



# Uniblue Tech Briefs

The WinBackup Outlook Agent:  
**Harnessing Email Backups**

***Uniblue***

## Introduction

Email is truly a killer application. Today businesses are entirely dependent on this widespread tool that allows efficient and inexpensive exchanges with employees, customers, suppliers, and partners. META Group expects email traffic this year to reach 35 billion messages or about 50% of corporate knowledge. Other studies show that 80% of employees keep emails after reading them while 78% store attachments within the email system. Analysts estimate that each user will send/receive an average of 4.6Mb daily this year.

## Problem

Since the more popular email applications (e.g., Outlook) store emails in a single mailbox database file (e.g., the PST file), employees keep their emails within this single file rather than in separate directories on their computers. This causes severe problems for small- and medium-sized businesses (SMB): **Most of the backup and recovery management software available today are file-centric solutions that will backup single mailbox database files rather than individual emails. Restores equate to replacement of single mailbox database files resulting in losses of any incremental changes made since the last backup.**

These systems carry grave disadvantages for SMBs since data loss of single emails results in long restore processes that, in all probability, will not result in 100% restoration of the original data set. This means that when SMBs use file-centric products, they will not have adequate backup and recovery solutions for emails and will rely on inefficient measures which do not guarantee that all emails are individually backed up. In essence, business continuity in the event of data loss is seriously hampered. SMBs also demand backup and recovery management solutions that are easy-to-use and administer to minimise the cost of ownership and to minimise the downtime resulting from backups and restores. Also, as file-centric backup requires greater user intervention to select the relevant files for backup and restores, they become much harder for non-technical personnel to understand and manage.

## Solution

WinBackup provides SMB with an exceptionally simple-to-use software package that allows anyone to backup and restore data at the click of a button. This backup and recovery management software addresses the problem of email backup in two ways: (a) it has an advanced system of pre-defined Shortcuts that backs up and restores mailbox database files and registry settings, and (b) it features the proprietary WinBackup Outlook Agent that specifically backs up and restores individual emails.

WinBackup Shortcuts are predefined dynamic links that point directly towards the relevant files of Microsoft Outlook (and other applications). Users need not concern themselves whether they are backing up all important files such as their registry settings. All they would need is mark a checkbox next to the Microsoft Outlook icon within WinBackup, and the software takes care of the rest. With these intuitive Shortcuts, system administrators are ensured complete peace of mind because they can delegate the task of backing up all Outlook files to employees. **Of significant importance is the fact that WinBackup Shortcuts automatically backup Outlook Registry Settings.** This enhances the protection of data assets, reduces the time SMBs spend on backing up data and on training users how to use software, and minimises the downtime spent in backups and restores.

With the WinBackup Outlook Agent, users can backup single and multiple emails directly through WinBackup which interfaces directly with Microsoft Outlook. This allows for individual email backups rather than just mailbox database file backup. Employees may choose to use WinBackup Outlook

Agent to backup the more important emails which translates into significant savings in storage space and reduced downtime when performing backups.

