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CONTENTS

introduction3	
Microsoft ActiveSync backup3	
Microsoft	

ActiveSync restore......6

iPAQ h3800 series

backup utility	10
BACKUP	10
RESTORE	12
PERMANENT PIM	14
backing up your PIM data	.14
restoring your PIM data	.15
permanently removing PIM data	a16

iPAQ h3900 series

backup program	17
MANUAL BACKUP	17
SCHEDULED BACKUP	21
RESTORE	22
PERMANENT PIM	26
backing up your PIM data	.26
restoring your PIM data	.27
permanently removing PIM data	a28

iPAQ h5400 series

backup utility29	
MANUAL BACKUP29	
SCHEDULED BACKUP33	
RESTORE34	
PERMANENT PIM38	
backing up your PIM data	
IPAQ H1910 SERIES	
BACKUP UTILITY41	

summary	



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1

backup and restore applications for the iPAQ Pocket PC h3800, h3900, h5400, and h1910 series

With so much more information being accumulated on our networks, computers, and devices, such as handhelds, the importance of backing up our data has become just as significant. Whether for legal purposes or in case of system failures, backups of our computer devices serve the purpose of retaining our information for future use. Not only is a solid process for backing up our data important, but also a sound restore process is also vital for maintaining the integrity of the information.

This white paper describes the backup and restore applications available with the iPAQ Pocket PCs h3800, h3900, h5400, and h1910Series. The tools used to perform the backups and restores differ slightly, but all serve the same purpose of safeguarding your data.

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introduction

The importance of backups cannot be overstated. It is important you understand the backup and restore features that are available to you on your iPAQ Pocket PC. Understanding how these applications work can help you develop a sound backup and restore process for your unit.

All of the iPAQ devices discussed in this white paper use the MicrosoftTM ActiveSync backup and restore utility. All of the units mentioned, except the h1910 iPAQ, also have their own backup and restore utilities. This white paper discusses the ActiveSync utility as well as the individual applications found on the h3800, h3900, and h5400 series devices.

As with any backup, always verify that your backup target has enough space to accommodate the information you are backing up. If you exceed the storage limitations of your backup target, the backup will not successfully complete.

Microsoft ActiveSync backup

Microsoft ActiveSync provides comprehensive non-selective backup/restore functionality, storing the Pocket PC applications and data in the "backup.stg" file in a folder on your computer. This backup supports both "full" and "incremental" backup operations. For additional information, see "backup" in the ActiveSync Help utility.

Note: You can rename the backup file to include the date or other information when multiple instances of backups are desired. The file extension must remain *.stg* for the file to be recognized by a Restore function.

- **full backup**—This option creates a copy of all data in the iPAQ Pocket PC RAM and saves it on your computer. The time this operation takes depends on the speed of the ActiveSync connection and how much data resides on your iPAQ Pocket PC. A full backup operation is recommended the first time the backup operations are enabled.
- **incremental backup**—This option updates the backup file stored on your PC with the data that has changed on the iPAQ Pocket PC since the last backup operation. This backup completes in a much shorter time than a full backup.

Follow these steps to back up your system:

- 1. Make sure your iPAQ Pocket PC is connected to your computer.
- 2. From your computer, open Microsoft ActiveSync.



3. From the Tools menu, click Backup/Restore.

🕀 Microsoft ActiveSync 🛛 🗖 🗖 🖂			
<u>File</u> ⊻iew	Iools H	<u>t</u> elp	
3 6	Option	\$	
Sync S	<u>H</u> eso'y	e Items	
Pocke	<u>B</u> acku	p/Restore	
Connecte	Add/R	emove Programs	
Synchronize	Import	Database Tables	
	<u>E</u> xport	Database Tables	
L			
Information	Туре	Status	
🔊 Calendar	r	Synchronized	
Contacts	2	Synchronized	
🖉 Tasks		Synchronized	
Favorite:	\$	Synchronized	
© Inbox		Synchronized	
🔄 Notes		Synchronized	
🔁 Files		Synchronized	

4

- 4. Click the Backup tab.
- 5. Click the type of backup you want and then click the Back Up Now button to initiate the backup. A Full backup is recommended the first time the backup operation is enabled.

