



Nokia 8310 Device Simulator

User's Guide

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Nokia 8310 Device Simulator

This document describes the Nokia 8310 Device Simulator, pictured below.



This simulator must be used in conjunction with either of the following two Nokia products:

- Nokia Mobile Internet Toolkit (NMIT)
- Nokia Simulator Application (SimApp)

Overview

The Nokia 8310 Device Simulator (“Nokia 8310 simulator” for short) is a simulation of a real Nokia 8310 phone and is based on a close copy of the actual phone software. Nokia 8310 simulator enables content developers to display mobile Internet content, whether locally developed or made available through a WAP gateway server.

Nokia 8310 simulator requires that either NMIT or SimApp be running (but not both at the same time) in order for it to run. A command given within either of these hosting applications causes Nokia 8310 simulator to run; for example, in NMIT, the command is **Settings>Select Device>Nokia 8310**.

Features and Support

This section describes major features of the Nokia 8310 simulator. Note that the Nokia 8310 handset supports other features in addition to those described herein.

Keyboard Shortcuts

The following keys on the computer keyboard are equivalent to keys on the Nokia 8310 simulator; you may use these keyboard keys in place of using the mouse to press keys on the Nokia 8310 simulator.

Key Combination	Description
<Up arrow> or CTRL+ALT+<Up arrow>	Scrolls up and/or selects the previous field. In an input field, moves the cursor to the left. Equivalent to the <UP arrow> on the device simulator.
<Down arrow> or CTRL+ALT+<Down arrow>	Scrolls down and/or selects the next field. In an input field, moves the cursor to the right. Equivalent to the <DOWN> arrow on the device simulator.
NumPad+ 0 through NumPad+ 9	Equivalent to device simulator number keys 0 through 9.
CTRL+ALT+ 0 through CTRL+ALT+ 9	Equivalent to device simulator number keys 0 through 9.
NumPad+ . (period) or CTRL+ALT+ = (equals)	Equivalent to device simulator pound key <#>.
NumPad+ + (plus) or CTRL+ALT+ - (minus)	Equivalent to device simulator asterisk key <*>.
NumPad+ / (slash) or CTRL+ALT+ F11	Equivalent to device simulator left soft key.
NumPad+ - (minus) or CTRL+ALT+ F12	Equivalent to device simulator right soft key.

Supported Content Types

- WML 1.3, June 2000 conformance
- WML Script, June 2000 conformance
- Image formats: WBMP, GIF, Animated GIF

WAP Protocol Support

- WAP June 2000 conformance

WAP-Specific Functions Supported

- Post
- Cookies
- WTAI public library

WAP Screen Attributes

- Screen size: 84x48 pixels
- Screen area reserved for content: 78x39 pixels
- Maximum image size: 78x30, 4-way scrollable
- Number of rows of text in a screen: 3
- Maximum number of characters in a row: 10 to 41 (10 W's or 41 I's)

WAP Browser Memory and Storage Features

- Maximum WML deck size: 2.8 KB in binary encoded format including WSP headers
- Maximum URL length in requests: 538
- Maximum URL length as homepage: 100
- Maximum URL length as bookmark: 255
- HTTP authentication: Yes
- Maximum number of connection settings: 5
- Maximum length of a username: 32
- Maximum length of a password: 20

Supported Character Sets

The Nokia 8310 Device Simulator supports the following character sets:

- US ASCII (ISO-8859-1)
- UTF-8
- UCS-2 (ISO-10646-UCS-2)

Character encodings supported are fixed and cannot be changed.

Note that support for the above listed character sets does not imply support for the corresponding font glyphs, which would require both a localized version of Windows and the corresponding fonts.

Using Nokia 8310 Simulator With Nokia Mobile Internet Toolkit

This section describes features of NMIT that users of the Nokia 8310 simulator may find to be of particular interest. It describes how to configure settings for Nokia 8310 simulator from within NMIT, settings such as connections, cache control, appearance, and so on. Finally, it describes particular content types that may be created in NMIT and displayed on the Nokia 8310 simulator.

