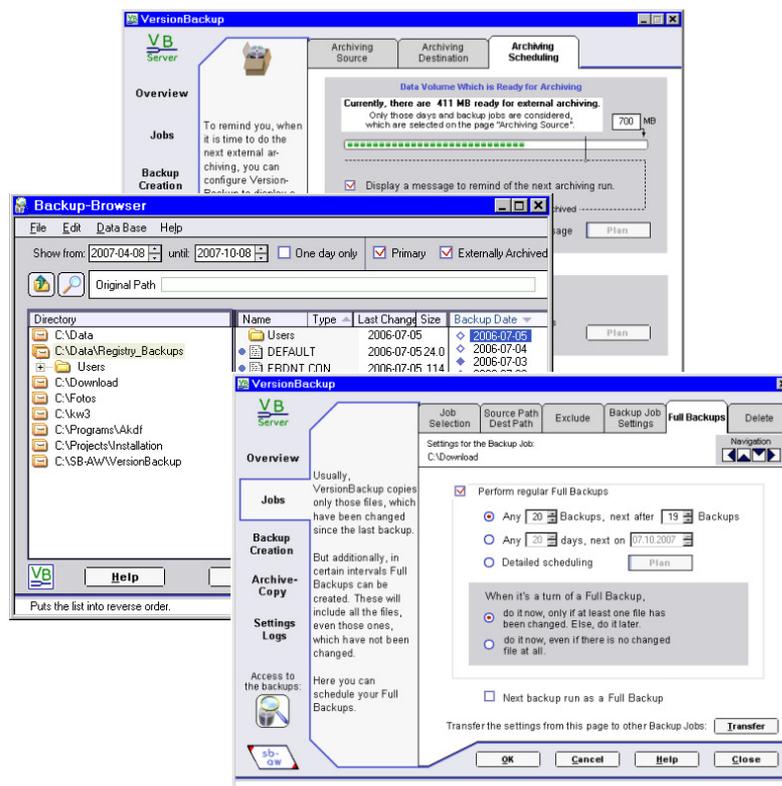




Backup-Archive System VersionBackup Server

User Manual



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1 Information about this Document

This text documents the software application “VersionBackup Server”.

The issue “VersionBackup Server” uses the same concept as “VersionBackup Master”. But it is specialized in backup creation on data servers and provides you additional features.

Additional functionality compared to “VersionBackup Master”:

- **Operates as NT Service with no user logged in**
- **Automatic e-mail notification about the success of the copy runs**
- **Scripts for individual extra functions**
- **Client-Server Coupling**

Parts of the described functionality of “VersionBackup Server” are also included in the software “VersionBackup Client”. Its purpose is not the backup creation but only the fast and flexible file recovery at the workstation. If you are using “VersionBackup Client” and there is a function, which you do not find on your computer, please use the function at the server.

This documentation is completely integrated in the application help system.

You can start the help system either clicking the >Help< button or the key >F1<. Each dialog page has its own help information page. The pages in the help system are connected by links. To find help information in a special situation, we recommend reading the corresponding help page.

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Suggestions or any critical comments are very welcome.

If you have important questions operating VersionBackup Server or if you have problems with your backups, We gladly will assist you by e-mail.

Disclaimer of liability

Because of the importance of data security, VersionBackup has been developed and tested with special care. Nevertheless, it is not possible to take any liability for the correct function of this software. The user has agreed to this by accepting the license agreement.

It cannot be excluded, that this documentation or any other technical advice may contain errors. Therefore, no liability can be taken for the content of any guidance texts from SB-AW. This concerns the help texts, which are part of the program, it concerns the user manual, furthermore all texts from SB-AW available in the internet and any individual response to your requests. If the user does any modification of his data stock or of his computer's configuration (the registry e.g.), he does it on his own risk. This is valid even if he proceeds exactly in the way like it is advised by SB-AW.

Regardless whether you use this software or any other means to create your backups, you should check the results of the copy process from time to time. Please test even the recovery. Only this way you can be sure, that your backups really are impeccable.

Installing and using “VersionBackup Server”, you declare your agreement with the **End User License Agreement**. This text is written in section 7.5 of this documentation.

2 Short Hints

You should know this about VersionBackup:

VersionBackup Server is a software application, which automatically creates backups from the files, which have been processed.

The special feature of VersionBackup is that you can recover the status of any specified day in the past. You can select the desired day from a list.

2.1 Functionality of VersionBackup Server

The automatically created backups are called **Primary Backups**. Every day, a new version of each file will be stored, if

- it has been changed,
- it has been added or
- the name or the path of the file has been changed.

All these versions of the files will be kept for any desired time.

If you need a backup, with other backup methods you have to fear, that it is not yet available, because it has been deleted or overwritten in the meantime. With VersionBackup, this danger is significantly reduced.

VersionBackup is able to create Full Backups in regular time intervals. A Full Backup includes not only the changed files. Each Full Backup saves the data completely.

From time to time you should archive your backups on an external archive media (on a CD or DVD e.g.). This is done with the VersionBackup Server archiving function. These additional backup copies are called **Externally Archived Backups**.

The contents of the external archive media will be displayed by the Backup-Browser together with the primary backups.

With the >Recover<-Function you can restore selected files or complete directories to the state of a specified day in the past. This is easy, even if the original versions of the files have to be copied from an external archive media.

But if you want, you can also read the archive media on a different computer, even if VersionBackup Master not has been installed on it.

The Operating System offers you a file classification by the **Path** and **Name** of the files (Windows Explorer© for instance).

VersionBackup offers more: a classification by **Path**, **Name** and the **Date** of the files. Appropriately, the Backup-Browser does not have two lists to choose your selection. It has three lists: Path, Name and Date. This is additional functionality, which you only get using VersionBackup.

VersionBackup Server makes it possible creating the backups by the server, but doing the recovery from any workstation.

- Backup creation will be done with **maximum security**
- Accessing the backups for recovery can be done with **maximum flexibility**.

VersionBackup Server combines the advantages of central and decentralized backups.

Creating the backups is a task of the application “VersionBackup Server”. Additionally, on the connected workstations, “**VersionBackup Client**” can be run. This application will not create new backups (this will remain the duty of the server). The purpose of VersionBackup Client is the **data recovery** controlled by the Client Computer. It uses the backup stock centrally created by the server. With VersionBackup Client, any person working at a workstation can use the backups without physical access to the server.

Usually, the backup data will not be stored on the server itself but on a separate backup station. This allows the VersionBackup Client user to access the backups even when the **main server is out of order**.