Backup/Restore	X
Backup Restore	
Use Backup to create a file on this computed at the files, databases, personal information programs and other information currently or device.	lei that contains n, RòM-based n your mobile
C Incremental backup Back up only the information that has changed sin backup.	ce the last
Microcolt/ActiveSyncl/Profiles/Gued/Blackup.stg	<u>Q</u> hangs
Click Back Up Now to begin backing up your mobile device.	Back Up <u>N</u> ow
Automatically back up each time the device come	eote.
OK.	Cancel

After a full backup has been performed for the first time, it is recommended that the Backup feature be configured with the Incremental Backup selection so that you do not have to remind yourself to back up your data and applications. This can be accomplished by clicking the Incremental Backup option from the Backup tab and checking the Automatically Back up Each Time the Device Connects check box. With this item flagged, every time the iPAQ Pocket PC is cradled, it does not only synchronize your data, but it determines the things that have changed since the last backup, and updates the backup file on the computer.

Microsoft ActiveSync restore

In the event of a total data loss on the iPAQ Pocket PC or a need to revert back to an earlier backup, you can restore data to the device using any backup file created with ActiveSync. The following steps are for the most typical scenario, that of a restore after a total loss of data caused by a battery discharge or deactivation of the battery. For additional information, see "restore" in the ActiveSync Help utility.



CAUTION:

If the restore purpose was to recover personal information manager (PIM) data that was accidentally erased from the iPAQ and the desktop, safely retrieve this information after the restore, but before performing synchronization with your computer.

- 1. Connect the device to AC power, recharge the battery, and complete the setup wizard on your iPAQ before connecting to your computer and performing a restore.
- 2. Connect to the computer by attaching the iPAQ Pocket PC to the cradle or cable. The following dialog displays on the computer. Select the option to connect as a guest, then click Next.



 Select the restore operation in Microsoft ActiveSync on the computer using the Tools, Backup/Restore menu option, and then select the Restore tab to display the following dialog.

mobile device and replace it v the backup file	with the conten	ts stored in
the restore successiony, guit an programs of the restore process. Also, do not use your process is complete.	device until th	e restore
Note: You cannot cancel the restore proc	ess ance it has	started.
Click Restore Now to begin restoring your mobile device.	R	estore Now

4. Click the Restore Now button to initiate the Restore process. This causes the following dialog to display, allowing you to select the partnership that you want to restore. Select the correct partnership then click OK.

Partnership Selection	x
In the list, select the patnership file that contains your backup file. Citck Browse if your backup file is not stored with your patnership file.	
Guest PFC. Demo Pocket_PC PH_Pocket_PC Visit	
OK. Cancel	

5. A warning, indicating that you will be erasing all data on your iPAQ Pocket PC and restoring a previous image of applications and data to the device, displays.



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6. Click Restore to begin the operation.

:

	(B)
	-39-
Now restoring from Backup	.sloʻ
Please do not use the devic	e until restore is finished.

7. When the Restore operation is complete, the following dialog displays asking you to remove the device from the cradle and perform a reset.

Restore	Complete: Restart derice
A	Restore complete. Yournust disconnect and then reset your device for these changes to take effect.
47	Consult your manufacturer's documentation for instructions on resetting your device.
	Note: When you reconnect, ActiveSync may prompt you to containe or discard items in any synchronized databases (Appointments, Contacts, or Tasks).

8. Perform a normal (soft) reset by pressing the reset button on the bottom of the iPAQ with the stylus for 2 seconds.

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9. Connect the iPAQ Pocket PC to the computer to establish a new partnership and synchronize the PIM data selected.

When ActiveSync recognizes pre-existing data on the iPAQ, the following prompt displays asking if you want to Combine or Replace the data.

CAUTION: The default selection of "Combine the items..." typically results in duplicate appointments in your calendar.

HP recommends that you select the option of Replace the items on my device... to avoid duplication of data.

Combine	or Replace
⚠	The following information type on your mobile device has items that have not been synchronized with this computer before
	Information Type: Calendar, Contacts
	C Cambine the items on my device with the items on this computer.
	Beplace the tems on my device with the items on this computer;
	O Do got synchronize this information type at this time.
	OK Cancel

10. After ActiveSync synchronization completes, you have finished restoring and updating your iPAQ Pocket PC with the most current PIM data.

Note: If the restore operation was performed on a different device from the original backup, it is necessary to re-align the touch screen by going to Start > Settings > System tab > Screen > Align Screen. The touch screen accuracy could be affected if this is not performed.

iPAQ h3800 series backup utility

The iPAQ Pocket PC h3800 Series offers the ability to perform a non-selective backup to a non-volatile storage device such as the iPAQ File Store, Compaq Flash, or SD media.

The benefit of using the iPAQ Backup feature is that you can easily carry your backup data with you so that you can restore while away from your office computer.

backup

Note: To ensure that all data and applications are backed up, manually close all active applications or perform a normal (soft) reset before beginning the backup operation.

