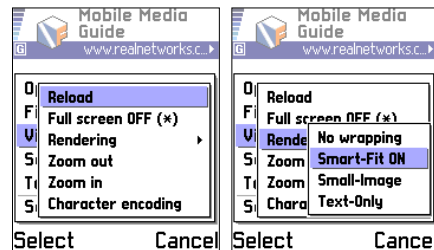


Fig. 25: View options

4.6.1 Reloading

Reload refreshes the page currently opened in the browser

4.6.2 Full screen On/Off

With Full screen set to On the entire screen is used for displaying web pages. Even though soft keys are invisible all functionality remains available.



Fig 26: Full screen on/off

4.6.3 Rendering/No wrapping

The No wrapping setting displays the site without any screen optimization.

Note: In No wrapping the navigation on a page changes. You will have the choice between Scroll and Focus mode.

4.6.4 Rendering/Smart-Fit Rendering

The Smart-Fit setting optimizes the display of standard web pages for a small screen.



Fig 27: Smart-Fit on/off

4.6.5 Rendering/Small-Image Mode

With The Small-Image setting the site is displayed with a minimum formatting and small resized pictures in order to minimize the memory consumption.

There are many pages on the web which have a lot of embedded objects. For example, portal sites and news sites use JavaScript, CSS, images in order to improve appearance. Since even advanced Series 60 phones have little memory compared to a PC for which such pages were originally designed, users may not be able to load such "heavy" pages on their handset. With Small-Image mode you can solve this problem and load only the text information.



Fig 28: Smart-Fit Rendering (left) and Small-Image Mode

Features of Small-Image mode in detail:

- JavaScript and CSS are off
- Embedded images are resized
- Some HTML elements and attributes are restricted
- The user can enable/disable Small-Image mode in View/Rendering settings menu anytime

Using Small-Image mode

There are two possibilities to enable Small-Image mode:

1. Selecting Small-Image from the view menu
2. Switching in low memory situation

If Small-Image mode is enabled some item in the settings dialog is hidden: JavaScript is no longer visible because such functionality is not available in Small-Image mode.

Dialogs

If you try to open a web page for which not enough memory is available you are presented a dialog informing you that the browser switched to Small-Image

mode. If you select Switch to Small-Image, NetFront enables Small-Image mode and shows the page. Small-Image mode consumes less memory and allows you to access information on "heavy" pages that you would not be able to load otherwise.

Unfortunately there is still the possibility to run out of memory while browsing in Small-Image mode. You will be informed that there is not enough memory and that the mode is switched to Text-Only mode.



Fig. 29: low memory conditions

4.6.6 Rendering/Text-Only mode

In Text-Only mode NetFront shows text only, dropping images. This mode is very useful in the case:

- You want to browse the web but you want to download as less data as possible
- The page you are viewing is very heavy and you run out of memory in Small-Image mode



Fig. 30: Text-Only mode Off and On

Note: If you would ever run out of memory in Text-Only mode the browser would automatically go back to the start page.

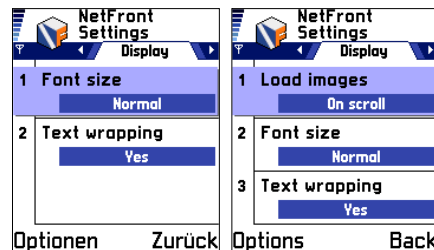
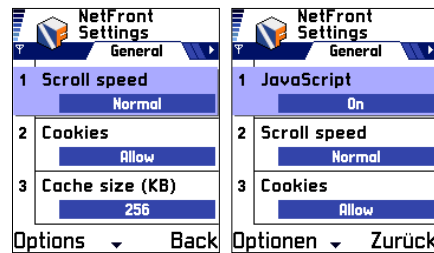


Fig. 31: Menus with Text-Only mode Off and On

4.6.7 Zooming pages

NetFront allows you to zoom in and out of web pages. Depending on what zoom level is activated you will find different menu items. If you selected Zoom in, only Zoom out and Normal will be available from the view menu.

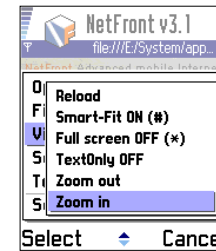


Fig. 32: Zoom options

4.6.8 Character encoding

In Character encoding you can force the browser to use a specified encoding for displaying a webpage. The default setting is Auto Detect.