2.2 How to Configure a Backup Job

- **It is recommended configuring several Backup Jobs. They will be processed one by one during a backup copy run.**
- Several Backup Jobs should be used to save different Source Paths. A Source Path is a directory path, where the files are located, which shall be saved by VersionBackup Server.
- Each Backup Job will be saved into a different Destination Path.
- Each Backup Job can get its own settings (e.g. for the Full Backups and the automatic deletion).

Where are the files saved, which are the result of your work on the computer (text documents, pictures, data tables)? You should configure those directories as Source Paths in your Backup Jobs.

To make VersionBackup able to work for you, you have to enter your Backup Jobs.

This is done either

- with the Backup Job Wizard, which can be started on the dialog page **>Overview<** with the button **>Define a New Backup Path<**.
The wizard will ask you step by step for all important configuration values.
or
- on the Page **>Jobs<** with the button **>New<** (see page 33).
This opens the dialog pages to configure a new Backup Job. On these pages, you can modify your settings even later.

2.3 How to Schedule the Backup Run

You can decide at which moment VersionBackup will create the backup copies.

Possible configurations:

- during the start up phase of Windows© (Boot phase or log in)
- at a configured clock time
- at shut down or logout
- a combination of this (detailed scheduling)

or the copies will be created

- when you start the copying manually.

With VersionBackup Server, you can define for each entry of the detailed scheduling, which backup jobs shall be processed at that time.

The settings for the **automatic** start are done either

- with the Start Parameter Wizard. To start it, please move to the page **>Overview<**, click **>Optimize your Settings<** and choose **>Start Parameter Wizard<**.
The Wizard will ask for all basic settings.

or

- on the page >**Backup Creation**< with its sub-pages (see page 61).

You can start the backup generation **manually**

- on the page >**Overview**< with the button >**Create Backup Copies Now**<

or

- on the page >**Backup Creation**< - >**Scheduling/Start**< with the button >**Start**<. (see page 64).

2.4 Full Backups

In the normal case, VersionBackup will copy a file only if it has been changed. This way to proceed is called **Incremental Backup**.

But it is also possible to create **Full Backups**, which include also the unchanged files. According to your settings, a VersionBackup will create a Full Backup instead of an Incremental Backup after a specified period.

See also: >General Remarks Regarding Full Backup< (page 13)

The settings for the Full Backup scheduling are done on the page >Jobs< - >**Full Backups**<. Additionally it is possible to request a Full Backup manually. This is done

- on the page >Jobs< - >**Full Backups**< with the button >**Next backup run as a Full Backup**< (see page 56)

or

- if you start the immediate copy run on the page >**Overview**< with the button >**Start**<. Then the dialog >**Start Backup Creation**< is displayed. To get a Full Backups for a Backup Job, please mark it in the column >**Full Backup**< (see page 65).

2.5 Backup Versions

Every day, VersionBackup creates new backup copies.

A main advantage of VersionBackup is that the earlier created backups will not be overwritten, when the next daily backup is created.

The backups continue existing on your disk, sorted by their creation date.

You can access the date directories directly in the Destination Path, using the Windows Explorer® or any other application.

But often it is easier to use the **Backup-Browser** (see page 110).

It offers you to select the desired files by their

- Path
- File Name and
- Date of the Version.

2.6 View and Recover Backups

The most easy and clear access to the stored backups is provided by the Backup-Browser (see page 110).

You can open this window with a click on the >**Backup-Browser**< button on the left lower side.

The Backup-Browser shows you the stored backup files. You can select the files by their **path**, **file name** and **version date**.

The file versions on your external archive media will be displayed together with the primary backups .

The selected files can be **recovered**. This means, they can be copied to the original or any other position on the disk system.

2.7 External Archiving

VersionBackup copies your new or changed files daily. This happens fully automatically, that means without any manual assistance. Therefore, this primary backup has to be copied to a disk, which always is ready. In the most simple configuration, this disk is one of the hard disks in your computer.

Of course, it is better storing already the primary backups on a disk of another computer, which is connected by the network.

To relieve this disk and to get additional data security, the backups should be saved to a different media (a CD or DVD e.g.) from time to time. This **second copy process** is called **External Archiving**.

VersionBackup Server assists you maintaining your backup archive,

- exporting the data to a configurable data path
- burning the data directly to a CD or DVD
- remembering, which data already have been externally archived
- displaying, how many data are ready for external archiving
- displaying a reminder message, when you should do the next external archiving run
- alternatively starting the external archive copy automatically

You can configure and start the external archiving on the dialog pages **>Archive Copy<** - **>Archiving Source<** and **>Archiving Destination<** (see page 73).

If your CD/DVD burner device cannot be controlled directly by VersionBackup, you can export the files to a temporary directory on the hard disk. From there, it is easy to transfer them to the CD or DVD using the CD writing software on your computer, which should be able to work with the burner. After this, you should delete the temporary buffer directory.

See also:

- **>General Remarks Regarding the External Archiving<** (page 14)
- **>How to Create an External Archive Media<** (page 17)

2.8 Deleting Backups

Some time afterwards, VersionBackup will have created a huge number of daily backups. After some months at the latest, the oldest backups should be deleted. VersionBackup does this automatically.

You decide, which backups will be deleted automatically and which backups shall be kept.

This can be configured either

- during the first configuration of the Backup Job parameters using the **Backup Job Wizard** (page **>Overview<**, button **>Define a New Backup Path<**)

or

- on the dialog page **>Jobs<** - **>Delete<** (see page 57).

To display this page, select the Backup Job on the page **>Jobs<** - **>Job Selection<**. Then click on the tab button **>Delete<** in the right upper corner.

If you plan to **archive** your backups externally, the primary backups of course may be deleted only when the archive copy is done. Even this can be configured on the page **>Delete<** (button **>Backups, which not have been archived<** page 59).

Furthermore, you can delete the backups **manually** (see **>Manual Backup Deletion<** page 148).

3 General Topics

3.1 General Remarks Regarding Backups

In the past, systematical backup creation and archiving was possible only for computers, which are incorporated into the network of a bigger company.

But even there, it was not easy to retrieve a version of a file in the state how it existed half a year ago. Without the proper tools, it is very awkward to extract one file from a very old backup.

With this condition, you should be no longer content. A backup archive is needed, which makes it possible to retrieve old file versions easily and fast. With VersionBackup you can generate and operate such a backup archive easily and effectively. This is even interesting for persons, whose data are managed by a company department “Central Server Support”. Because only with VersionBackup, you will have your old data really to hand.

With VersionBackup, you can retrieve your old file versions yourself. Without trouble and very quickly.