Features of NMIT Accessible Through Nokia 8310 Simulator

NMIT is a feature-rich mobile Internet browsing and development environment, and it is not the intention here to describe its many features. For this, see the *Nokia Mobile Internet Toolkit User's Guide*.

In NMIT, you will notice the following when the Nokia 8310 simulator is the selected device simulator:

- You can display both local files and mobile Internet content in Nokia 8310 simulator by typing a URL directly into the **Go** text-entry box or by selecting an NMIT bookmark and then choosing **Go**.
- You can create or open files of many content types in an NMIT editor, but you can display only wml files in Nokia 8310 simulator by pressing **Show** within the editor window.
- All device settings and NMIT preferences are available through the **Settings** menu.

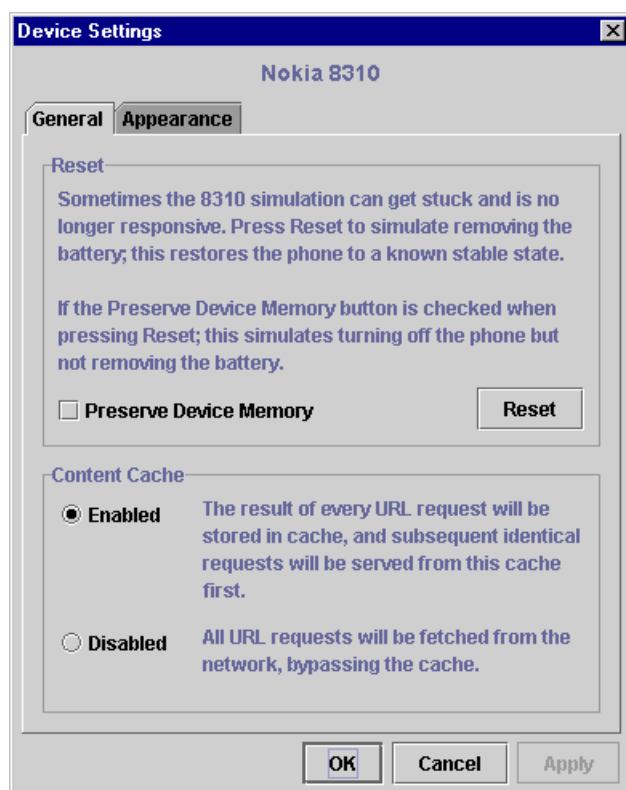
As the NMIT development and browsing environment supports many different simulators and content types, some of its features are unavailable when Nokia 8310 simulator is the current device simulator.

Nokia 8310 Simulator Settings Accessible Through NMIT

In NMIT, when Nokia 8310 simulator is the chosen device simulator, you may configure various settings by choosing **Settings>Device Settings**. The following sections describe the available settings accessible in these dialogs.

You may choose both general and appearance settings for the Nokia 8310 Device Simulator using the dialogs described below.

General Settings



Reset region

The **Reset** button re-initializes the phone by simulating the removal of the battery. This restores the phone simulation to a known, stable state, which is the state at initial startup. Sometimes it may be necessary to do this if the phone simulation becomes unresponsive.

The **Preserve Device Memory** feature is not currently supported in the Nokia 8310 simulator.

Content Cache region

This feature is not currently supported in Nokia 8310 simulator. Content cache is always disabled in the simulator software and cannot be changed using these settings.

