



# S60<sup>®</sup> USER GUIDE

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# Table of Contents

<b>1.0</b>	<b>Downloading WalkingHotSpot .....</b>	<b>3</b>
<b>2.0</b>	<b>Installing WalkingHotSpot .....</b>	<b>3</b>
<b>3.0</b>	<b>Running WalkingHotSpot .....</b>	<b>4</b>
<b>4.0</b>	<b>Registration .....</b>	<b>5</b>
<b>5.0</b>	<b>Settings.....</b>	<b>5</b>
5.1	Cell Networks Settings .....	5
5.2	Wi-Fi Settings .....	6
5.3	Power Management.....	7
5.3.1	Wi-Fi Power Settings .....	7
5.3.2	Cell Network Auto Disconnect.....	7
5.3.3	Auto Shutdown .....	8
5.4	Client Auto Connect.....	8
5.5	Detailed View .....	9
5.6	Block List .....	9
5.7	Restore Settings.....	9
<b>6.0</b>	<b>Connecting a Client.....</b>	<b>10</b>
<b>7.0</b>	<b>Blocking a Client .....</b>	<b>11</b>
<b>8.0</b>	<b>Roaming Indicator .....</b>	<b>11</b>
<b>9.0</b>	<b>Help.....</b>	<b>12</b>
<b>10.0</b>	<b>About .....</b>	<b>12</b>
<b>11.0</b>	<b>Exiting WalkingHotSpot.....</b>	<b>12</b>
<b>12.0</b>	<b>Upgrading WalkingHotSpot.....</b>	<b>12</b>
<b>13.0</b>	<b>Uninstalling WalkingHotSpot .....</b>	<b>12</b>

## 1.0 Downloading WalkingHotSpot

The Symbian S60 version of WalkingHotSpot (WHS) is delivered as a sis install file and can be downloaded to your smartphone from the Internet. Please visit <http://www.walkinghotspot.com> to get the appropriate link to the software.

**NOTE:** *It is recommended that you have an unlimited data plan with your network carrier operator.*

## 2.0 Installing WalkingHotSpot

Installation begins automatically after the sis install file has been downloaded onto the target phone. A series of three screens will pop up in order during the installation. Follow the instructions on each screen and respond when prompted to install WalkingHotSpot.

Screen 1: Install WalkingHotSpot? Screen:

**Yes** – proceeds with installation

**No** – stops installation

Screen 2: Information screen (application name and version number):

**Continue** – proceeds with installation


**Cancel** – stops installation

Screen 3: Data usage warning screen:


**OK** – proceeds with installation

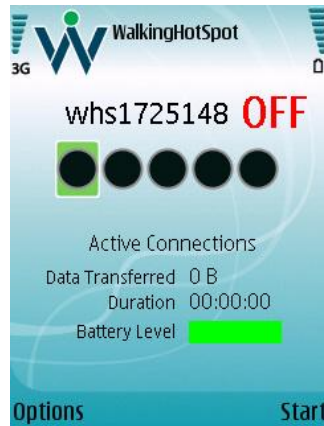
**Cancel** – stops installation

After installation is complete WalkingHotSpot is ready to be configured and run.

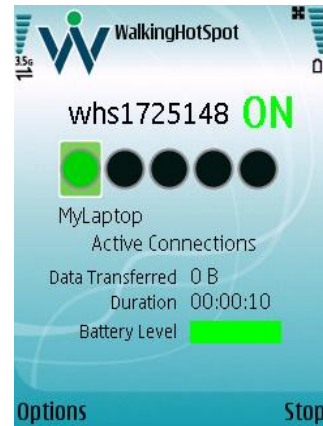
**TIP:** *To put the WalkingHotSpot icon  on the “active idle list” (short cut on the main S60 screen) please refer to the S60 user manual that came with your phone. This will enable single button starting of the application.*

### 3.0 Running WalkingHotSpot

Locate and select the WalkingHotSpot icon . If a shortcut has not been created it will be in the folder where installed applications are stored, typically "Installations" or "Applications". Selecting the icon will launch WalkingHotSpot in the idle state as illustrated by the red **"OFF"** on the WHS Status Screen below. On the initial execution, you may be asked to reboot the phone via a popup message. To reboot: power off the phone and power it back on. Once the phone is back on WalkingHotSpot can be restarted.