Which are the possible reasons for a data loss? How can you protect yourself against this concretely?

1. Deletion of Complete Files

One of the most probable reasons for data loss is that you actively but accidentally delete data files which will be needed later.

Against this, you can protect yourself rather easily. If you use the ‘wastepaper basket’, you can recall those ‘deleted’ files without any problem. So, there is little danger of a data loss.

Moreover, there are tools, to recover also ‘really deleted’ files - if you have some luck.

An automatic backup system provides you additional safety.

2. Deletion or Distortion of Parts of a File as a Consequence of User Action

The maybe most dangerous reason why file contents may be lost is that parts of the file may be overwritten, modified or deleted.

If you work with a program with editor functions, it rather easily happens that you remove a part of the file or replace it with a different content. Then you save and the file on the disk is not complete any more. Maybe you recognize this not before days or weeks. Then you find out, that the content somehow is incomplete. But it will be very laborious only to determine, what in detail is missing.

Or else, you work on a picture (graphic or photo), do some changes and save. Later you possibly find out, that these changes removed some details, which you do not want to give up after all. How will you restore the original content?

To cancel an unintended overwriting or deleting of parts of a file after the next save operation, you need to have a separately stored version of the previous state. In special cases, you should create those versions manually. Additionally it is a significant gain of safety, if an automatic operating backup program stores the existing file versions.

But it is not enough to keep only one backup version. Until you find out, that something has gone wrong, the backup function may be run already the next time. Then, also the backup is overwritten with the incomplete version. A good solution does not overwrite the existing backup files. So, you can retrieve the complete version even after weeks or months.

To prevent a data loss of this kind, it is enough to store the backup files on the same disk like the original file version.

3. Data Loss as a Consequence of a System Disturbance

Sometimes it happens that a file is destroyed in the running operation.

A reason for this may be:

- crash of a program
- power failure
- system down not correctly performed
- conflicts accessing the disk

After such an event, files may have vanished, maybe they are not (completely) readable any more or parts of them are missing.

Also to prevent these accidents, it is very important to have a program on your computer, which automatically creates backups from all the important files. Again the situation is not safe, if only one backup copy exists, which would be overwritten by the next backup run.

Also to prevent a data loss of this kind, it usually is enough to store the backup files on the same disk like the original version.

4. Hardware Defect (Disk or Computer)

The most dramatic scenario of a data loss is the permanent defect of your hard disk or the complete computer.

Fortunately this is rather seldom. Sometimes some effects will announce the 'dying' of a hard disk (for instance if there are disk access errors with increasing frequency). You should take those symptoms seriously and replace the disk or the affected electronic components preventively.

But even if a different central part of your computer terminates operating, you possibly have a data problem. How long will it last until you get access to your data again? Perhaps the computer is old, so it is not reasonable to repair it. If you took precautions and saved your data, you can scrap the old computer easily. Then you save the extensive work to rescue the data from the old computer's disk.

As a measure against the permanent defect of hardware you need a backup on a separate storage media. This may be a separate PC, a central data server or a changeable media (Floppy, CD, DVD, MOD, ZIP Disk or Tape Streamer). Such externally archived backups can be created using VersionBackup Server with the function >Archive<.

As the hardware defect is a rather seldom event, the backup to an external storage media usually is done not as frequent as the primary backups.

5. Virus Attack

Even if you always keep your anti-virus software actual, you cannot exclude, that a virus or some different malicious code will delete or 'infect' your files.

If it is not yet possible to repair the 'infected' files, sometimes the only way is to delete them. Extremely you have to re-install the computer completely. Also in such a situation, it is very important to have actual backups of your work.

Frequently it will be enough, if the backups are internally stored. Of course it is better, if your backup copies are located on an independent media. Only if that media has last been written before the virus attack, you really can be sure, that the backups are not infected by the malicious code.

Versions as a guarantee that a backup still exists, when you need it

Imagine if you have a backup system, which only keeps one version of your backup files.

When the next backup run is done, such a system overwrites the backup copies, which have been stored during the last run.

At first sight, this procedure looks quite good. After all, you always have a file version in your backup area, which is as up-to-date as possible. Many backup systems work like this.

But such a backup concept will give you a secure protection only against the deletion of the complete file (see Topic 1 above). If one of the other reasons has caused the data loss, then you must be very lucky, to do the recovery before your backup system has run a second time.

If the backup run starts a second time (this happens automatically in many systems) before you repaired the trouble, usually also your backup version will be overwritten with the version, which is defect, incomplete or virus infected. Then the correct version definitely is lost.

To close this security gap, VersionBackup has been designed to store and manage many backup versions of each file, as much as you want. Each version takes the date of the last file change. It will not be overwritten.

In the **Backup-Browser** window, you can select the backups using the three criteria **Path**, **File Name** and **Date**. This is comfortable and gives you optimum operational security.

Additional information in the chapters:

- General Remarks Regarding Full Backups (page 13)
- General Remarks Regarding the External Archiving (page 14)
- Is There Enough Disk Space For All Those Backups? (page 25)
- The Data Structures Created by VersionBackup (page 150)

3.2 General Remarks Regarding Full Backups

Usually, VersionBackup creates a backup copy of a file only then, if it has been changed, it is new or if the file name or path has been changed.

This procedure makes it possible to keep backups from each day without having boundless storage space requirements. This is, because only those files and directories will be copied, where real work is done. Projects without any activity may be kept within the configuration, without creating useless backup copies. Whenever a change on one of the files of this project will be done, VersionBackup will become active again.

This procedure to create backups copies only from those files, which have been changes, is called **Incremental Backup**.

But if only Incremental Backups will be created for a longer time, the files will be spread over a big number of different backups. If you need to restore a set of files completely from Incremental Backups, they have to be collected from many backups. Furthermore you may not delete old backups, because some of the files have not been saved again in the meantime.

These disadvantages will be avoided, if not only Incremental Backups will be created, but some **Full Backups** from time to time. A Full Backup includes a complete set of files.

To restore a set of files completely, the Incremental Backups are necessary until the next Full Backup in the past.

Automatic Full Backup Generation:

VersionBackup is able to create an optimum mixture of Incremental Backups and Full Backups. You can configure the details in the dialog page **>Full Backups<** (see page 53).

You can choose, whether the automatic creation of a Full Backup will be done

- 1) after a fixed number of backup runs with this Backup Job
(Parameter: Full Backup **>Any x backup runs, next after y Backups<**) (page 54))

or

- 2) after a fixed number of calendar days.
(Parameter: Full Backup **>Any xx days, next on xxxx-xx-xx<** (page 54))

Alternative 1) has the advantage, that projects without any changes will create no backups at all. From Backup Jobs without any activity even no Full Backups will be created. If the changes are rare, there will be a long time between the Full Backups.