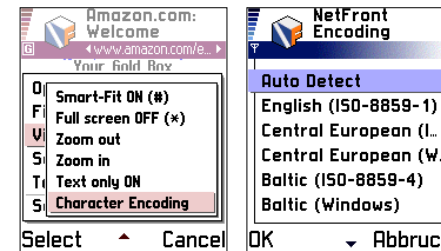


Fig. 33: Character encoding

4.7 Using bookmarks

Bookmarks are a convenient way to manage your favorite Web sites. NetFront uses the same bookmarks database as the original browser on your phone (**Services** on the main menu).

4.7.1 Opening a page using bookmarks

To open a page from the bookmarks list press [OPTIONS] and select **Open/Bookmarks**. A bookmarks list will open. Navigate to the bookmark and press the cursor control or [Options] and **Open**.

If you are not yet connected to the Internet you will be asked to select an access point.

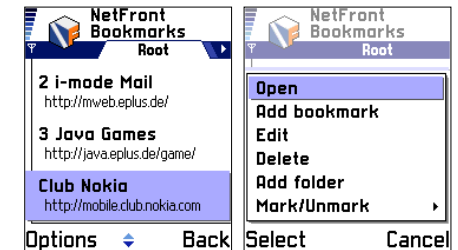


Fig. 34: Bookmarks

4.7.2 Bookmarking a page

To add a currently opened web page to the bookmark list select **Tools** and after that **Add to bookmarks**. Open the **Options** menu and select **Tools/Add to bookmarks**.

NetFront adds the respective URL to the bookmarks list. If a title is defined in the web page this information will be added, too.

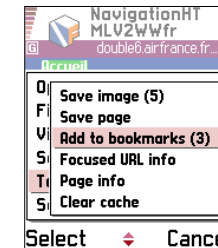


Fig. 35: Adding a page to the bookmarks list

To edit the title which is displayed in the bookmarks list, open the bookmarks list, navigate to the respective bookmark and press [OPTIONS] **Edit**.

4.7.3 Organizing bookmarks

With an increasing number of bookmarks you might want to organize them into folders.

To create a new folder select **Options/Add** in the bookmark list. A dialog will show up where you can enter a name for the new folder.

The new folder is created as an additional tab. In the beginning this folder is empty. You can now move existing bookmarks into that folder. Select the bookmark you want to move, press **Options/Move to folder** and choose the respective folder from the list.

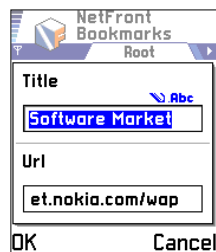


Fig. 36: Editing a bookmark

4.7.4 Selecting bookmarks

To select several single bookmarks to be deleted or moved to another folder go to the first bookmark, press [OPTIONS] **Mark/Unmark** and **Mark**.



Fig. 37: Selecting bookmarks

Marking of Bookmarks

To mark a bookmark highlight the respective item, press [Options] and select **Mark/Unmark** and **Mark**.

As a result, the marked bookmark will show a check at its right side. A check symbol indicates that the bookmark has been selected for further actions like moving to a folder or deleting.

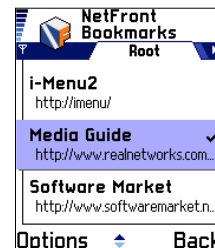



Fig. 38: One bookmark marked

- < [ABC] + cursor control is a shortcut to mark list items in Series60.
- < On Nokia 3650 the [ABC] key is labeled with a pencil symbol .
- < If several bookmarks are marked or if one bookmark is marked and another bookmark is highlighted, it is not possible to open any bookmarked Page.

Sending bookmarks

Sending bookmarks is currently not supported in NetFront for Series60. However you can go to the phone's service menu and use the send option here.

Please note that other Series60 device users might not be able to use this bookmark with the original browser on their phone.

4.8 Other tools

Save page

Save page saves the page currently loaded to the phone's local storage. After saving this page will be available from the **Open Saved Pages** menu where you can select Options to manage already saved pages: delete, move to folders etc.



Fig. 39: Saved pages and Options menu

Clear Cache

Using the **Clear Cache** command deletes the content of the browser cache in order to release space on the phone.

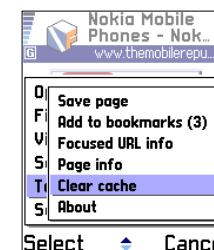


Fig. 40: Clear Cache

Show focus URL

Before following a link on a web page, you might want to know where this URL link will take you to. **Show focus URL** displays the URL of a focussed link, helping you to decide whether you want to follow this respective link or not.

If there is no link in focus, NetFront shows a message that there is no link focussed. This message will disappear automatically after a few seconds.