To back up your iPAQ h3800 series device, follow these steps:

- From the Start menu, select Settings. 1.
- 2. From the Settings screen, tap on the System tab on the bottom of the screen.



3. Select the Backup Utility program from the screen to open the utility. 4. Tap on the Open menu to select your target backup location.

ह Settings	4 € 3:17	6		
Backup Utility				
All data in the file system will be backed up to the location specified in the target field below. To change the target, click the "Open" in the lower left corner.				
Target : None				
Space Needed: 1117.66	КВ			
Space Available: None				
Start				
0 %				
iPAQ File Store				
Open	E	≝ ^		

- 5. Select the appropriate target.
- 6. Click Start to begin the process.



- 7. A warning message displays. Click OK if you are ready to begin the backup.
- 8. After the backup completes a message that says, "Backup is complete" displays. Click OK on this pop-up window to complete the backup.

restore

The restore program allows you to pull the backed up information from the backup media and restore your system to the previous state (of the latest backup).

CAUTION: To ensure that all data integrity is maintained after the restore, the ActiveSync partnership between the iPAQ device and the host PC should be deleted from the host PC and then recreated **before** synchronizing.

To restore, close all open applications and follow these steps:

- 1. From the Start menu, select Settings.
- 2. From the Settings screen, tap on the System tab on the bottom of the screen.



3. Select the Backup Utility program from the screen to open the utility.

4. Click on the Restore tab at the bottom of the screen.

🎊 Settings	📢 3:16 🛛 🐽			
Backup Utility				
All data in the specified Source will be restored to the file system in the same folder hierarchy from which it was backed up.				
Source: None				
Space Needed: None				
Space Available: None				
Start				
0%				
Backup Restore				
Open	▲			

- 5. To select the source (where you want to restore from), tap Open and select the appropriate location.
- 6. After you have selected the source location, tap on Start to begin the restore.
- 7. You are prompted by a message indicating the restore will overwrite the current data. If you want to continue, tap Yes.
- 8. A second message displays advising that all programs should be closed. Close any open applications and tap OK to continue the restore process.
- 9. After the restore is complete, the following message displays.

🎊 Setti	ings (€ 3:23
Backup	Utility
All data restore	i in the specified Source will be d to the file system in the same
Messa	ge 🛛 🕺
i	Restore is complete. Press the RESET button to resume operation.
Space	Available: 32296.00 KB
	Start
100%	
Backup R	lestore
Open	

10. Tap OK and reset the device to complete the restore.

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permanent PIM

Permanent PIM is not part of the h3800 backup utility, but it is a storage feature that merits discussion. Permanent PIM allows you to store Calendar (appointment) and Contacts information into non-volatile flash memory so that it is not lost after a total loss of power or a full (hard) reset.

backing up your PIM data

To activate Permanent PIM on your iPAQ h3800 series device, follow these steps:

- 1. Tap Start > Settings > System.
- 2. From this screen, tap the Permanent PIM application icon to open the program.

Settings Permanent PIM Selecting an item below with a checkmark) will a permanently stored in r memory. This will ensur not lost when power is Check the items you w permanent: Contacts Appointment	
Permanent PIM Selecting an item below with a checkmark) will o permanently stored in r memory. This will ensur not lost when power is Check the items you w permanent: Contacts Appointment	🔫 🕂 3:43 🛛 🔂
Selecting an item below with a checkmark) will o permanently stored in r memory. This will ensur not lost when power is Check the items you w permanent: Contacts Appointment	
 Contacts Appointment 	v (enabling it cause it to be non-volatile flash e that they are turned off. vant to make
Appointment	
	ts

- 3. Select both check boxes to store Contacts and Appointments to non-volatile flash memory.
- 4. Tap OK to exit.

restoring your PIM data

Note: After a full reset, like most user settings, the Permanent PIM selection defaults back to the factory setting of not enabled. The data is still present, but it will not be restored automatically.

After a total loss of power or a full reset, you can restore you Contacts and Calendar data by following these steps:

- 1. Tap Start > Settings > System.
- 2. From this screen, tap the Permanent PIM application icon to open the program.