Alternative 2) has the advantage to make it possible to set up a specified Full Backup Schedule. So, you will get the better overview about your Full Backups. If, for instance, you set a time interval of 7 days, you will get the Full Backups each week on the same weekday.

If you like, you can determine a detailed Full Backup schedule. For instance, it is possible requesting a Full Backup on every 10-th and 25-th of each month. (This scheduling plan can be defined with the scheduling dialog **>Detailed Planning<**.)

Furthermore you can configure a Full Backup run to take place only if at least one of the files has been changed. Else it will be done without any change in the file system
(Parameter: **>do it now, even if there is no changed file at all<**) (page 55)).

Manual Full Backup Request:

You also can request a Full Backup manually.

This is done by one of the following ways:

- For **one or several Backup Jobs**, you can set, that the next backup run is to be done as a Full Backup. The location to do this is the Dialog **>Full Backups<** at the checkbox **>Next backup run as a Full Backup<**. You should use this alternative, if you want the next automatically started backup run be done as a Full Backup instead of an Incremental Backup.
- If you click **>Create Backup Copies Now<** on the dialog page **>Backup Creation – Scheduling/Start<**, the dialog **>Start Backup Creation<** will be displayed. Here, you can choose which Backup Jobs shall be copied as a Full Backup.

3.3 General Remarks Regarding the External Archiving

Any storage media has a certain probability to break down without a chance to repair it. Of course, this is true even for your hard disk.

Such a situation, which may occur without any prior indication, could mean a significant loss for you, unless you have saved your files regularly to a different storage media.

Often, a changeable media (a CD e.g.) is used for the additional backup. This is called **External Archiving**.

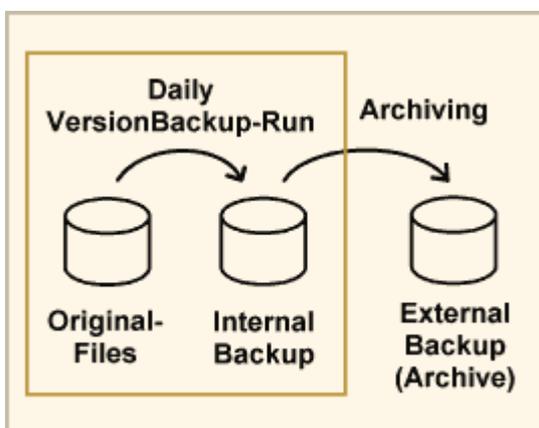
When you have archived the backup versions externally, you may delete them on your primary disk. CDs or DVDs must never be cleared. Therefore, you can keep your file versions forever, without high requirements for the primary disk.

(But note: if you have one externally archived backup and delete the primary one, you do not have double data storing any more. If the CD fails, the data will be gone. If you have high security requirements, copy the data to two CDs.)

For the external archiving, VersionBackup Server provides easy and standardized procedures. (see page 73).

If you set the Destination Path for your primary backups to a path on your hard disk, the automatically running primary backup consists of internal copies. So, the files are stored twice on the hard disk.

Archiving the data externally, additional backups are created. They are located on an external archive media (a CD or DVD e.g.).



It is easy to restore a backup, because VersionBackup Server assists you to do this, no matter if the version of the file is stored on the hard disk or on an external archive media (see dialog page: >Recovery< (page 116)).

The external archive media is not permanently accessible for the computer. Before it can be used, it has to be inserted into the drive. This provides a set of advantages:

- While the media is lying in the cupboard, it is safe to say, that no malicious code will be able to affect it.
- You can store the external archive media in a place separate from the computer or in a place with special security features. So you increase the safety regarding fire, manipulation, theft etc.
- Data storing on changeable media has no storage limit. It is always possible to buy more recordable CDs. e.g. No reconstruction or configuration changes of your computer will be necessary.

Particularly these types of storage media come into question:

- CDs
- DVDs
- REV Disks
- USB Hard Disks
- USB Sticks
- Drives on a Server

General Recommendations:

We recommend using **CDs** or **DVDs** as archive media.

Any time, you must reckon that the CD/DVD burner will create a media which is not readable at all. **Therefore, it is very important that you check any external media after creation whether the data on it is really readable.**

You generally should use **High-Quality disks**. This is the prerequisite that the data will be readable even after many years (see below on this page).

Use a separate disk for each archiving process.

- This way, your backup archive remains clearly arranged.
- There is no danger to destroy a backup while writing additional data onto the disk.

You should **close the disk logically** (no multi-session operation) to make it impossible that its content will be modified any more.

As CDs and DVDs are cheap, it should be no problem, if only a fraction of the capacity of the disk is used. If one archiving run has filled the disk only half, you should not try to fill it completely during the next external archiving. This would reduce your data security.

There is nothing to be said against storing the archive disks in a CD shaft. So, you can keep big data volumes for a long time very compactly.

Usually VersionBackup Server will be configured to take care, that each file version will be externally archived only once (see dialog page >Archiving Source<, field >Reset the “archive it”-mark after successful archiving< (page 75)).

If there are more data ready for external archiving than there is space on one media, VersionBackup assists you splitting the data to several media. (For details see: >Split the data, if one archive media is not large enough< page 82).

Moreover you can set, that the backups never will be automatically deleted, if they not have been externally archived (see dialog page: >Delete< (page 57), field: >Backups, which not have been archived<) (page 59)).

CDs or DVDs are very cost-effective storage. Commercial users can easily keep their archiving policies this way.

On the other hand, data protection rules dictate that special data (personal data, e.g.) must be deleted after some time. If this applies to some of your data, then you should store them in separate backup jobs and archive them separately. To meet your data deletion duty, you will simply destroy the archive media with the critical data and keep the other media with the data which may be stored forever.

You will find more information in the chapter: **How to Create an External Archive Media**.

Long-Term Stability of the Archive Media

Storing your data with VersionBackup on external CDs or DVDs, you can organize the backup archive to make it possible accessing each file version even in 20 years. But will the media be still readable after this time?

Unfortunately, it is impossible getting any binding statement from the manufacturers about minimum media durability.

But you can act on the assumption that there are two different classes of media quality. On one side, the goal of all development is reducing the production cost again and again. This can not be good for the quality level. But if a well-known manufacturer offers special archiving media, he should direct his production process even to the long term stability.