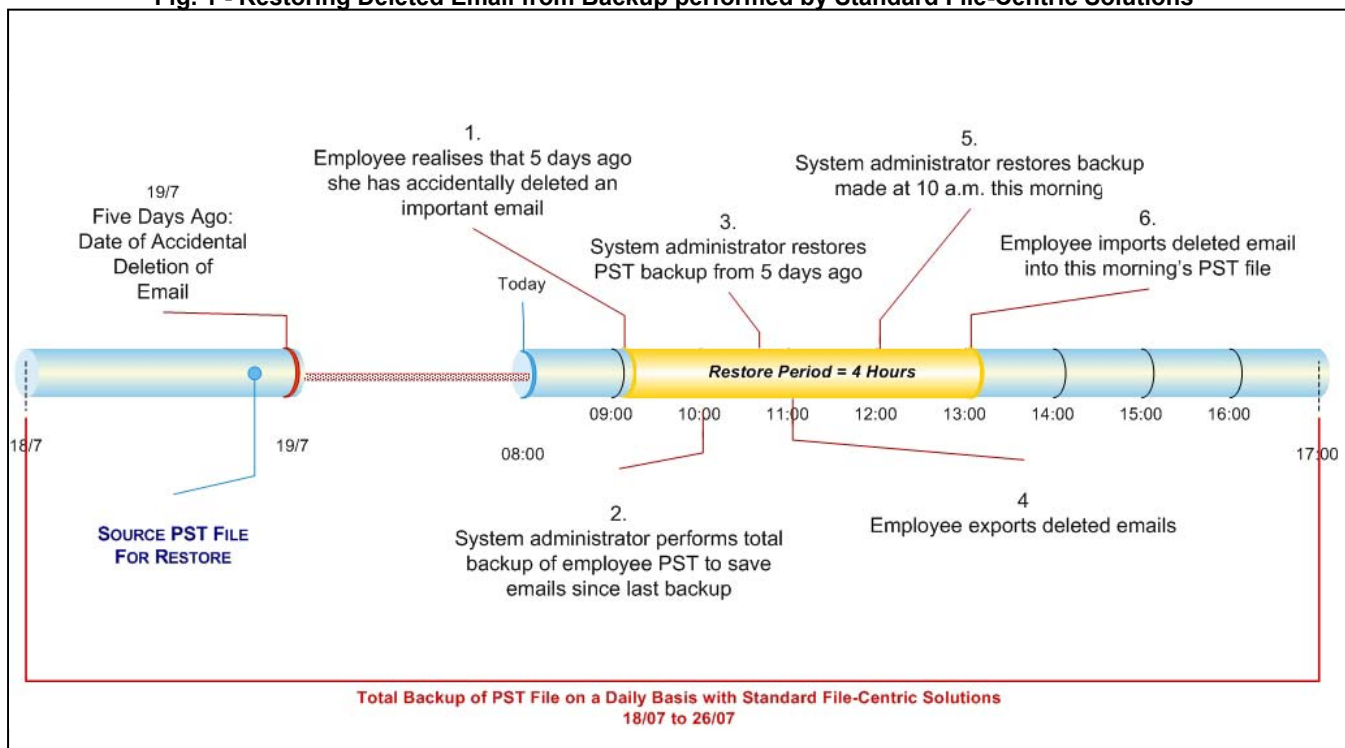
Alternatively, when used in conjunction with the WinBackup Shortcuts, employees will be backing up their mailbox database files, their registry settings, a set of individual emails and attachments, email account settings, templates and preferences. Thus, ensures full business continuity and reduces restore downtime since employees can restore individual registry settings, preferences, templates, attachments and emails (or the complete data set contained in their mailbox database file).

This table compares WinBackup to Standard File-Centric Solutions:

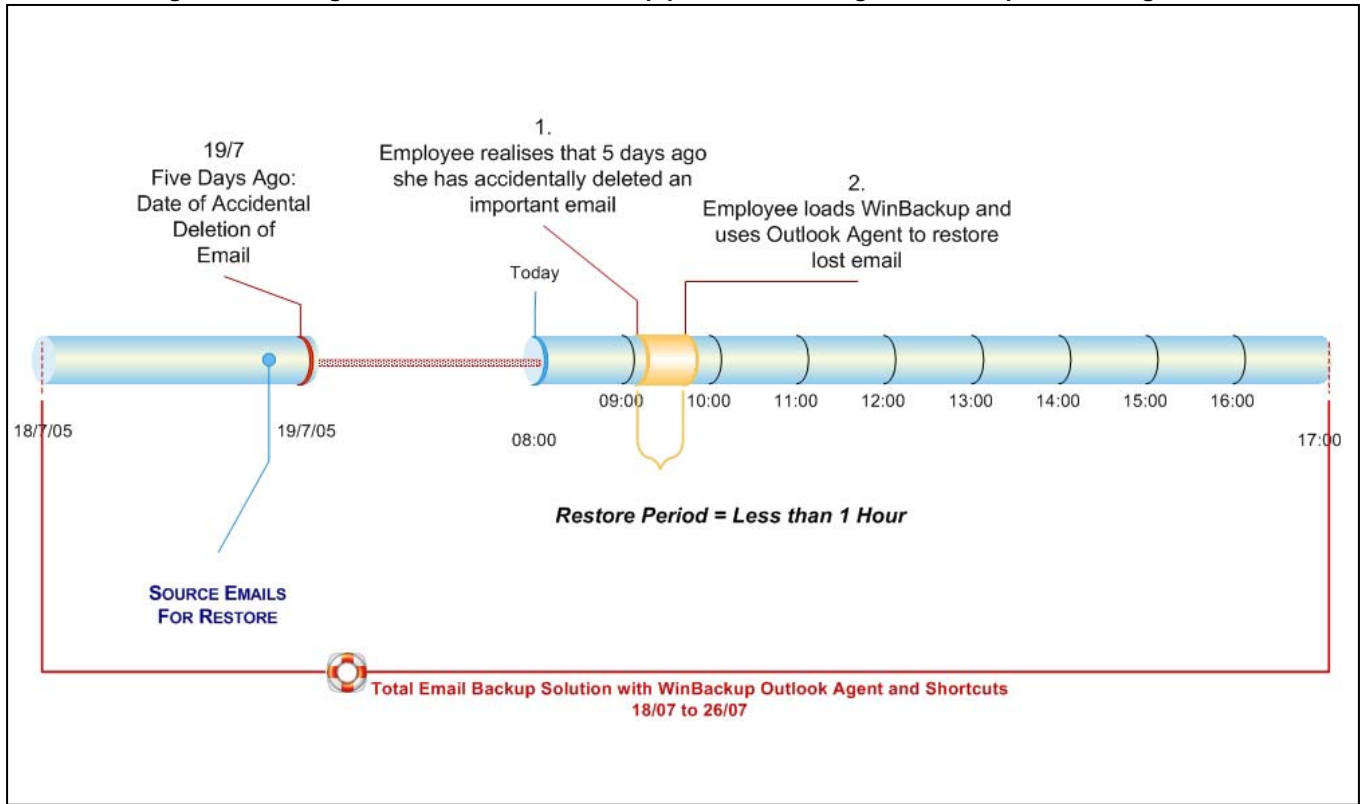
	Standard File-Centric Backup and Recovery Management Software	WinBackup	
		WinBackup Shortcuts	Outlook Agent
Mailbox Database File	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> single click	
Backup Registry Settings		<input checked="" type="checkbox"/> single click	
Restore Multiple and Single Registry Settings		<input checked="" type="checkbox"/> single click	
Emails	<input checked="" type="checkbox"/> in a single file	<input checked="" type="checkbox"/> in a single file single click	<input checked="" type="checkbox"/> individual emails
Attachments	<input checked="" type="checkbox"/> in a single file	<input checked="" type="checkbox"/> in a single file single click	<input checked="" type="checkbox"/> individual attachments
Email Accounts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> single click	
Templates and Preferences	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> single click	

The following figures compare the restore processes when using Standard File-Centric Solutions or WinBackup. Note the minimized downtime in restore.

**Fig. 1 - Restoring Deleted Email from Backup performed by Standard File-Centric Solutions**



**Fig. 2 - Restoring Deleted Email from Backup performed through WinBackup Outlook Agent**



This Tech Brief continues to explain in greater detail the advantages that WinBackup has over standard file-centric solutions in relation to email backup and restore management.

## The Problem: In Detail

Email is truly a killer application. It has helped small and medium sized businesses gain up on their larger rivals by minimising their communication costs and allowing them inch on niche markets that could not be served by larger companies.

Email is not just another business application that helps business communicate – you just can't imagine life without it!

Today businesses are entirely dependent on this widespread tool that allows efficient and inexpensive exchanges with employees, customers, suppliers, and partners. Much research has been carried out in relation to the volume of emails exchanged within and among businesses around the globe and to the habits of employees when it comes to dealing with storing emails.

The following are some example of research findings on emails:

- a) IDC found that 13.5 trillion total emails were transmitted in 2003. This figure is expected to rise to 19.7 trillion in 2005 or a staggering 35 billion messages (Meta Group).
- b) META Group research findings suggest that emails represent 50% of total communicated corporate knowledge.
- c) The Radicati Group found that a typical corporate user in 2003 received an average of 81 email messages per day and send 29 emails per day. Average email attachment size was 435 Kb.
- d) Radicati estimate that each user will send/receive an average of 4.6Mb daily in 2005.
- e) Vanson Bourne on behalf of KVS, found that 80% of employees keep their emails after reading them and at least 24% store them in their inbox while 78% store their attachments within their mailbox database file system. Moreover, 75% of the working population have deleted an email and then found it was important.
- f) The Yankee Group estimates that typical corporations with 5000 employees accumulate nearly 4 terabytes of emails every year or an average of 800 Mb per employee.
- g) In 2004, IDC found that 52.5% of respondents to a survey it conducted stated that the main driver for the demand of more data storage is the increased use of email.