File	Zoom	Tools	Help	-		
87	Settin	gs			3:43	œ
Peri	manen	t PIM				
Sel wit per me not Ch	ecting th a chi maner mory. t lost w eck the rmane	an iter eckmar itly sto This w /hen p e item: nt:	n belov 'k) will (ired in r ill ensur ower is s you w	/ (enabl ause it ion-vola e that t turned ant to r	ing it to be tile fla hey a off. nake	sh re
		Conta	acts			
	\checkmark	Appoi	intment	s		
					E	≝ ^

3. Select the Contacts, Appointments, or both check boxes to restore your Contacts and/or Appointments from ROM back to the PIM applications.

Your PIM data will automatically start copying from ROM and populate the PIM applications.

Note: With Contacts and/or Appointments selected, your Pocket PC will perform a PIM synchronization after a normal reset. The amount of time for this synchronization to occur depends on how much Calendar and Contact data is on your Pocket PC.

permanently removing PIM data

The PIM backup file is stored in an inaccessible area of ROM (if you have this feature enabled). Because it is not removed during total loss of power or a full reset, if you want to erase this data manually or refrain from having PIM automatically backed up, follow these steps:

- 1. Tap Start > Settings > System.
- 2. From this screen, tap the Permanent PIM application icon to open the program.

T	Settin	gs	
Per	maner	t PIM	
Se wit pe me no	lecting th a ch rmaner emory, t lost v	an item belo eckmark) wi ntly stored ir This will ens vhen power	ow (enabling it ill cause it to be n non-volatile flash sure that they are is turned off.
Ch pe	eck th rmane	e items you ent:	want to make
Ch pe	eck th ermane	e items you e nt: Contacts	want to make

- 3. Tap on the Contacts, Appointments, or both to deselect them.
- 4. A message asking if you are sure you want erase all of the backup contents of these items displays. If you are sure you want to have these items removed, tap "Yes", otherwise, tap "No".
- 5. Tap OK in the application window to exit the Permanent PIM application.

Your PIM data is no longer automatically saved to ROM. If you want to remove PIM data permanently, you can perform a full reset at this time. A full reset can be performed by simultaneously pressing the two outer application buttons and the reset button on the bottom of the handheld for 10 seconds.

backup and restore applications for iPAQ Pocket PC h3800, h3900, h5400, and h1910 series

iPAQ h3900 series backup program

The iPAQ Pocket PC h3900 Series offers a more advanced backup and restore program. With the iPAQ Backup application you can:

- back up and restore selected files, folders, and databases on your Pocket PC
- copy the entire Pocket PC system state (for example, the registry, user and system databases, and data files)
- back up and restore PIM data
- schedule regular backups

manual backup

To back up your iPAQ h3900 Series device, follow these steps:

- 1. From the Start menu, tap Programs.
- 2. Tap the iPAQ Backup program.



3.	Select files, folders, or databases from the tree view.
	🍠 iPAQ Backup 🛛 📢 2:24 🐽
	File \iPAQ File Store\Backup.pbf
	Options Backup
	Backup Restore More
	- E
4.	Tap the button. (shown circled in previous image)

5. Enter a name and saving location for the backup data, then tap OK.

🏂 iPAQ B	ackup	4 € 2:27
Save As		
Name:	Backup	
Folder:	None	•
Type:	.pbf	Ŧ
Location:	Main memory	•
	ОК	Cancel
123 1 2 3	3 4 5 6 7 8	90-=+
Tab q w	ertyu	i o p []
CAP a s	d f g h j	k ; '
Shift z X	: C Y b n m	,./↩
Ctl áü 🗅	1	↓ ↑ ← →
		

Note: On the iPAQ h3900 series device you can name your backup file to best fit the description of what you are backing up. This is useful if you want to have multiple backups of various data on your device.

:

- 6. From the main backup screen, tap Options... to set the backup options. Select whether to:
 - compress or encrypt data
 - stop all processes before backing up
 - exclude files from the backup

Note: Because some files are not backed up when they are in use, HP recommends selecting the Stop Processes Before Backup option to ensure that all information is saved.

🎊 iPAQ Backup	4 € 2:26	•
Compress Data		
Encrypt Data		
Stop Processes Before	Backup	
Exclude		
III III IPAQ Backup Files (*.PI	BF)	
Log Files (*.LOG)	-)	
Persistent Storage		
Schedule Default	OK	
	E	ਾ "
Tap OK after you have select	ed the opti	ons.

- 8. Tap the Backup... button.
- 9. From the following screen, tap Start to begin the process.

<i>2</i> 7	iPAQ Bac	kup	4 € 2:2	7 🚯
Co	pying	Tap <star< th=""><th>rt> to Backu</th><th>qı</th></star<>	rt> to Backu	qı
Т	уре	Message		
		Ш		•
	Car	ncel	Start	
				•

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7.