WHS Status Screen



WHS Status Screen

To begin using the WHS device (phone) as an access point or hotspot, select **"Start"** (right soft key) from the WHS Status Screen. On the initial start-up the following quick setup will occur:

A popup message displaying **"Initial use, please enter settings"** will appear. The user must set the **"Cell network settings"** (see section 5.1 for details) or access point for connectivity to the cellular network. This is the only mandatory setting. You may be asked to reboot the phone after the value is set.

Next a popup message will appear alerting of increased data usage followed by a second screen that asks if the user wants to be warned again.

Data usage warning screen - responses are **"Yes"** and **"No"**.

**Yes** – continues launch procedure

**No** – terminates launch procedure



Warning screen cancellation - responses are **"Yes"** and **"No"**.

**Yes** – the warning screen will appear next time WalkingHotSpot is started

**No** – the warning screens will not appear again

Otherwise, a screen will appear that shows WalkingHotSpot is connecting to the cellular network and setting up the WLAN network. The user can terminate the session during this time by selecting **"Cancel"** (right soft key).

WalkingHotSpot is active and ready for connections when the status changes to a green **"ON"** as illustrated on the WHS Status Screen above. To terminate WalkingHotSpot, select **"Stop"** (right soft key).

**TIP:** To send WalkingHotSpot to the background, hit the red end key (phone hang-up) when WalkingHotSpot is running. A long (2 second) S60 menu key ( or ) press will bring up a list of the active applications

## 4.0 Registration

During the trial period as part of the start-up procedure a notification of the remaining time in the trial period will be displayed followed by the Registration Screen (illustrated to the right). Either input the code, assigned at the time of purchase, in the boxes and select **“Register”** (left soft key) or select **“Skip”** (right soft key) to continue with the free trial.

**Register** – the authentication process informs the user whether the registration was successful or not

**Skip** – once the trial period has expired, WalkingHotSpot cannot be started or used without registering (purchasing)



## 5.0 Settings

Most settings can only be altered when WalkingHotSpot is in the idle mode. Once WalkingHotSpot is started but idle (**OFF** on the WHS Status Screen) select **“Options”** (left soft key) and then **“Settings”** to bring up the Main Settings Screen which displays the various feature settings. To change the value of any of the items, either highlight and select it using the joy stick or highlight it and select **“Options”** (Left Soft Key) and select **“Change”**.



WHS Status Screen



Main Settings Screen

## 5.1 Cell Networks Settings

To configure the cell network settings, highlight **Cell network settings** from the Main Settings Screen select it and a screen appears showing the access points available for connectivity. This is the high speed connection from the mobile network operator that will be used for internet connectivity (backhaul). Please ensure that the proper selection is made. If there are any questions on which access point to use, contact your carrier to verify which network access point should be used for internet connectivity.

**NOTE:** *This is the only setting that needs to be set in order to get WalkingHotSpot functional.*

## 5.2 Wi-Fi Settings

To configure the Wi-Fi access point, highlight and select **Wi-Fi settings** from the Main Settings Screen and the Wi-Fi Settings Screen will appear as illustrated below.



Wi-Fi Settings Screen

For illustration purposes the Wi-Fi Settings Screen has been broken into two parts above. On your phone's UI only one screen will appear. Please scroll down to see all the menu items.

You can change the following items on this screen:

- ✓ **Connection name** – name of the access point used by WalkingHotSpot (default value is fine)
- ✓ **WLAN network name** – default value is “WHS” + last seven(7) digits of the electronic serial number – can be changed if desired
- ✓ **WLAN security mode** – default value is “Open network” but can be changed to “WEP”, if WEP is selected, the WEP key will need to be set in the WLAN security settings
- ✓ **WLAN security settings** – in order to change this, the WLAN security mode must be set to “WEP” and this will be the WEP key that is used for connecting WHS clients
- ✓ **Homepage** – not an active feature at this time

The following items should **NOT** be changed from their default value:

- ✗ **Data bearer** – this should be kept as default value of “Wireless LAN”
- ✗ **Network status** – this should be kept as default value of “Public”
- ✗ **WLAN network mode** – this should be kept as default value of “Ad-hoc”

**NOTE:** *Changing the above values could cause WalkingHotSpot not to run.*

## 5.3 Power Management

To configure the power management settings highlight and select **Power management** from the Main Settings screen and the Power Management Menu will appear as illustrated below:



Power Management Menu

### 5.3.1 Wi-Fi Power Settings

To change the Wi-Fi transmit power setting select the “**Wi-Fi power**” option from the Power Management Menu and a new menu screen will be displayed showing the following options:

**Wi-Fi power** values are “**High**”, “**Normal**”, and “**Low**”:

**High** – use when distance from the WHS device is critical

**Normal** – (default) a hybrid of distance and battery optimization

**Low** – use when the WHS clients are nearby and battery conservation is important

### 5.3.2 Cell Network Auto Disconnect

The **Cell net auto disconnect** values are “**On**” and “**Off**”:

**On** – (default) the mobile network data interface will shut down after WalkingHotSpot has been inactive (no client data transfer) for more than 3 minutes. This will help conserve battery life.

**Off** – no action taken, the mobile network data interface will stay persistent.

**NOTE:** *Some network clients continuously send data across the network even when idle.*



### 5.3.3 Auto Shutdown

The “Auto shutdown” menu is part of Power Management Menu which contains two additional settings: “Stop if inactive” and “Stop if low battery” as illustrated on Screen 1 below.



Screen 1



Screen 2

“Stop if inactive” values are “On” and “Off”:

**On** – (default) WalkingHotSpot will automatically shut down to the idle state if there is no WHS client data traffic (i.e. phone to PC) for longer than the specified timeout period. This is useful if WalkingHotSpot is inadvertently left on. Two (2) additional settings are available: enable a “Popup” warning and set the “Timeout” period.

“Popup” values are “On” and “Off”:

**On** – a warning message will be issued before WalkingHotSpot terminates

**Off** – (default) no warning message issued before WalkingHotSpot terminates

“Timeout” is the amount of idle time necessary to activate the auto-shutdown feature. The value can be set to any amount of time in minutes (default is 15).

**Off** – WalkingHotSpot will continue to run until manually terminated.

“Stop if low battery” values are “On” and “Off”:

**On** – (default) WalkingHotSpot will automatically terminate when the battery level falls below 50%. A message will have been issued warning the user to charge the battery before WalkingHotSpot terminates. When this feature is active and the battery level is below the threshold, WalkingHotSpot cannot be started unless the phone is being charged.

**Off** – WalkingHotSpot can always be started and will continue to run until the battery dies. Warning dialogs will be issued to remind the user to charge the device.

**WARNING:** when this feature is set to “Off” the battery can be fully drained resulting in shutdown of the phone and subsequent inability to make calls without recharging.

## 5.4 Client Auto Connect

“Client auto connect” values are “On” and “Off” from the Main Settings Screen:

**On** – WHS clients will automatically connect to the hotspot after their first successful connection meaning the WHS user will only have to authenticate them, via a popup message, on the initial connection.

**Off** – (default) the WHS user must grant access each time a WHS client connects.

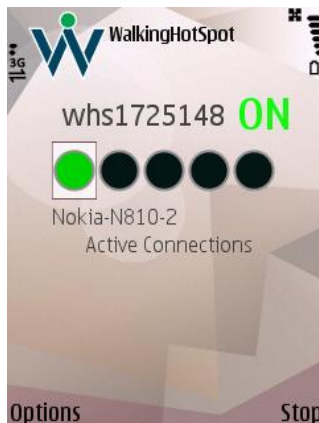


## 5.5 Detailed View

“Detailed view” values are “Simple” and “Detail” from the Main Settings screen:

**Simple** – displays only the active number of connections as illustrated below.

**Detail** – (default) displays real-time statistics on data transferred, connection duration, and battery level (GREEN = good, YELLOW = moderate, and RED = low) as illustrated below.



