



## AIRSCANNER MOBILE ANTIVIRUS USER'S MANUAL



### Requirements

The following operating systems are supported. Note: although the antivirus software is identical for all of the following systems, each of these platforms requires its own special installer. Please make sure you use the correct installer for your device:

- Microsoft Windows Mobile 5 Pocket PC
- Microsoft Pocket PC 2003SE
- Microsoft Smartphone (Both Windows Mobile 5 and 2003SE Smartphones use the same installer)
- Microsoft Windows CE .NET (use one of the above installers)

### The threat

"Airborne" mobile viruses have been increasing in complexity at a surprising pace. For example, we have already seen blended Trojan and virus threats that can spread through Smartphones using multiple wireless protocols. This is a

problem, since current mobile devices cannot support sophisticated antivirus software.

The very first Windows Mobile virus to appear (Dust) was incredibly complex. Airscanner was the first antivirus company to issue a patch for it. Dust achieved a technological breakthrough roughly equivalent to the Win32 Chernobyl virus, which was the first PC based virus to break into the protected "Ring 0" of the Windows operating system. That means Dust took total control of the supposedly protected operating system kernel.

Shortly after Dust, the first Windows Mobile Trojan appeared. Called Brador, it gives a remote hacker total, wireless remote control over your device. Worse, you might never know you are infected. Brador is difficult to detect without specialized tools. Imagine a corporate CEO who uses his phone to connect to his remote network. The malicious phone hacker now has an easy backdoor into the corporate network.

One problem with this rapid evolution of threats is the fact that mobile devices can't support sophisticated antivirus software on current platforms. To give one example, most embedded operating systems don't use "interrupts" (system calls to the kernel), so a heuristic virus scanner on the PDA or Smartphone can't hook a specific interrupt that it might otherwise suspect is a virus.

However, Airscanner has risen to the challenge. Long before others entered the market, we were pushing the envelope in mobile security research and development. Most of the leading technical books and Windows Mobile security papers have been written by Airscanner team members. *For many years, Airscanner has been the only antivirus company in the world to focus exclusively on Windows Mobile Security.* No one knows this area better than Airscanner.

When you use Airscanner, you get a technological advantage. With millions of users over several years, our mobile security products are the most widely tried and tested. Trust Airscanner to help secure your mobile device.

## Using Airscanner Antivirus

### Installation:

If you are using the PC installer, the program will automatically install using a wizard through Active Sync.

If you are using the direct-to-device installer (e.g., you don't want to go through your PC), simply download the "cab" version of the installer directly to your device in the following directory:

*Windows\Start Menu\Accessories*

(Note: you can download the .cab file to any folder that you find convenient). Then, browse through your phone's menu as follows:

*Start > More > Accessories*

and launch the Airscanner installer from the options on your screen. Your program will now be installed.

### **Launching the antivirus program:**

To run the program, simply use your phone's menu to browse to

*Start > More > Airscanner AV*



And select "Airscanner AV" in order to run it.



You will then see the splash screen welcoming you to the program.

Loading... 



Protected by  
Airscanner Mobile Antivirus

**Options** **Done**

### Using the Program:

As the program comes up, it will say "Program started!" at the top of the screen.

Airscanner AV 

Program Started!

Files Tested: **0**

Bytes Tested: **0**



Elapsed Time: **00:00:00**

Infected Files: **0**



**Options** **Done**

You can now launch the program by selecting the "Play" button.

Airscanner AV 

Scanning File:

Files Tested: **40**

Bytes Tested: **861**



Elapsed Time: **00:00:05**

Infected Files: **0**



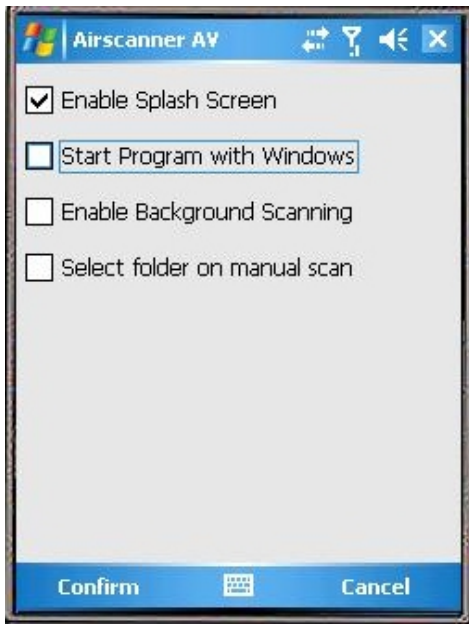
**Options** **Done**

While the program is scanning, you will see the list of files currently being scanned in the address bar window. You can stop or pause the scanning at any time by using the "pause" or "stop" buttons.