10. When the backup is complete, the following pop-up window displays.

🎊 iPAQ Ba	ckup	4 € 2:2	9
Copying	Registry		
100 IPAQ B	ackup	0	,
	Operatior successfu	n completed lly.	
•	III		•
Ca	ncel	OK	

11. Click OK to close the window and complete the backup process.

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backup and restore applications for iPAQ Pocket PC h3800, h3900, h5400, and h1910 series

scheduled backup

With the iPAQ Pocket PC h3900 Series, you have the ability to schedule backups. When you schedule a backup, a pop-up reminder displays on the iPAQ screen. This feature is very useful in making sure routine backups are performed. The following steps are necessary to schedule a backup:

1. Follow steps 1 through 6 in the previous "Manual Backup" section to access the Backup options screen.

🎊 iPAQ Backup	4 € 2:26	•
Compress Data Encrypt Data Stop Processes Before	e Backup	
Exclude ✓ iPAQ Backup Files (*.P Programs (*.EXE,*.DL ✓ Log Files (*.LOG) ✓ Persistent Storage	BF) L)	
Schedule Default	OK	
	E	≝ ^

2. Tap the Schedule button to open the schedule backup options screen.

🜮 iPAQ Backup	 € 12:08 0
Enable Scheduled St	art Up
Once Daily	🔘 Weekly
Time 12:08:40 PM	<u>+</u> T
Date 5 /20/02	-
Enable Battery Monit	tor old (%)
Cancel	OK

- 3. Check the Enable Scheduled Start Up check box, and select the frequency, the time, and date for the backup.
- 4. Click OK

restore



To perform a restore on your iPAQ Pocket PC h3900 Series, close all open applications and follow these steps:

- 1. From the Start menu, tap Programs.
- 2. Tap the iPAQ Backup program.



3. From the main screen of the iPAQ Backup program, tap the Restore tab at the bottom of the screen.

87	iPA	Q Backu	р	-	K	12:58	•
⊡… : : :	₹	Pocket	: PC 1 Datab ner Dat Syster gistry	bases :abases m	;		
File	١	My Docu	iments	\Backu	ıp1	1.pb	
			Optio	ins	R	estor	e
Back	up	Restore	More				
						E	∎ ►

- 4. Tap the ... button (circled above) from this screen to select where you want to restore from.
- 5. Select the backup file you want to use.

🏂 iPA	Q Backup	-	€ 2:29
Open			
Folder:	All Folder	s 🔻	Cancel
Type:	iPAQ Bac	kup Files (*.I	PBF) 🔻
Name	A	Folder	Date
🛍 Back	up		10/24 7:2
•	III		•
			™

6. From the tree view, select which items you want to restore.

:

7. From the main screen, tap Options... to select your restore settings.

🎊 iPAQ Backup	4 € 12:07	•
Stop Processes Bef	ore Restore	
Default	OK	
	F	ਯ∣▲

- 8. Check the Stop Processes Before Restore checkbox.
- 9. Tap OK.

:

- 10. From the main screen, tap Restore to begin the process.
- 11. Press Start to initiate the restore.

🎊 iPAQ Ba	ickup	4 € 2:30	•
Copying	Tap <start></start>	to Restore	
Туре	Message		
•	III		•
Cá	ancel	Start	
		E	⊴ ^

12. After the restore is complete, the following screen displays.



13. Tap OK and perform a normal (soft) reset.

permanent PIM

Permanent PIM is not part of the h3900 backup utility. Permanent PIM allows you to store Calendar (appointment) and Contacts information into non-volatile flash memory so that it is not lost after a total loss of power or a full (hard) reset.

backing up your PIM data

To activate Permanent PIM on your iPAQ h3900 series device, follow these steps:

- 1. Tap Start > Settings > System.
- 2. From this screen, tap the Permanent PIM application icon to open the program.

File	Zoom	Tools	Help		
87	Settin	gs		◀€ 3:43	ø
Per	manen	t PIM			
Sel wit per me not Ch	ecting th a chi rmaner mory. t lost w eck the	an iten eckmar itly sto This wi vhen po e items at:	n below k) will ca red in no III ensure ower is t s you wa	(enabling it ause it to be on-volatile flu that they a curned off, ont to make	e ash are
	>	Conta Appoi	cts ntments	Êr;	

- 3. Select both check boxes to store Contacts and Appointments to non-volatile flash memory.
- 4. Tap OK to exit.

restoring your PIM data

Note: After a full reset, like most user settings, the Permanent PIM selection defaults back to the factory setting of not enabled. The data is still present, but it will not be restored automatically.