There are manufacturers claiming a stability of 300 years for their CDs or DVDs. This sounds absurd, but it is not. If this value is true, then after 300 years, half of the disks will be unreadable. An archive where half of the data is lost is not very useful. For you, it is much more interesting when not more than 1 % of the disks will be unreadable. If you employ these "300 years disks", there is a good chance that the period until the 1% loss is more than 10 years, maybe even more than 30 years.

Tape cassette manufacturers claim that their media are more stable than CDs or DVDs. But especially with tapes, the stability strongly depends on the storage conditions (certain temperature and humidity, storage in the right orientation, no magnetic fields (electromagnetic pollution) and periodical rewinding). But even if this is made sure, they will give you no guaranty for long periods. To our evaluation, high quality CDs and DVDs are more suitable data carriers than tapes.

If you want to store your data on CDs or DVDs for more than two years, you should consider the following experiences:

- Media of brand suppliers usually are better than no-name products.
- Use disks which are assigned for archival purposes ("Archival Grade").
- The most stable disks have a reflex layer of genuine gold (Caution: Most disks labeled with "gold" only have a golden color.)
- In the low-cost range, rewritable disks often are more stable than once-writable disks.
- The media should be stored in a cool, dry and dark environment and without permanent vibrations.
- Writing on the disks (even with special disc markers) can reduce durability (this especially applies for CDs).
- Touching the disk faces can reduce durability.
- Very important data should be stored at least twice.
- Very important data should be copied to new media at least any 10 years.

Please note even the following:

If you want to be able to access your data even after 15 years, will you then have a drive being able to read the media?

Shrink-wrapping a new drive and storing it in the cellar for the next 15 years will not be the solution. When a drive will stand still for such a long time, the bearings may be fixed making any restart impossible. On the other hand, the drive might be still working but you will have no computer with an interface where you can connect this ancient device.

CDs and DVDs are in mass circulation today. Therefore, there is a good chance that even in more than 10 years compatible drives will be sold. After all, drives for 3 1/2" floppy disks are still in production today, and even old gramophones.

With tape cassettes, the situation is much worse. Many cassette types are manufacturer specific. Any time, they could decide to discontinue their oldest cassette standard. Then, it will last a few years and the drives will have disappeared.

3.4 How to Create an External Archive Media

You can create an external archive media by different methods, depending on the storage device, you want to use. This is configured in the upper part of the page >Archiving Destination< (see page 78).

- A) **CD/DVD:** Direct disk burning
- B) **Directory:** Writing into a directory on a hard disk
(Use this setting to archive on USB Hard disks, ZIP-Disks, MODs or servers, which can be accessed by LAN)
- C) **FTP:** Archiving to the Internet

3.4.1 Direct disk burning

- Open the dialog page >**Archive Copy**< - >**Archiving Source**<.
- If you want to archive all Backup Jobs externally, keep the setting >Backups from all Backup Jobs<.
If you want to archive only some of these paths, please change it to >Backups from selected Backup Jobs<. Click on the button >Select< to define, which Backup Jobs shall be externally archived.
- If VersionBackup Server shall take care, that each backup will be externally archived only once, keep the setting >All days with the "archive it" mark< and >Reset the "archive it" mark after successful archiving<.
In special cases (tests e.g.), you can choose different settings.
- Open the dialog page >**Archive Copy**< - >**Archiving Destination**<.
- Click on the upper round button >**CD/DVD**<.
- If the computer has several CD burners, choose the desired one from the selection field in the line >Target<.
- The right input field in the line >Target< usually remains empty. Only if you want to store the data into a certain subdirectory on the disk, enter the subdirectory path into this field (see description >Target< (page 78)).
- Click on the upper >Settings< button to open the >**CD/DVD Dialog**<. Here, you can enter special setting for the burning process (see page 78).

- Switch the option **>Export the oldest data, which shall be archived, for one media<** on.
- Insert an empty disk into the drive.
- Click on the button **>Archive now: Start<**.
- The dialog **>External Media<** is displayed.
Leave the setting **>Do you want to store the information<** switched on.
In the line **>Comment<**, you can enter a designation for the external archive media (see page 77).
- Confirm with **>OK<** to start the export process.

VersionBackup Server writes a copy of the backup files to the external archive media.

After the archiving export, VersionBackup displays the identifier of the external archive media in the **>Archiving Result View<**. This window can be opened even later, using the button **>Show<**.

Please take care to inscribe the media exactly with the media identifier (date, time and maybe comment), to make it possible to recognize it later, when VersionBackup will ask you to insert it into the drive for recovery.

Please check the export result and take care for a secure storage of the media.

If the function **>Reset the “archive it” mark after successful archiving<** has been switched on, VersionBackup Server has put down, that these backups need not be externally archived any more. (More information: **>All days with the “archive it” mark<**).

If there is a serious problem burning directly to the CD or DVD, please proceed like it is described in section **>If direct burning to the CD/DVD is not possible<** (page 20).

3.4.2 Writing into a directory on a hard disk

(USB Hard disks, ZIP-Disks, MODs or servers, which can be accessed by LAN.)

- Open the dialog page **>Archive Copy<** - **>Archiving Source<**.
- If you want to archive all Backup Jobs externally, keep the setting **>Backups from all Backup Jobs<**.
If you want to archive only some of these paths, please change it to **>Backups from selected Backup Jobs<**. Click on the button **>Select<** to define, which Backup Jobs shall be externally archived.
- If VersionBackup Server shall take care, that each backup will be externally archived only once, keep the setting **>All days with the “archive it” mark<** and **>Reset the “archive it” mark after successful archiving<**.
In special cases (tests e.g.), you can choose different settings.
- Open the dialog page **>Archive Copy<** - **>Archiving Destination<**.
- Click on the second round button: **>Directory<**.
- Enter the path of the external archive directory into the line **>Path<**. It is also possible to select the path using the **>Browse<** button.

- If the destination drive is big enough to take all the archiving data, switch the function **>Split the data, if one archive media is not large enough<** off.
Else switch it on and enter into the field **>Size of the Archive Media<**, how many data may be stored there.
- Switch the option **>Export the oldest data, which shall be archived, for one media<** on.
- Click on the button **>Archive now: Start<**.
- The dialog **>External Media<** is displayed.
Leave the setting **>Do you want to store the information<** switched on.
In the line **>Comment<**, you can enter a designation for the external archive media. (see page 84).
- Confirm with **>OK<** to start the export process.

VersionBackup Server writes a copy of the backup files to the external archive directory.