Save images

See 4.3 **Select images**

4.9 Sending

You can send any web content that is supported by the platform via Bluetooth, via Infrared, as SMS or as an email. Select **Tools** and **Send** from the main menu and the URL of the currently opened page will be sent. Select the desired sending option and follow the further instructions. Any other content like images, movies etc. has to be saved to the platform first and can be sent from the images folder or the respective application.

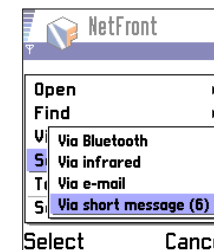


Fig. 41: Sending options

4.10 Help

The **Help** command in the main menu brings you to the help pages stored on the phone or alternatively to other help pages on the Internet, if defined so in NetFront's **Pages settings**.

4.11 Closing NetFront

To close NetFront press [Options] and select **Exit**.

While NetFront is closing settings will be saved. This process may take several seconds.

Trouble shooting

5.1 DNS errors

In the event, that you encounter a DNS error, there are two ways to work around this problem.

First you should check if a DNS server and an IP address are specified in your browser settings. Provided that these items are existent, delete them or ask for a different IP address and after that try again to access to the Internet.

If no DNS server is defined, you should contact your provider. Ask her for a DNS server you can use and a respective IP address. You can find the several settings european service providers on our website <http://www.access-sys-eu.com/gprs.html>. Change your IP address and DNS server accordingly. After that you should be able to access the Internet.

4 *For more information on doing this, refer to "Defining your Internet access point."*

5.2 Updating NetFront

If you want to install a new version of NetFront and NetFront was already installed, you are asked whether to replace the existing installation. The existing version will be replaced, but existing bookmarks remain.

5.3 Speed up browsing.

Images are typically the most memory consuming elements on a web page. To reduce data traffic – thus saving costs – you might want to disable the download of images. If **Load images** is set to **None**, NetFront will display a place holder symbol instead of the image thus preserving the layout of the page. To have even faster access, you might want to enable Text-Only mode.

5.4 GPRS connection status

The GPRS connection status is indicated by a little "G" in a box underneath the spinning globe. If the frame around the "G" appears, a GPRS connection is established.

< *The access point for browsing the Internet is usually different from your WAP or MMS access points.*

5.5 Out of Memory error

There are some very big and complex sites on the Internet, and we are trying to improve our browser constantly. In some cases it is helpful to clear the browser cache (Tools / Clear Cache) during a browsing session. This will increase the amount of memory available for the application.

3G
3G is a global initiative of communication standards and technologies. This initiative enables access to multimedia services with a mobile phone.

Animated GIF
A type of GIF image that can be animated by combining several images into a single GIF file.

Bluetooth
Bluetooth is a wireless data transmission technology using the free 2.4 GHz frequency band. Therefore it offers a reliable and permanent connection. A Bluetooth device supports up to a 10m coverage.

CDMA
Code-Division Multiple Access, a digital cellular technology that uses spread-spectrum techniques.

cHTML
compact HTML, a subset of HTML for small information devices.

CLDC
Connected Limited Device Configuration, the J2ME configuration for smaller handheld devices that are usually battery operated and low in memory with limited processing power and low bandwidth.

CSS
Cascading Style Sheets, a new feature being added to HTML that gives both, Web site developers and users more control over representing content data.

DHTML
Dynamic HTML refers to new HTML extensions that will enable a Web page to react to user input without sending requests to the Web server.

DOM
Document Object Model, the specification for how objects in a Web page (text, images, headers, links, etc.) are represented.

ECMAScript
ECMAScript is a standard internationally accepted scripting language specification announced by the European Computer Manufacturers Association (ECMA). JavaScript is an implementation of the ECMAScript specification.

Frames
Frames are HTML elements which allow web authors to divide their browser display area into two or more sections (frames). With frames certain information can be kept visible, while other views are scrolled or replaced.

GIF
Graphics Interchange Format, a bit-mapped graphics file format.

GPRS
General Packet Radio Service, enabling GSM networks to offer 'always-on', higher capacity, Internet-based content and packet-based data services.

GSM
Global System for Mobile Communications, one of the leading digital cellular systems using narrowband TDMA, which allows eight simultaneous calls on the same radio frequency.

HDR
High Data Rate, a cost effective, high-speed, high-capacity wireless packed data technology developed by QUALCOMM.

HSCSD
High-speed Circuit Switched Data is a service enabling fast Internet access. Transmission speed is up to 43.2 kbps.

HTML
Hyper Text Markup Language, the authoring language used to create documents on the World Wide Web.