Although email is an efficient, pervasive and inexpensive method of information and message exchange, there are critical issues that SMBs need to address. The most severe relates to the fact that standard backup and recovery management software are file-centric solutions which backup and restore mailbox database files (rather than individual emails as well) and hence are less suitable for email backup. This leads to inadequate protection of business knowledge assets 50% of which is stored in emails.

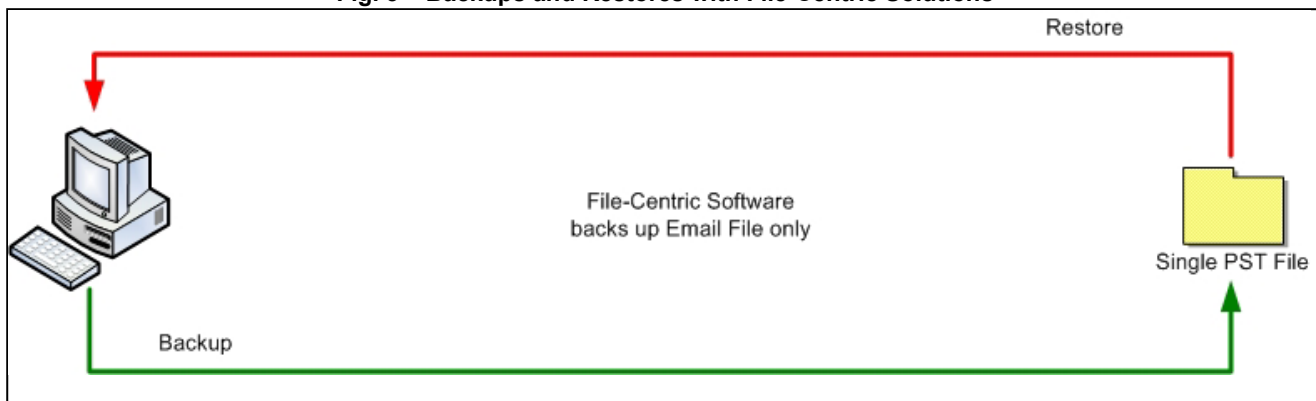
The more popular email applications store emails in a single file, and employees keep their emails and attachments within this single mailbox database file rather than in separate directories on their computers. Outlook, for example, uses the PST extension to denote the single archive that contains emails, folders, attachments, contacts, journals, archives and email account details.

**Backing up this single mailbox database file is imperative however it is not sufficient:** Any file-based restore procedure requires restoring the single file thus replacing the mailbox in question with the resultant loss of any incremental changes occurring since last backup. If single emails are lost through accidental deletion, restores become long multi-stage procedures (see Fig. 1) that result in a **considerable period of downtime**. Typically such restore procedures are complex and would require intervention by system administrators. This may involve an added cost if such intervention is performed by contracted third-parties. If Exchange is being used, then the data is stored separately

on the server and on the client PC. This distribution of data across the network further complicates matters because the sources of loss of data are not localised, and because backing up and restoring **data will result in increased downtime**. Furthermore, **important registry settings cannot be restored**.

This problem is compounded since more and more businesses are demanding solutions that allow them to delegate the less complex technical procedures of backup and restore to employees. In this case, backup and recovery management solutions need to be easy-to-use and to-administer so as to minimise any downtime.