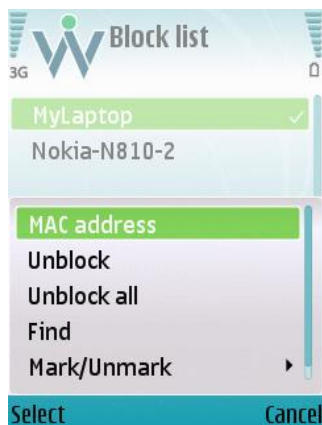
Simple View



Detailed View

## 5.6 Block List

The “Block List” displays a list of previously blocked clients as illustrated below. The WHS user can unblock one or all clients or get detailed information (MAC address) about a client. To unblock one client use the up / down keys to navigate thru the list and highlight the targeted client, then press “Options” and then “Unblock”. To unblock all clients, press “Options” and then “Unblock all” to clear the list.



## 5.7 Restore Settings

This feature from the Main Settings screen is used to reset WalkingHotSpot to its default settings.

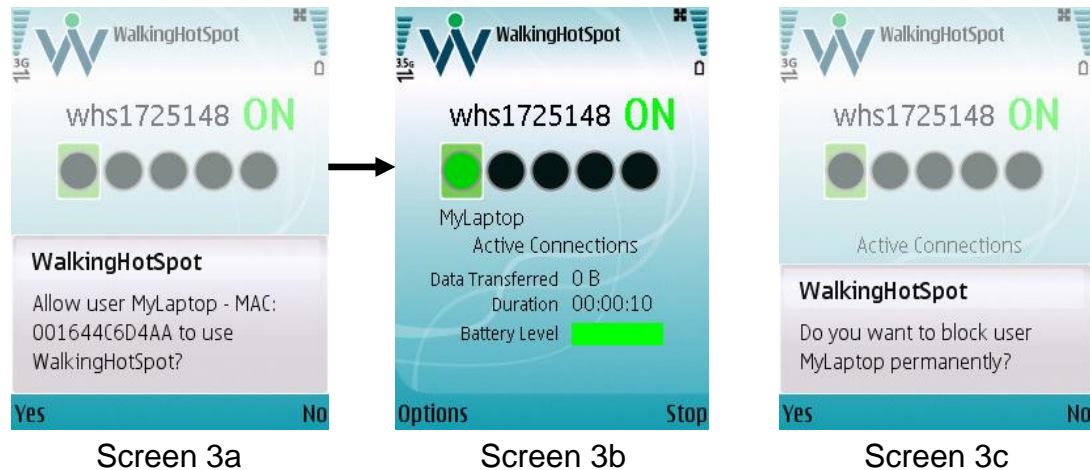
## 6.0 Connecting a Client

When WalkingHotSpot is active, up to five (5) WHS client devices can simultaneously connect to the Internet. When a potential client is trying to connect, a popup message will be displayed similar to what is illustrated below on Screen 3a if this is either the first time that particular client is trying to connect or the "Client auto connect" is set to "Off". Otherwise the WHS client will connect and a simulated LED will turn green as illustrated on Screen 3b below.

Screen 3a: responses are "Yes" and "No" via soft keys

**Yes** – WHS client will connect to the WalkingHotSpot and one of the black simulated LEDs (available slots for connectivity) will turn green as illustrated on Screen 3b indicating an active connection was made.

**No** – Will cause the popup on screen 3c to appear.



Screen 3c: responses are "Yes" and "No" via soft keys

**Yes** – connection is denied and the WHS client will be placed on the blocked list

**No** – connection is denied for this session but the WHS client will not be placed on the blocked list which means they can try to connect in subsequent sessions

**NOTE:** WHS clients (i.e. laptops and MP3 players) are connected to the WalkingHotSpot utilizing an Ad-Hoc network Connection which should be similar to connecting to other wireless network. Please consult your WHS client's documentation for details on how to connect to an ad-hoc network or WLAN.

- The black circles represent the number of connections (IP addresses) available
- The green circles indicate the number of active connections (IP addresses) in use

## 7.0 Blocking a Client

When WalkingHotSpot is active and clients are connected the WHS user can still police or administer their hotspot. To see information about a given connection (green LED) using the S60 navigation keys move left or right keys to highlight an LED and see the connection detail (friendly name or MAC address) of each connection as illustrated below on the Client Info Screen below.