HTTP
Hyper Text Transfer Protocol, the underlying protocol used by the World Wide Web.

i-mode
First introduced in Japan in February 1999 by NTT DoCoMo, i-mode is one of the world's most successful services offering wireless Internet browsing and e-mail from mobile phones. The i-mode alliance currently encompassing DoCoMo, E-Plus, KPN, Base, Bouygues, Telefonica, KG Telecom, Hutchison and AT&T Wireless is likely to attract many more followers.

Infra-red
Infra-red technology enables wireless data transmission between PCs and mobile phones.

IPv4
Internet Protocol, that specifies the format of packets, also called datagrams, and the addressing scheme. Most networks combine IP with a higher-level protocol called Transmission Control Protocol (TCP), which establishes a virtual connection between a destination and a source. IPv4 is the current version.

IPv6
IP version 6, a set of standards designed to replace IP version 4. IP addresses in IPv6 are lengthened from IPv4's 32 bits to 128 bits, providing support for an almost unlimited number of networks and systems.

Java
Java is a platform independent programming language developed by Sun Microsystems.

JPEG
Joint Photographic Experts Group, a lossy compression technique for color images.

MIDI
Musical instrument digital interface, a standard adopted by the electronic music industry for controlling devices, like synthesizers and sound cards that emit music.

MIDP
Mobile Information Device Profile, a set of J2ME APIs that define how software applications interface with cellular phones and two-way pagers.

MMS
Multimedia Messaging Services allows sending of different media, like graphics, clips or sounds from a mobile phone.

MPEG
Moving Picture Experts Group, a high compression format for video. There are three major MPEG standards: MPEG-1, MPEG-2 and MPEG-4.

PDC
Personal Digital Cellular, a 2G cellular technology used in Japan.

PNG
Portable Network Graphics, and pronounced ping, a new bit-mapped graphics format similar to GIF.

RAM
Random Access Memory is a type of computer memory that can be accessed randomly; that is, any byte of memory can be accessed without touching the preceding bytes.

ROM
Read-Only Memory is a computer memory on which data has been prerecorded. Once data has been written onto a ROM chip, it cannot be removed and can only be read.

SIM
A Subscriber Identity Module is a card widely used in GSM phones. The card stores information like phone number and phone book. Additionally, it encrypts voice and data transmission.

SMIL
Synchronized Multimedia Integration Language, which enables simple authoring of interactive audiovisual presentations.

SMS
Short Message Service allows to send and receive short text messages from/on a mobile phone.

SSL
Secure Sockets Layer, a protocol for securely transmitting private documents via the Internet.

TCP
Transmission Control Protocol, one of the main protocols in TCP/IP networks. TCP enables two hosts to establish a connection and exchange streams of data.

UAProf
User Agent Profile, a specification that extends WAP 1.X to enable end-to-end flow of User Agent Profile between WAP client, intermediate network points, and the original server.

Unicode
A standard for representing characters as integers with 16 bits rather than 7 bits (ASCII) or 8 bits. Commonly used for expressing Chinese and Japanese, which requires two bytes.

URI
Uniform Resource Identifier, the generic term for all types of names and addresses that refers to objects on the World Wide Web.

URL
Uniform Resource Locator, the global address of documents and other resources on the World Wide Web.

UTF-8
UTF is a short for "Universal Transformation Format", a method of converting Unicode characters, which are 16 bits each, into 7- or 8-bit characters. UTF-8 converts Unicode to 8-bit characters thus enabling the use of Unicode (needed for languages such as Chinese, Greek, Japanese) in environments that were designed around ASCII.

WAP
WAP (Wireless application protocol) is a standard by OMA (formerly WAP Forum) for the way in which wireless technology is used for Internet access. WAP 1.x requires a WAP gateway that converts protocols and content for the mobile devices. WAP 2.0 specifies an environment that permits wireless devices to utilize existing Internet technologies.

WBMP
Wireless Bitmap, a graphic format optimized for mobile computing devices.

W-CDMA
Wideband Code-Division Multiple Access, a 3G cellular technology derived from code-division multiple access (CDMA), also known as IMT-2000 direct spread.

WCSS
Wireless CSS (See above for CSS definition).

WML
Wireless Markup Language, an XML based language used to specify content and user interface for WAP devices.

WTLS
Wireless Transport Layer Security, is the security layer of WAP, providing privacy, data integrity and authentication for WAP services.

XHTML
Extensible Hypertext Markup Language, a hybrid between HTML and XML specifically designed for Net device displays.

XML
Extensible Markup Language, which enables designers to create their own customized tags, enabling the definition, transmission, validation, and interpretation of data between applications and between organizations.



ACCESS