The screenshot below shows the options available. As you can see, it is a very feature-rich application. The point is to give you back control over your device, and what applications you have running.



The Configuration option opens the screen below. You can choose options such as auto-start with windows and background scanning. Background scanning allows the program to continually scan your device. It is optimized to use very little CPU and battery. If you do not select background scanning, you can opt for manual scanning of a particular folder. If you choose the root folder, it will scan the entire device.



You can also choose to perform an online update. Note: this requires an open Internet connection. Under the Update History option, you can also see a list of mobile malware that is in the wild, along with a brief summary of each.



Under the About option you can find information such as the version number and your registration code. The screen below tells you how much time is left in your license (or trial period).



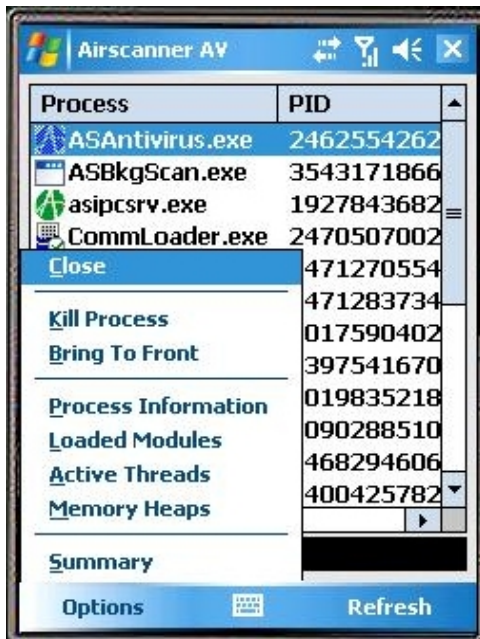
On the right hand bottom of the screen, you can select from several system tools, as shown below.



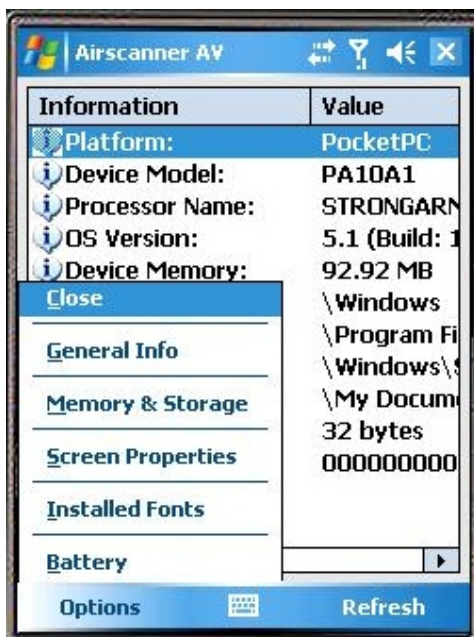
The screen below shows the process manager. This is similar to the Windows desktop task manager with which you are familiar. Sadly, Microsoft chose to leave this application out of Windows Mobile. That means you are at the mercy of certain viruses and Trojans like Brador that can't be delete when they are resident in memory. Fortunately,



Airscanner now gives you back the control to kill these processes (for advanced users).



The screenshot below shows some of the System Information tool options. There is also a registry viewer that is helpful for debugging when you suspect a spyware infection (for advanced users).



**Uninstalling:**



To uninstall, simply use your phone's menu to browse to:

*Start > Settings > More > Remove Programs*

Then select the "AirScanner" item. That's it!

## AIRSCANNER ANTIVIRUS SCHEDULER FOR WINDOWS MOBILE SMARTPHONES

***This following is hands-on guide for using the Airscanner  
Antivirus Scheduler for Windows Mobile Smartphones***

### Airscanner Scheduler

The scheduler is a standalone tool that is bundled with the antivirus installer. It is installed as a separate program the first time the antivirus is downloaded and installed. It is a powerful, fully configurable, highly granular scheduling tool that gives you total control over how often you want to automatically scan or update your antivirus software to help protect against the latest threats.