After a total loss of power or a full reset, you can restore you Contacts and Calendar data by following these steps:

- 1. Tap Start > Settings > System.
- 2. From this screen, tap the Permanent PIM application icon to open the program.

File	Zoom	Tools	Help	-	_	_
87	Settin	gs			3:43	œ
Peri	manen	t PIM				
Sel wit per me not Ch	ecting maner mory, t lost w eck the rmane	an iter eckmar itly sto This w /hen p e item nt:	n below rk) will a ired in r ill ensur ower is s you w	/ (enabl :ause it ion-vola e that t turned ant to r	ing it to be tile fla :hey a off. nake	ish re
	2	Conta	acts			
		Appo	intment	S		
						- 10

3. Select the Contacts, Appointments, or both check boxes to restore your Contacts and/or Appointments from ROM back to the PIM applications.

Your PIM data will automatically start copying from ROM and populate the PIM applications.

Note: With Contacts and/or Appointments selected, your Pocket PC will perform a PIM synchronization after a normal reset. The amount of time for this synchronization to occur depends on how much Calendar and Contact data is on your Pocket PC.

permanently removing PIM data

The PIM backup file is stored in an inaccessible area of ROM (if you have this feature enabled). Because it is not removed during total loss of power or a full reset, if you want to erase this data manually or refrain from having PIM automatically backed up, follow these steps:

- 1. Tap Start > Settings > System.
- 2. From this screen, tap the Permanent PIM application icon to open the program.

Permanent PIM Selecting an item below (i with a checkmark) will cau permanently stored in nor memory. This will ensure t not lost when power is tu Check the items you wan permanent: Contacts	enabling it use it to be n-volatile flash that they are urned off.
Selecting an item below (i with a checkmark) will cau permanently stored in nor memory. This will ensure t not lost when power is tu Check the items you wan permanent: Contacts	enabling it use it to be 1-volatile flash that they are Irned off.
Contacts	it to make
I Appointments	

- 3. Tap on the Contacts, Appointments, or both to deselect them.
- 4. A message asking if you are sure you want erase all of the backup contents of these items displays. If you are sure you want to have these items removed, tap "Yes", otherwise, tap "No".
- 5. Tap OK in the application window to exit the Permanent PIM application.

Your PIM data is no longer automatically saved to ROM. If you want to remove PIM data permanently, you can perform a full reset at this time. A full reset can be performed by simultaneously pressing the two outer application buttons and the reset button on the bottom of the handheld for 10 seconds.

iPAQ h5400 series backup utility

The iPAQ Pocket PC h5400 Series offers a more advanced backup and restore program. With the iPAQ Backup application you can:

- back up and restore selected files, folders, and databases on your Pocket PC
- copy the entire Pocket PC system state (for example, the registry, user and system databases, and data files)
- schedule regular backups
- back up and restore PIM data

manual backup

To back up your iPAQ h5400 series device, follow these steps:

- 1. From the Start menu, tap Programs.
- 2. Tap the iPAQ Backup program.



3.	Select files, folders, or databases from the tree view
	🎊 iPAQ Backup 🛛 📢 4:46 🐽
	 Pocket PC PIM Databases PIM Databas
	File \IPAQ File Store\Backup.pbf
	Options Backup
	Backup Restore PIM More
	► [
1	Tan the button (shown circled in previous image

- Tap the ... button. (shown circled in previous image) 4.
- 5. Enter a name and saving location for the backup data, then tap OK.

🎊 iPAQ B	ackup	4 € 2:27
Save As		
Name:	Backup	
Folder:	None	•
Type:	.pbf	Ŧ
Location:	Main memory	•
	ОК	Cancel
123 1 2 3	3 4 5 6 7 8	9 0 - = ቀ
Tab q 🛛	e r t y u	i o p []
CAP a s	d f g h j	k ; '
Shift z x	C V b n m	,. <i>1</i> ←
Ctl áü	N I	↓ ↑ ← →
		

Note: On the iPAQ h5400 series device you can name your backup file to best fit the description of what you are backing up. This is useful if you want to have multiple backups of various data on your device.

.....

- 6. From the main backup screen, tap Options... to set the backup options. Select whether to:
 - compress or encrypt data

.

- stop all processes before backing up
- exclude files from the backup

Note: Because some files are not backed up when they are in use, HP recommends selecting the Stop Processes Before Backup option to ensure that all information is saved.