After the archiving export, VersionBackup displays the identifier of the external archive media in the **>Archiving Result View<**. This window can be opened even later, using the button **>Show<**.
If the archive media is a movable disk, take care to inscribe it exactly with the media identifier (date, time and maybe comment), to make it possible to recognize it later, when VersionBackup will ask you to insert it into the drive for recovery.
Please check the export result and take care for a secure storage of the media.

If the function **>Reset the “archive it” mark after successful archiving<** has been switched on, VersionBackup Server has put down, that these backups need not be externally archived any more. (More information: **>All days with the “archive it” mark<** (page 74))

3.4.3 Archiving to the Internet

You can archive your backups to the Internet, if you have access to a suitable FTP server.

Please note that Internet connections are slower than local data connections. If you want to copy a data volume of hundreds of Megabytes or Gigabytes, this might last several hours or days.

- Open the dialog page **>Archive Copy<** - **>Archiving Source<**.
- If you want to archive all Backup Jobs externally, keep the setting **>Backups from all Backup Jobs<**.
If you want to archive only some of these paths, please change it to **>Backups from selected Backup Jobs<**. Click on the button **>Select<** to define, which Backup Jobs shall be externally archived.
- If VersionBackup Server shall take care, that each backup will be externally archived only once, keep the setting **>All days with the “archive it” mark<** and **>Reset the “archive it” mark after successful archiving<**.
In special cases (tests e.g.), you can choose different settings.
- Open the dialog page **>Archive Copy<** - **>Archiving Destination<**.
- Click on the third round button: **>FTP<**.
- If you did not it before, configure the server settings with the dialog **>FTP Connections<** (it can be opened with the lower **>Settings<** button (see page 104)).

- If you configured more than one FTP server, please choose the right one from the selection field >Server<.
- In the field >Path<, please enter the archive subdirectory on the server, which shall be used, behind the server identifier. It is also possible to select the path using the >Browse< button.
- Switch the function >**Split the data, if one archive media is not large enough**< off.
- Click on the button >Archive now: Start<.
- The dialog >External Media< is displayed.
- Leave the setting >Do you want to store the information< switched on.
In the line >Comment<, you can enter a designation for the external archive media (see page 77).
- Confirm with >OK< to start the export process.

VersionBackup Server writes a copy of the backup files to the FTP server.

After the archiving export, VersionBackup displays the identifier of the external archive media in the >Archiving Result View<. This window can be opened even later, using the button >Show<.

If the function >Reset the “archive it” mark after successful archiving< has been switched on, VersionBackup Server has put down, that these backups need not be externally archived any more. (More information: >All days with the “archive it” mark<, see page 74).

3.4.4 If direct burning to the CD/DVD is not possible

(if the burner device can not be accessed by VersionBackup e.g.)

It cannot be excluded that the burner software, which is incorporated in VersionBackup, might not be able to access your CD/DVD burner.

If you have another burning program, which is able to run your burner, you can create your archive media as described here.

The method is exporting your backups into a buffer directory on your hard disk. Then burn the content of the buffer directory to the disk using the foreign burner software.

1. Export the files to a buffer directory

- Open the dialog page >**Archive Copy**< - >**Archiving Source**<.
- If you want to archive all Backup Jobs externally, keep the setting >Backups from all Backup Jobs<.
If you want to archive only some of these paths, please change it to >Backups from selected Backup Jobs<. Click on the button >Select< to define, which Backup Jobs shall be externally archived.
- If VersionBackup Server shall take care, that each backup will be externally archived only once, keep the setting >All days with the “archive it” mark< and >Reset the “archive it” mark after successful archiving<.
In special cases (tests e.g.), you can choose different settings.
- Open the dialog page >**Archive Copy**< - >**Archiving Destination**<.
- Click on the second round button:>**Directory**<.
- Enter the path of the buffer directory into the line >Path<. This directory should either not yet exist or it should be empty.

- Switch the function **>Split the data, if one archive media is not large enough<** on and enter the size of your external archive media into the field **>Size of the Archive Media<**.
- Switch the option **>Export the oldest data, which shall be archived, for one media<** on. Then, only the data for the first external archive media will be prepared. (If you, alternatively, choose the setting **>Export all data, which shall be archived, for several media<**, VersionBackup will prepare the data for several media in different subdirectories in a single pass, see page 83.)
- Click on the button **>Archive now: Start<**.
- The dialog **>External Media<** is displayed. Leave the setting **>Do you want to store the information<** switched on. In the line **>Comment<**, you can enter a designation for the external archive media (see page 77).
- Confirm with **>OK<** to start the export process.

VersionBackup Server writes a copy of the backup files, which have to be externally archived, to the buffer directory.

If the function **>Reset the “archive it” mark after successful archiving<** has been switched on, VersionBackup Server has put down, that these backups need not be externally archived any more.

More details: **>All days with the “archive it” mark<**

2. Copy the content of the buffer directory to the external archive media

The content of the buffer directory should now be copied to the external archive media. To do this, please use the proper software for the storage device.

If you selected the function **>Split the data, if one archive media is not large enough<** and **>Export all data, which shall be archived, for several media<**, VersionBackup created several buffer directories, which should be burned to several media one by one.

After the archiving export, VersionBackup displays the paths and identifiers of the different media in the **>Result View<**. This window can be opened even later, using the button **>Show<** (see page 76).

Please take care to inscribe the media exactly with the media identifier (date, time and maybe comment), to make it possible to recognize it later, when VersionBackup will ask you to insert it into the drive for recovery.

Please check the export result and take care for a secure storage of the media.

3. Delete the buffer directory

When the content of the buffer directory has been copied to the external archive media, the buffer directory should be deleted.

The primary backups will not be affected by this deletion, because the buffer directory took only a copy of them.

3.5 Backups from a Data Server

3.5.1 Additional Functionality in “VersionBackup Server”

1. Backup creation while no user is logged-in (NT-Service operation)

Usually, nobody is logged-in on a data server while it is running. VersionBackup Server creates the backups even without a logged-in user.

If the administrator or backup operator, who set the VersionBackup configuration, logs in while the backup creation is running, then the current copy status will be displayed. It is possible logging out during the backup creation without stopping the copy process.

2. Automatic e-mail notification about the success of the copy runs

The data server should work unattendedly for a longer period. Nevertheless, you should be continuously informed whether the backups are properly created.

VersionBackup Server is able to send e-mails after the copy runs to any e-mail addresses. Several e-mail configurations can be active at the same time to sent different mails in different situations. The mail text is configurable. It is possible appending lists with the names of the files which have been copied or which could not be copied due to an error.