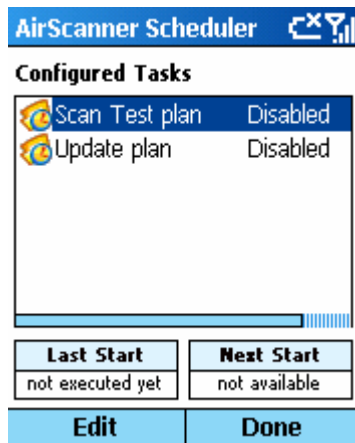
The Scheduler Icon is shows as menu item #3 in the following screenshot:



### Main Screen

By clicking on "Scheduler" in the screenshot above, the program interface will open. The screenshot below shows a list with two tasks for scheduling. The task description (e.g. "Scan Test Plan") and it's status (e.g. "Disabled") appear on the list. By default, the two options (Scan Test Plan and Update Plan) are disabled. To edit them, select an item on the list and so press the Edit button.

Note that at the very bottom of the screen the “Last Start” and “Next Start” fields show the last task execution that was successful, as well as the next execution that is scheduled.



The screenshot shows the 'AirScanner Scheduler' window. Under the 'Configured Tasks' section, there is a list with two entries: 'Scan Test plan' and 'Update plan', both marked as 'Disabled'. Below this list, there are two columns: 'Last Start' and 'Next Start'. The 'Last Start' column shows 'not executed yet' and the 'Next Start' column shows 'not available'. At the bottom, there are two buttons: 'Edit' and 'Done'.

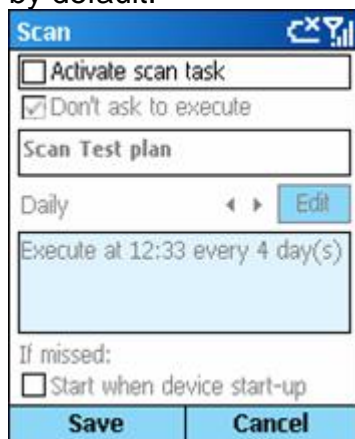
Configured Tasks	
Scan Test plan	Disabled
Update plan	Disabled

Last Start	Next Start
not executed yet	not available

**Edit**      **Done**

## Setting up your Scan Test Plan

By clicking “Scan Test Plan”, the following appears with all commands disabled by default.



The screenshot shows the 'Scan' configuration dialog box. It has a title bar 'Scan'. Inside, there are several options: 'Activate scan task' (unchecked), 'Don't ask to execute' (checked), 'Scan Test plan' (text field), 'Daily' (frequency selector with left and right arrows and an 'Edit' button), 'Execute at 12:33 every 4 day(s)' (text field), and 'If missed:' section with 'Start when device start-up' (unchecked). At the bottom, there are 'Save' and 'Cancel' buttons.

**Scan**

☐ Activate scan task  
☒ Don't ask to execute

Scan Test plan

Daily      Edit

Execute at 12:33 every 4 day(s)

If missed:  
☐ Start when device start-up

**Save**      **Cancel**

Please note the following screen shot, which shows a numbered list of each option. The options are described below:

The screenshot shows a configuration window titled "Scan". It contains the following elements:

- 1**: A checkbox labeled "Activate scan task" which is checked.
- 2**: A checkbox labeled "Don't ask to execute" which is checked.
- 3**: A text field labeled "Scan Test plan" containing the text "Scan Test plan".
- 4**: A frequency field showing "Daily" with a double-headed arrow and an "Edit" button.
- 5**: A text field showing "Execute at 12:33 every 4 day(s)".
- 6**: A section labeled "If missed:" with a checkbox "Start when device start-up" which is unchecked.

At the bottom are "Save" and "Cancel" buttons.

The features on the above screen are as follows:

1. "Activate scan task" – Once you tick this checkbox, it gives you access to all of the screen's commands, and it retrieves all the scheduling data.
2. "Don't Ask to execute" – If this option is selected, the scheduled scan task will run automatically without asking for user confirmation first.
3. This field shows the task to be scheduled; it can be modified.
4. Scheduler Frequency Options – this field defines exactly when the task will be executed. Simply click the Edit button to adjust this field.

The screenshot shows a dialog box titled "Select an Item". It contains a list of frequency options:

- Daily (highlighted)
- Weekly
- Monthly
- Once
- At system startup
- Run on Connected

At the bottom is a "Done" button.