🎊 iPAQ Backup	4 € 4:48	•
 ☐ Compress Data ☐ Encrypt Data ✓ Stop Processes Before 	Backup	
Next Backup: Not Scheduled		
Exclude ✓ iPAQ Backup Files (*.P Programs (*.EXE, *.DLL ✓ Log Files (*.LOG) ✓ Persistent Storage	BF) _)	
Schedule Default	OK	
	E	≝ ^

- 7. Tap OK after you have selected the options.
- 8. Tap the Backup... button.
- 9. From the following screen, tap Start to begin the process.

🏂 iPAQ Ba	ckup	4 € 2:27	•
Copying	Tap <start< td=""><td>:> to Backup</td><td></td></start<>	:> to Backup	
Туре	Message		
•	Ш		•
Ca	ncel	Start	
		E	≖ ^

10. When the backup is complete, the following pop-up window displays.

ह iPAQ Backup	4 € 4:50
Copying Registry	
iPAQ Backup	•
Operation com successfully. Pe Reset.	pleted erform a Soft
▲ III	•
Cancel	OK
	⊠ ^

11. Click OK to close the window and complete the backup process by performing a normal (soft) reset.

backup and restore applications for iPAQ Pocket PC h3800, h3900, h5400, and h1910 series

scheduled backup

With the iPAQ Pocket PC h5400 Series, you have the ability to schedule backups. When you schedule a backup, the backup starts automatically as long as the target destination is available. This feature is very useful in making sure routine backups are performed. The following steps are necessary to schedule a backup:

1. Follow steps 1 through 6 in the previous "Manual Backup" section to access the Backup options screen.

🎊 iPAQ Backup	- € 4:51	•	
 Compress Data Encrypt Data Stop Processes Before 	: Backup		
Next Backup: Not Scheduled			
F Exclude ✓ iPAQ Backup Files (*.PBF) Programs (*.EXE, *.DLL) ✓ Log Files (*.LOG) ✓ Persistent Storage			
Schedule Default	ОК		
	B	≖ ^	

2. Tap the Schedule button to open the schedule backup options screen.

🎊 iPAQ I	Backup	- 📢 4:51 🛛 🐽			
Enab	Enable Scheduled Start Up				
Onc	e 🔘 Daily	O Weekly			
Time	4 :51:49 AM	4 V			
Date	6 /30/02	-			
🗌 Enab	Enable Battery Monitor				
Ba	Backup Automatically				
30	🚔 Thresho	old (%)			
Ca	incel	OK			
					
5981-4260EN					

- 3. Check the Enable Scheduled Start Up check box, and select the frequency, the time, and date for the backup.
- 4. Click OK.

restore

CAUTION: To ensure that all data integrity is maintained after the restore, the ActiveSync partnership between the iPAQ device and the host PC should be deleted from the host PC and then recreated **before** synchronizing.

To perform a restore on your iPAQ Pocket PC h5400 Series, follow these steps:

- 1. From the Start menu, tap Programs.
- 2. Tap the iPAQ Backup program.



3. From the main screen of the iPAQ Backup program, tap the Restore tab at the bottom of the screen.



- 4. Tap the ... button from this screen (circled above) to select from where you want to restore.
- 5. Select the backup file you want to use.

🎊 iPAQ Backup	-	€ 2:29
Open		
Folder: All Folder	s 🔻	Cancel
Type: IPAQ Bac	kup Files (*.I	PBF) 🔻
Name 🔺	Folder	Date
🛍 Backup		10/24 7:2
4		•
		™

6. From the tree view, select which items you want to restore.

7. From the main screen, tap Options... to select the restore settings.

🎊 iPAQ Backup	4 € 12:07	•
Stop Processes Be	ore Restore	
Defau	It OK	
	E	≝ ^

- 8. Check the Stop Processes Before Restore checkbox.
- 9. Тар ОК.
- 10. From the main screen, tap Restore to begin the process.
- 11. Tap Start to initiate the restore.

🎊 iPAQ Ba	ickup	4 € 2:30	•
Copying	Tap <start></start>	to Restore	
Туре	Message		
•	III)	•
Cá	ancel	Start	
		æ	∄∣►

:

12. After the restore is complete, the following screen displays.



13. Tap OK and perform a normal reset.

permanent PIM

Permanent PIM allows you to store Calendar (appointment) and Contacts information into nonvolatile flash memory so that it is not lost after a total loss of power or a full (hard) reset. The Permanent PIM utility on your iPAQ Pocket PC h5400 series is offered as a tab in the backup program.

backing up your PIM data

To activate the backup function for your PIM data, follow these steps:

- 1. Start the iPAQ Backup utility.
- 2. Select the PIM tab from the bottom of the backup screen.
- 3. From the PIM screen, tap the Enable Automatic Backup/Restore checkbox.