**Fig. 3 – Backups and Restores with File-Centric Solutions**

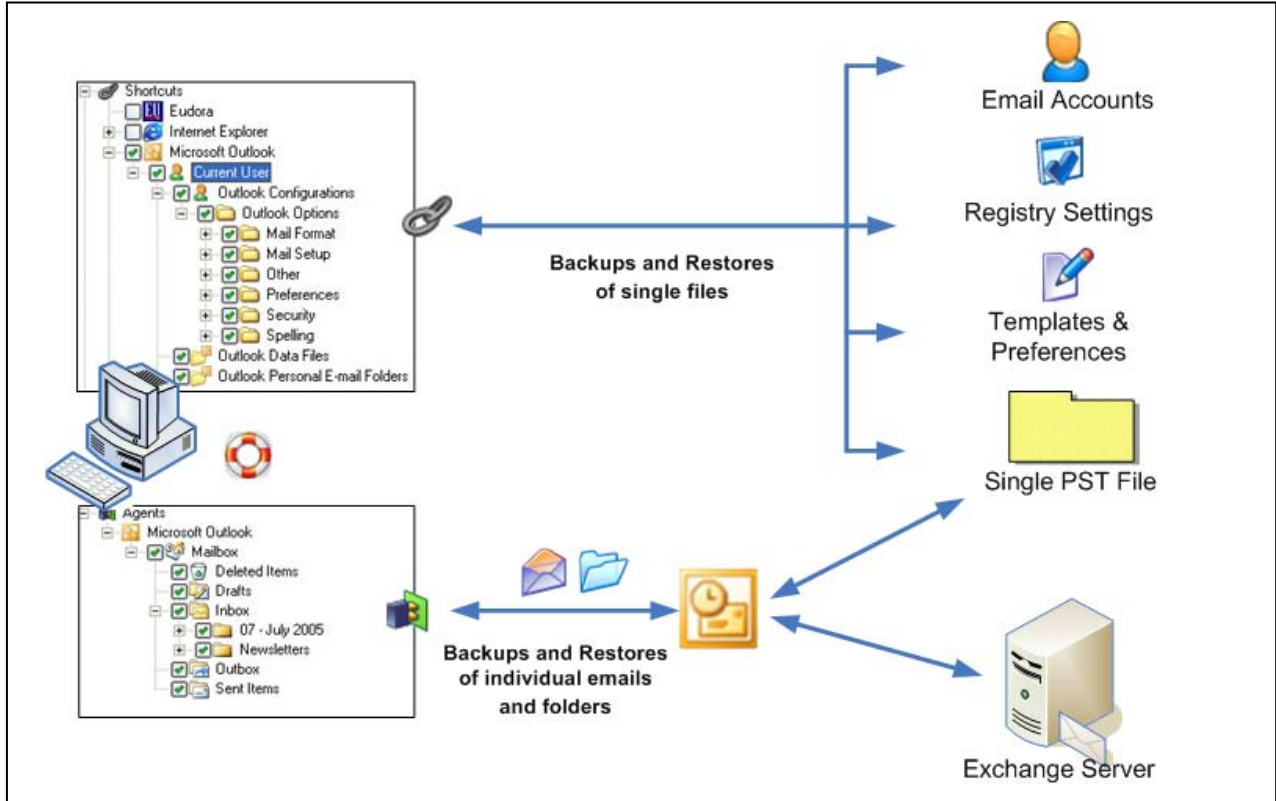


### The Solution: In Detail

What is needed, therefore, is a solution that allows the single archive and individual emails to be backed up concurrently. It needs to backup and restore multiple and/or single registry settings. Such a backup and recovery management solution must also be easy-to-use and allow backup and restores to be performed by employees rather than system administrators. 100% reliability is also a pre-requisite for such a solution.

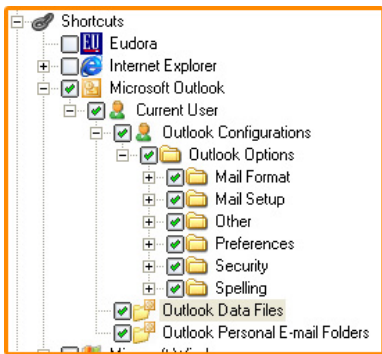
WinBackup offers this solution through its system of Shortcuts and its Outlook Agent. Shortcuts allows the flexibility of backing up single mailbox database files together with ALL registry settings, preferences, customizations and any templates that have been saved in the Outlook default locations.

Fig. 4 – Backups and Restores with File-Centric Solutions



WinBackup Shortcuts are predefined dynamic links that point directly and automatically towards the relevant files of Microsoft Outlook together with a host of other applications and settings (e.g., Internet Explorer and My Documents).

Fig. 4 – WinBackup Shortcuts



Users need not concern themselves whether they are backing up all important files such as their registry settings. As may be seen from the figure, WinBackup Shortcut for Outlook points towards mailbox database files, registry settings, templates, and preferences. Users simply tick a checkbox next to the Microsoft Outlook icon within WinBackup, and the software takes care of the rest. With these intuitive Shortcuts, system administrators are ensured complete peace of mind because they can delegate the task of backing up all Outlook files to employees.