The options can be visualized as listings. If so, just click on the corresponding field when highlighted.

5. This field shows the current configuration that was chosen.
6. If ticked off, this option tells the program to try again when the device boots up, but only in case an error occurred when first trying to execute the task.

This following screenshot shows an example of a configuration:

**Scan** abc

☒ Activate scan task  
☐ Don't ask to execute

Scanner

Daily ◀ ▶ **Edit**

Execute at 12:33 every 4 day(s)

If missed:  
☐ Start when device start-up

**Save** **Cancel**

## Scheduling a Task

When choosing how often you want to scan, click the “Edit” button as shown next to “Daily” in the screenshot below.

**Scan** cx

☒ Activate scan task  
☒ Don't ask to execute

Scan Test plan

Daily ◀ ▶ **Edit**

Execute at 12:33 every 4 day(s)

If missed:  
☐ Start when device start-up

**Save** **Cancel**

If you have chosen a daily scan, you will see the following screen after you select “Edit”:

**Daily** cx

**Schedule Task Daily:**

Start Time:  
12:33:00 PM

Every:  
4 Day(s)

**Confirm** **Cancel**

On the Daily scheduling screen as shown above, you can change the time and the scan frequency (in number of days). Click on “Confirm” to save or on “Cancel” to abort.

If you prefer a weekly scan, then select “Weekly” as shown in the screenshot below and click “Edit.”

**Scan** abc [signal icons]

☒ Activate scan task  
☒ Don't ask to execute

**Scan Test plan**

Weekly [left arrow] [right arrow] **Edit**

Execute at 10:46 on Mon, Tue, Wed, Thu, Fri, Sat, Sun, every 1 week(s)

If missed:  
☐ Start when device start-up

**Save** **Cancel**

You will then see the following screen:

**Weekly** [signal icons]

**Schedule Task Weekly:**

Start Time: 10:46:00 AM Every: 1 week(s)

☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat ☒ Sun

**Confirm** **Cancel**

On the Weekly scheduling screen, you can choose the interval frequency in weeks, and you can also choose which weekdays you prefer. Click on “Confirm” to save or on “Cancel” to abort.

If you prefer monthly scanning, select “Monthly” and then “Edit” as shown below:

**Scan**

☒ Activate scan task

☒ Don't ask to execute

Scan Test plan

Monthly ◀ ▶ **Edit**

Execute at 17:30 on day 5 of Feb, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec.

If missed:

☐ Start when device start-up

**Save** **Cancel**

You will then see the following screen:

**Monthly**

**Schedule Task Monthly:**

Start Time ⦿ Day

5 :30:00 PM ⬆ ⬇ ⬆

☐ Weekday of the Month

First ◀ ▶ Sunday ◀ ▶

☐ Jan ☒ Feb ☐ Mar ☒ Apr

☒ May ☒ Jun ☒ Jul ☒ Aug

☒ Sep ☒ Oct ☒ Nov ☒ Dec




**Confirm** **Cancel**

On the Monthly scheduling screen, you can modify the following:




1. The hour of the task execution.
2. Which monthly date OR which monthly week, along with its weekday, the task will run
3. Which year-long months the task will be run.

Click on “Confirm” to save, or on “Cancel” to abort.



The following screenshot shows an example test plan that we created. January and March have been left out on purpose, for the sake of this example:

Scan 	
<input checked="" type="checkbox"/> Activate scan task	
<input checked="" type="checkbox"/> Don't ask to execute	
<b>Scan Test plan</b>	
Monthly	  <b>Edit</b>
Execute at 17:30 on day 5 of Feb, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec.	
If missed:	
<input type="checkbox"/> Start when device start-up	
<b>Save</b>	<b>Cancel</b>

However, if you only want to schedule a single, one time only scan, then you should select 'Once' and then 'Edit' as shown below:

Scan 	
<input checked="" type="checkbox"/> Activate scan task	
<input checked="" type="checkbox"/> Don't ask to execute	
<b>Scan Test plan</b>	
Once	  <b>Edit</b>
Execute at 10:46 of 07/06/2005	
If missed:	
<input type="checkbox"/> Start when device start-up	
<b>Save</b>	<b>Cancel</b>

You will then see the following screen:

Once 	
<b>Schedule Task Once:</b>	
Start Time:	
10:46:00 AM 	
Run on:	
5 / 25 / 2005	
<b>Confirm</b>	<b>Cancel</b>

On the scheduling screen for just one execution, you can change the hour and day of the task to be run. Click on "Confirm" to save, or on "Cancel" to abort.