3. Scripts for individual extra functions

Some systems need special operations before or after the copy run. This may be necessary to avoid missing or inconsistent backups due to another process, which is currently running.

For example, you could easily terminate or start services using the “SC” command. For more extended functionality, Visual Basic Scripts or Java Scripts can be used.

4. Enhanced scheduling functions

Even with VersionBackup Master, it is possible defining different configuration records to schedule the backup creation or archiving. This has been extended for VersionBackup Server.

- a) With VersionBackup Server, it is not only possible defining when the backups shall be created but also which backup jobs shall be started at a certain schedule.
- b) The settings for the copy intervals have been extended. For instance, you now can define that the action shall be done every 5th week or every 2nd month.
- c) If the computer is not active at the scheduled moment, VersionBackup Master will catch up the action as soon as possible. With VersionBackup Server, you can define whether this shall be done or not.

5. Client-Server-Coupling

On the workstations, which are connected to the server, the application “VersionBackup Client” can be used. Its purpose is not the backup creation but the recovery.

It is possible restoring the backup data even when the server is not online (if the backups are stored on a separate backup station).

- The clients are managed centrally on the server. For each client, the access rights can be individually configured. This includes the Backup Jobs, which can be accessed.
- The VersionBackup configuration and information about the backup stock will be transferred automatically to the clients.
- When the server is not online, the clients work independently with locally stored settings.

If you created a backup archive with other issues of VersionBackup, it is possible to continue using it with VersionBackup Server.

3.5.2 The VersionBackup Server Concept

In the computer network of a company, all important files usually are stored on a data server. The backup system, which is used there, should make a lot of past dates available for the recovery. Working with the backup archive should be easy and comfortable, both for the system administrator and for every user.

The main purpose of a data server is to let every employee store his or her data there on the central disks and not on the local PCs. This provides a lot of advantages, for the general data accessibility, for the maintenance of the PC cluster and in the first place for data security.

Data security - Most people think of losing all information, stored on a damaged disk, when they hear this. Fortunately, this danger is nearly eliminated by **RAID systems** on most of all servers.

Are backups still necessary, when a RAID system is used?

Absolutely! First: even a RAID system can fail. Second: total data loss is not at all the main reason for backup recovery runs. More frequently, single changes in the files have to be undone. Or else, all files may be alright, but it is necessary to have a look into a former issue of a file.

Reasons for this:

- Parts of the files may be deleted by mistake
- Non reversible changes (Example: image processing, old planning documents, old text issues)
- Damaged data format (file is no more readable)
- Malware attack (viruses, etc.)

For this purpose, the **classical tape backup** procedures do not help in a satisfying extend. This is because errors in a file often will be noticed not immediately but only in some days or some weeks. Then, the newest backups already are useless because even they include the same error. Backup issues, which are too old do not contain the required information. And in most cases, the tape from the day which is needed is already deleted.

You do not need the backup from yesterday in the evening. You need **the newest backup which is o.k.**

This may be some weeks old.

Please consider a backup system as powerful only ...

- if it keeps a lot of file versions from different dates.
- if it will be quick and easy to find the right file version for recovery.

Furthermore, important features are:

- Creating and maintaining the backup stock shall run automatically without daily manual action.
- Long term archiving shall be possible. Even the data in the archive shall be easily accessible.
- If the data server is temporarily offline, it should be possible accessing the backups in spite of this.
- The cost for investment and consumption material should be low.

With "VersionBackup Server", you will reach all these goals.

VersionBackup Client

Creating the backups is done by the server. The system administrator can take the full responsibility for this task.

The recovery is a different thing. VersionBackup Server makes the backups available to any number of client computers. If any user needs old versions of some files or directories, he can fetch them without the help of the administrator.

The clients are able to do the recovery themselves. They do this accessing the part of the backup archive which has been made available to them. All users with VersionBackup Client on their PCs can reach their backup versions easily and without the help from the administrator.

On the server, it is configured for each workstation, which part of the backup archive shall be visible in VersionBackup Client. Additionally it can be centrally defined, who may modify the backup creation configuration.

The decentralized recovery functionality gives significant advantages:

- Each user can look for the backup files, which meet his requirements, on his own.
- The users can do the recovery within minutes. There is no need to wait until the system administrator is present and until he has time.
- The system administrator is relieved of the recovery requests.
- If the data server is out of operation, the user can fetch the data directly to his PC to continue working immediately.

Even if the server is defect, the user can access his backups immediately.

3.5.3 Using VersionBackup Client

We recommend installing VersionBackup Client on the workstations, which are connected to the server. Then, each user can do the recovery of his data himself.

The clients will not create their own backups, because this is done by the server. **The purpose of VersionBackup Client is to be able to do the recovery, controlled by the workstations.**

On the server, it will be set which backup jobs shall be accessible for every client computer. The client might be able to modify the backup creation configuration. On the server, it is set whether this shall be possible.

If the server is **online** when VersionBackup Client starts, then the up-to-date configuration will be automatically transmitted to the client computer.

The files, which shall be recovered by the client computer, can be copied to a drive on the server. Or else, they can be copied to a local drive on the workstation.

If the server is **not online** when VersionBackup Client starts (because it is defect, e.g.), then the client computer works independently with the last stored configuration. If the backups are stored on a different backup station (not on the server's drives), then the client can access the backups without the server's attendance. It can restore the files on its local discs. It is easy to do this. Therefore every user can fetch his backups without the help of the system administrator.

Requirements for the connection between client and server:

- On the server, >VersionBackup Server< must be active, on the client computer >VersionBackup Client<.
- Server and client must be in the same **Subnet** of the LAN.
- The **Computer Name of the server** or the **TCP/IP Address** of the server must be entered in the dialog >Connection Data< on the client (see page 124). (The Computer Name is displayed on the server on top of the dialog >Client Computers<, see page 97.)
- The **Port Number**, which is set on the server in the dialog >Client Computers< must be also set in the dialog >Connection Data< on the client computer.
- For each client computer, a **Client License** is required. The license must be assigned to the client (see below).
- On the server, the backup jobs, which shall be visible on the client, must be defined.
- If a **Firewall System** is used on the server, then the VersionBackup application or the used Port must be opened.

Assigning the Backup Jobs to the client computers is done in the dialog >Client Computer Settings<. You can open this dialog selecting the client in the list in the dialog >Settings/Logs< - >Client Computers< and clicking on the >Settings< button.

The Backups of the assigned Backup Jobs will be displayed in the client's Backup-Browser. These backups can be used for recovery.

Warning: It is possible accessing the backups even without VersionBackup using other software. If due to privacy requirements, it must be impossible that the workstation users access foreign backups, you must lock the access also by the general network access right management.