Once the targeted client is highlighted, press the joy stick or center button to bring up the options as illustrated below on the Block Client Screen. The client can either be blocked for the current session or permanently. After the selection is made the WHS user is asked to verify that the client should be blocked as illustrated below on the Verify Block Screen.

### Block Client Screen:

**MAC address** – displays the unique media access control address of the connecting client

**Block user for session** – knocks the client off the WLAN and blocks it for the remainder of the current session

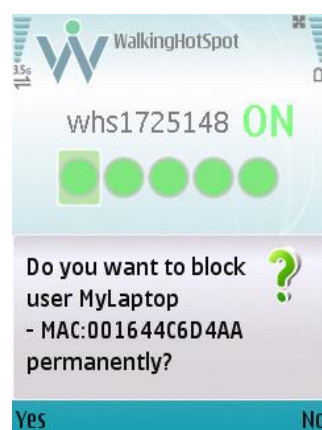
**Block user permanently** – knocks the client off the WLAN and blocks it permanently (puts it on the block list). For information on how to remove a permanently blocked client see section 5.6



Client info screen



Block Client Screen



Verify Block Screen

## 8.0 Roaming Indicator

When roaming outside the home carrier network, a popup message will appear, alerting the user of potential increased data costs and asking to continue using WalkingHotSpot. Answering “Yes” to this message will keep WalkingHotSpot active, while answering “No” will cause WalkingHotSpot to terminate.

**NOTE:** *WalkingHotSpot continues to run while the note is displayed. If WalkingHotSpot is attempting to start in a roaming network, a warning prompt will be issued to ensure that it should be started.*

## 9.0 Help

From the WHS Status Screen select **"Options"** (Left Soft Key), then **"Help"**. The phone's browser will launch and bring up a web site that contains help topics for WalkingHotSpot. Depending on your phone's browser settings, you may be asked to select an access point to be able to connect to connect to the web.

**NOTE:** *Your browser will need to have an access point from your cellular network operator rather than a WLAN access point since the phones do not support two (2) active WLAN connections.*

## 10.0 About

From the WHS Status Screen select **"Options"** (left soft key), then **"About"** and a screen will appear that provides information on copyrights, software version, and contact information.

## 11.0 Exiting WalkingHotSpot

From the WHS Status Screen select **"Options"** (left soft key) and then **"Exit"**. This terminates WalkingHotSpot and will stop all active connections, if any.

## 12.0 Upgrading WalkingHotSpot

Upgrades to WalkingHotSpot are done over-the-air (OTA). When a new version is released, a popup message will be displayed at startup which queries the user if WalkingHotSpot should be upgraded.

Responses are **"Yes"** and **"No"** via soft keys

**Yes** – initiates the push of the new SW version to the phone which starts the installation process automatically, please see section 2.0 for details

**No** – starts the current version of WalkingHotSpot; however, the popup will be displayed the next time WalkingHotSpot is started

**NOTE:** *If you are using the Beta version of WalkingHotSpot, you will be forced to upgrade to Ver. 2.0. Certain phone models will require the previous version of WalkingHotSpot to be uninstalled before installing the new version. Please see section 13 for more information on how to uninstall.*

*Some older Nokia phones (i.e. E61, E61i, E65, E70) require the battery to be removed (hard reset) before upgrading WalkingHotSpot. After replying "Yes" to Upgrade new version and the download has started, select **"Options"** then **"Pause"**. Follow the instructions to remove the old version and then go and continue the download OR reply "No" and follow steps in section 13 to remove the old version and then reload new version from the website.*

## 13.0 Uninstalling WalkingHotSpot

To uninstall WalkingHotSpot, press the S60 main menu key to display the main menu and locate WalkingHotSpot icon in the folder where installed applications are stored, typically "Installations" or "Applications". Once you locate the WalkingHotSpot icon, highlight it, select **"Options"**, and **"Remove"**.

Check out <http://www.walkinghotspot.com/support.php> for more information.