Appearance Settings

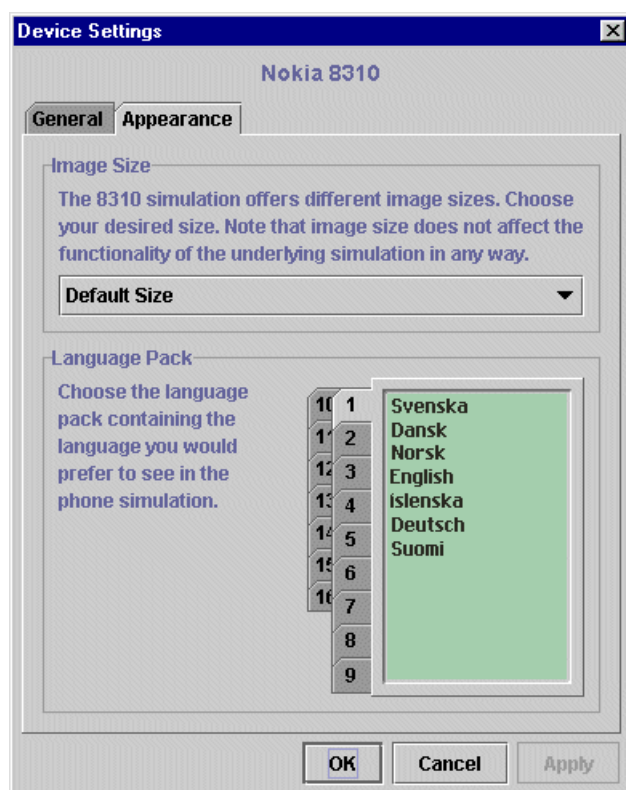


Image Size region	Choose which image size you prefer for the Nokia 8310 from the drop-down list box: default size or small size. Both sizes function identically.
Language Pack region	Choose the language pack containing the language you wish to see displayed in the phone. Then, click OK or Apply to load the selected language pack into the phone simulation. To choose the desired language from those contained in the language pack, you use the phone simulation keys. From the simulation main menu, choose Settings, then Phone Settings, and then Language. After choosing the desired language, the phone simulation displays menu items and controls (such as the OK and Back button names) in the specified language. WAP content will be displayed in the language in which it was created only if the language pack containing that language has been loaded into the simulation. So, for example, if you have loaded Language Pack 1 and then selected English as the desired language, the simulation will display characters in Dansk or Svenska characters if these are contained in the WAP content. But the phone simulation menus and controls will be displayed in English.

Using Nokia 8310 Simulator With Nokia Simulator Application

SimApp is a small application that allows you to view mobile Internet content on any of several (provided) device simulators. It allows you to open, close, and configure each simulator.

Nokia makes SimApp available to other software providers who wish to integrate its functionality with their software products. Typically, SimApp is installed at the time of installing such a third party product. SimApp is generally launched and closed in tandem with the third-party product with which it has been bundled; however, it can also be independently launched from the Windows Start menu.

While running, SimApp is accessible through its icon () , which resides in the System Tray. The System Tray is an application icon repository located in the lower right corner on the Windows task bar.

SimApp Features

Basic SimApp functions include the following:

- Open a URL or local file in the currently selected device simulator.
- Select the current device simulator from a list of those installed.
- Configure device settings for the current device simulator.
- Set connectivity preferences (specifically, Proxy) for the current Server Simulator.

Nokia 8310 Simulator Settings Accessible Through SimApp

Configurable device settings for SimApp are the same as those described for NMIT (above): specifically, in the **General** and **Appearance** tabs in the **Device Settings** dialog.

In addition, by choosing the **SimApp Settings** menu item, a dialog is displayed wherein you can specify the address of an HTTP Proxy server, should this be necessary in order for you to establish an external connection.

For More Information

Several documents describing the Nokia 8310 handset are available at the Nokia Forum website: <http://forum.nokia.com>. After logging in to the site, look for “Nokia WAP Phones” or simply perform a search for the phone model number.

The following two documents, which may be found at the site, are particularly helpful:

- *Nokia WAP Phone Characteristics*

This document lists in tabular format the phone characteristics of particular interest to developers of WAP content. WAP phones are listed according to the series to which they belong. The series 20 line, for example, of which the 8310 is a member, has a screen resolution of 84x48 pixels. For your convenience, the characteristics for the 8310 model are provided in the document you are reading now.

- *WAP Service Developer’s Guide for Nokia Series 20*

This guide provides guidelines for the development of content targeted for the series 20 WAP phones. It includes general usability guidelines for site development, user interface keys and display, WML element usage, and a description of the WAP 1.2.1 features (which are supported by the 8310).