**Note:** After you have created your scan test plan, click “Save” (at the bottom left of the following screen:

**Scan**

☒ Activate scan task

☒ Don't ask to execute

**Scan Test plan**

Daily    ◀ ▶    **Edit**

Execute at 12:33 every 4 day(s)

If missed:

☐ Start when device start-up

**Save**    **Cancel**

**AirScanner Scheduler**

**Configured Tasks**

Scan Test plan	Pending
Update plan	Disabled

**Last Start**    **Next Start**

not executed yet	07/06/2005 12:33
------------------	------------------

**Edit**    **Done**

After having saved the Scan task you prefer, its status will show, “Pending” up until the moment it will be executed for the first time.

## Update Plan

Just like the Scan test plan described above, you can set the Update task to update your virus signatures automatically online. Simply select “Update Plan” as shown below:

In the screenshot below, all of the options (1-5) work the same as the Scan test plan described above, but the last option (6) is different:

Option 6 tells the scheduler to attempt an update again as soon as the device is on-line. This is just in case the connection was unavailable during updating, which would lead to a task execution error.

Otherwise, all the Update tasks are described in detail in the Scan Test section above. However, the “Run on Connected” option is unique to the Update part of the program.

To use this feature, select “Run on Connected” as shown below:

**Update**

☒ Activate update task

☒ Don't ask to execute

Update plan

Run on Connected ◀ ▶ **Edit**

Execute this task when connected once a day.

If connection is not available:

☐ Check when it goes online

**Save** **Cancel**

You will then see the following screen:

**Run on Connected**

**Schedule Task On Connected:**

☒ Only run this task once a day

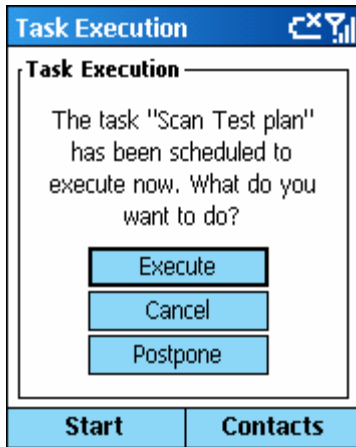
**Confirm** **Cancel**

On the “Run on Connected” scheduling screen, the Scheduler can be programmed to run a task only once, in case the hardware is connected more than once a day. Click on “Confirm” to save, or on “Cancel” to abort.

**Note:** remember to save your Update test plan by clicking “Save” when you are done.

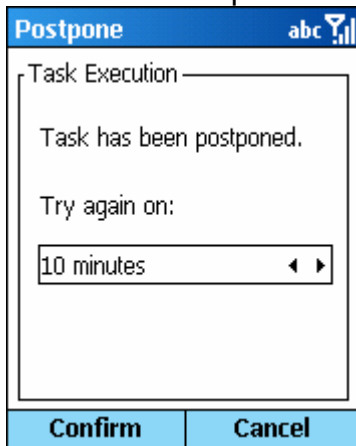
## Running a programmed Task

At the time a task is scheduled, the system will check whether the “Don’t ask to execute” option has been ticked off. If so, the screen below will be displayed asking for your confirmation to execute the program.



You can then choose one of the following options:

1. *Execute* – runs the programmed task immediately;
2. *Cancel* – aborts the task's execution at this moment, without deleting its future scheduled runs, if applicable;
3. *Postpone* – re-schedules the task execution for a later time. By clicking the "Postpone" button, the system displays the following screen:



The screen asks the user how much time to postpone the task. By clicking the button 1, the postponing options will be displayed, as shown in the next screen.

Select an Item abc

10 minutes

1 hour

2 hours

3 hours

4 hours

5 hours

1 day

Done

You can then select a time and then press "Done". After that, click on "Confirm" to postpone the task execution. You will see the following screen, and the task will be run later according to your choice.

Postpone abc

Task Execution

Task has been postponed.

Try again on:

10 minutes

Confirm Cancel

The postponement can be verified on the Scheduler main screen. The task status is now dated forward and is shown as "Postponed".

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