**Of significant importance is the fact that WinBackup Shortcuts automatically backup Outlook Registry Settings.**

WinBackup Shortcuts enhance the protection of SMB data assets, minimising the time and effort spent on backing up data, on training users how to use software, and on restore downtime.

**Fig. 5 – WinBackup Outlook Agent**



With the WinBackup Outlook Agent, users can browse their Inbox, Outbox, Sent and Deleted Items and any other folders that are contained in their mailbox. This is done directly through WinBackup since the Outlook Agent interfaces directly with Microsoft Outlook.

Users can read emails to make sure that ones of particular importance are going to be backed up. They can perform searches within WinBackup so that the Outlook Agent can pick up emails grouped by specific senders or by date or by subject. Users can easily backup up attachments through the Outlook Agent. Each email and email folder has a checkbox that is marked for backup. Within minutes, users would have chosen to backup single and multiple emails directly through WinBackup.

Outlook Agent communicates with Microsoft Outlook irrespective of whether the emails are stored on the PC or on the Exchange Server, and gets the emails itself – a process that is completely transparent to the user. This ensures that all the latest individual emails and attachments are backed up wherever they are stored.

When restoring, individual emails and/or are restored and not the whole PST file. The WinBackup Outlook Agent does NOT replace emails but it restores copies so users will see incremental changes rather than total replacements. Any data that has been added since last backup will not be lost.

Employees may choose to use WinBackup Outlook Agent to backup the more important emails which translates into significant savings in storage space and reduced downtime when performing backups. Alternatively, when used in conjunction with the WinBackup Shortcuts, employees will be backing up their mailbox database files, their registry settings, a set of individual emails and attachments, email account settings, templates and preferences. Thus, ensures full business continuity and reduces restore downtime since employees can restore individual registry settings, preferences, templates, attachments and emails (or the complete data set contained in their mailbox database file).

## **The Advantages of WinBackup over File-Centric Solutions**

WinBackup, results in several distinct advantages:

- a) Since WinBackup is exceptionally easy-to-use and to administer, backup can now be delegated to employees rather than to system administrators – this translates into significant administration cost savings and reduced user/administrator downtime while performing backups and restores.
- b) The WinBackup Shortcuts allow employees to back all their important data easily and require little effort or training.
- c) Shortcuts allow peace of mind since all important files, registry settings, preferences and templates are saved in one automatic procedure leaving no room for user error.
- d) The WinBackup Outlook Agent allows employees to back up and restore specific and individual emails from any source wherever they are (locally or on the Exchange server). This significantly minimizes data loss as true individual email restores are performed, and not just complete mailbox database file replacements.
- e) The WinBackup Outlook Agent also significantly reduces restore time since employees can browse for that single email that they have mistakenly deleted rather than performing a total restore of their PST files together with any incremental backups performed since last total backup.
- f) Using the Outlook Agent minimizes both the storage space required to store backup archives and the inherent risks of having mailbox database files distributed across the network. The example below, shows how by using Outlook Agent and the Encryption and Compression



features of WinBackup businesses are maximising security and minimising storage space for backup files.

- g) Through Outlook Agent, WinBackup communicates with Outlook allowing greater flexibility. This is completely transparent to the user and allows for automatic transfer of the most recent files and individual emails. In this way all the latest emails and attachments are backed up as individual files rather than as a merged single block of data file (the PST file).

## Example – Using WinBackup to the Full

Using WinBackup you can use Shortcuts to backup the complete PST files including your settings, preferences and templates. This can be part of your regular weekly total backup policy. During the week you can use the Outlook Agent to backup all incremental emails or you can search for specific emails from selected senders. Tick the checkbox next to the folder or email to select the emails to backup. Save these searches and use in conjunction with Scheduler to have automatic backup. Set compression rate to maximum to minimize on archive size and storage space. To protect your backup archive files, set encryption levels at maximum which encrypts the file with AES 256 bit level encryption and places a password on the file.

This simple procedure shows the true power of the comprehensive features of WinBackup which have been designed for ease-of-use and with SMB in mind.

Fig. 6 – WinBackup Screenshot of Shortcuts and Outlook Agent