🎊 iPAQ Backup	🔫 2:04 🛛 🐽		
Tap the checkbox below (enable it with a checkmark) to automatically backup and restore your PIM databases (Contacts and Appointments)			
Enable automatic backup/restore			
Backup Restore PIM More			
	■		

4. Tap OK to exit.

Your PIM data is now automatically saved to ROM. Each time Calendar or Contact data is added to the iPAQ device, it also adds the information to the PIM backup.

Note: With the Enable Automatic Backup/Restore selected, your Pocket PC will perform a PIM synchronization after a normal reset. The amount of time for this synchronization to occur depends on how much Calendar and Contact data is on your Pocket PC.

restoring your PIM data

Note: After a full reset, like most user settings, the Permanent PIM selection defaults back to the factory setting of not enabled. The data is still present, but it will not be restored automatically.

After a total loss of power or a full reset, you can restore you Contacts and Calendar data by following these steps:

- 1. Start the iPAQ Backup utility.
- 2. Select the PIM tab from the bottom of the backup screen.
- 3. From the PIM screen, tap the Enable Automatic Backup/Restore checkbox.

🎊 iPAQ Backup	🕂 2:04 🛛 🐽		
Tap the checkbox below (enable it with a checkmark) to automatically backup and restore your PIM databases (Contacts and Appointments)			
Enable automatic backup/restore			
Backup Restore PIM More			
	■		

4. Tap OK to exit.

Your PIM data will automatically start copying from ROM and populate the PIM applications.

Note: With the Enable Automatic Backup/Restore selected, your Pocket PC will perform a PIM synchronization after a normal reset. The amount of time for this synchronization to occur depends on how much Calendar and Contact data is on your Pocket PC.

permanently removing PIM data

The PIM backup file is stored in an inaccessible area of ROM (if you have this feature enabled). Because it is not removed during total loss of power or a full reset, if you want to erase this data manually or refrain from having PIM automatically backed up, follow these steps:

- 1. Start the iPAQ Backup utlity.
- 2. Select the PIM tab from the bottom of the backup screen.
- 3. From the PIM screen, tap the Enable Automatic Backup/Restore checkbox to remove this selection. You will see the following prompt asking if you are certain that you want to turn this feature off.
- 4. Tap Yes to disable this feature and access to the data in ROM.

🎊 iPAQ) Backup		€ 5:40	
Tap the checkbox below (enable it with a checkmark) to automatically backup and restore your PIM databases (Contacts and Appointments)				
🗌 Ena	able automa	tic backup	o/restor	e
iPAQ Ba	ackup			
?	This will tur automatic l restore of l you sure?	m off the backup ar PIM data.	nd Are	
	Yes	No		
·				≡ •

5. Tap OK to exit.

Your PIM data is no longer automatically saved to ROM. If you want to remove PIM data permenantly, you can perform a full reset at this time. A full reset can be performed by simultaneously pressing the two outer application buttons and the reset button on the bottom of the handheld for 10 seconds.

IPAQ H1910 SERIES BACKUP UTILITY

The iPAQ Pocket PC h1910 Series does not offer a backup and restore utility of its own. Instead, backups and restores are done using the Microsoft ActiveSync application. See the "Microsoft ActiveSync Backup" and "Microsoft ActiveSync Restore" sections at the beginning of this white paper for instructions on how to use these applications.

Third-party backup and restore software is also available for the iPAQ Pocket PCs such as ArtSave from ArtSoft (<u>http://www.artsoft.ru/eng/artssppc.htm</u>), Pocket Backup from Sprite Software (<u>http://www.spritesoftware.com/pocket.html</u>), Sunnysoft Backup Manager from Sunnysoft (<u>http://www.sunnysoft.cz/en_novinky.php</u>), and Mobile Vault (for restoring) from AnyWare Consulting (<u>http://members.aol.com/ ht_a/anyware/wce/MobileVault/index.htm</u>). Visit these websites for additional information about each of these products.

summary

HP recognizes the importance of establishing a good backup routine for your iPAQ Pocket PC. That is why you have several processes and options available with your iPAQ Pocket PC to ensure that your data is protected in case of a system failure or other event that might cause data loss. By incorporating these tools into a regular backup routine, you ensure that the integrity of your data is maintained.