Operating VersionBackup Client, you need a **Client License** for each workstation. (One Server License usually includes the first 3 Client Licenses.) Managing the Client Licenses is done on the server in the dialog >Client Licenses<. You can open this dialog clicking on >Enter< on the page >Client Computers<.

3.5.4 Setting the VersionBackup User

VersionBackup Server creates backups even when nobody is logged-in at that time. Therefore, it cannot be used for several users on the same computer. You must decide which user account shall be active for VersionBackup Server.

When the scheduler service is about to be installed, you must determine the VersionBackup User.

- Select **>local Workstation User<** if VersionBackup runs on a computer with a **workstation** operating system (WinXP® or Vista®, e.g.) **and** the user is defined **locally** on this computer.
- Select **>Server- or Domain User<** if VersionBackup runs on a computer with a **server** operating system (Win2003 Server®, e.g.) **or** if the VersionBackup User is a **Domain User**, who is defined on a domain server. In this case, you also have to specify the domain

If a user with the same name is defined both as local user and as domain user, then it is possible to use only the local user as VersionBackup User. If you need the domain user, please take care that the name is different.

During the backup creation, VersionBackup accesses the shares, directories and files, where data have to be saved. This is done with the VersionBackup User's access rights. Therefore, it is necessary to define all access rights for the VersionBackup User, which is necessary for the backup operations.

When the scheduler service starts for the first time, you will be asked for the Login Password of this user. This is necessary to give VersionBackup the access rights of the VersionBackup User.

When you want to configure and operate VersionBackup, you have to be logged in as this user. Settings, which are done when a different user is logged in, will not be executed. But the VersionBackup User can be changed easily at any time.

Two recommended possibilities to choose the VersionBackup User:

1. Run VersionBackup in an **Administrator** account.
The Administrator does the configuration in his own account. Then, usually no special means are required to give VersionBackup all needed access rights.
2. Define a special **Backup Operator**.
You have to grant him the storage space **access rights**, which are needed. It is recommended to give him even write access for the original data to enable recovery operation. But he need not get any rights for other storage area or for the system configuration. This provides higher **system security**.
But for the installation of VersionBackup Server, system configuration rights are necessary. Therefore, the administrator should do the installation. During this, he can define the Backup Operator.
But do not forget to log in as the Backup Operator when you want to modify the VersionBackup configuration or if you want to do a recovery or archiving operation.

3.6 Is There Enough Disk Space For All Those Backups?

In contrast to nearly all other backup programs, VersionBackup does not store only one backup version from each file, but any number of versions.

Of course this results in an increased need of storage space. The question is: is it possible in usual conditions to perform this extensive data storing without storage space problems?

We have tested VersionBackup on different computers, even on a system with very low disk capacity. Our result: if you set a reasonable configuration, the storing of many versions of each data file is possible, even if the disk space is extremely rare.

Because the files you really are working on, are rather small compared to the enormous disk volume of a modern PC.

Furthermore, the backups usually will be compressed. This results in a significant reduction of the disc space requirement. You can switch the compression on or off with the parameter **>Compress the backup files<**.

Nevertheless: to keep the disk space requirements of your VersionBackup data archive in a reasonable order of magnitude, you should follow some rules:

- **Only those directories should be configured as a Source Path in a Backup Job, where the files are located, which you are working on.**
System files, software installation, drivers etc. can be recovered from the install media. There is no need to include them into your backup concept.
- **Use the Exclude-function** (see page 40).
With this feature, you should prevent files from being copied, if there is no need to do this. (For instance: files, which can be reproduced by the system automatically. In a development environment those files are created in a compilation process.)
- **Compress the backups** (Setting: **>Compress the backup files<** (page 46)).
- **Create Full Backups only rarely.**
Full Backups need significantly more disk space than Incremental Backups. One of the advantages of VersionBackup is that you get a complete storing of your data without the need to create Full Backups frequently.
- **Caution if there are very big files.**
Videos and music files should be included into a systematic, repeated backup only if this is necessary and if there is enough storage space.
- **Archive the backups to external archive media from time to time** (see page 73).
Then it is possible to allow automatic deletion on your hard disk unhesitatingly (see page 59). Additionally you get security in case of hardware defects.
- **Use the automatic delete function** (see page 57).
If your disk space is scarce or the files are very big, you get a minimal, but good safety, if you keep only 3 to 5 versions of each file. (Dialog page: Delete, field **>While there are more than xx backup stored<**).
If you do not have any disk space problems, you can afford to set this parameter to 30 e.g.
- **In extreme cases, you can set the delete parameter >While there are more than xx backup stored< to one** (see page 58).
If on the page Delete there are no **>Reasons to prohibit the deletion<** set, this Backup Job is handled the same way, like a backup system does, which only can store one version.

If you store your backups on your system partition C : \, you must take care that this partition must not be filled completely. Because Windows© must be able to store its management information to the disk at any time. If the system partition is completely full, the installation might get damaged! If due to the backup creation the system partition might be filled completely, you should store your backups on another partition.

3.7 Using the ZIP-Password Protection

3.7.1 The ZIP-Password Protection in VersionBackup

Files, which are packed to a ZIP file, can be protected with a password.

VersionBackup Server is able to use this Password Protection.

Then, the backup files in the ZIP files can only be decompressed and used if the right password is available. This is most recommendable if the backups are stored on a separate computer, for instance on a LAN server or on an Internet server. The backups will be encrypted even during the data transport.

Nevertheless, the backup management and the recovery with the Backup-Browser are done by VersionBackup as easy as without Password Protection. If necessary, you will be asked to enter the password.

To protect the backups with a password, please enable the function **>ZIP Password Protection<** on the dialog page **>Backup Job Settings<** (see page 47). This requires that the **>Compress the backup files<** function is switched on.

If the Password Protection is switched on or off is set for each Backup Job individually. The password is the same for all Backup Jobs. Nevertheless, it can be changed at any time.

If you want to retrieve the saved data from the ZIP file with a different application (WINZIP®, e.g.), this application will ask for the password each time you use it.

VersionBackup has an internal password management system. It ensures that there is no need to enter the password more often than you configured it.

The password has to be entered once **for the encryption**. Then, it is stored permanently by VersionBackup. This ensures to continue creating the backups automatically without any user interaction (like password input).

The password will be needed even **for the decryption**, whenever you want to recover files. You can choose, whether the password shall be kept active for the decryption:

- If the password is **activated** permanently for the decryption, you can access the backups with VersionBackup as easy as accessing non-encrypted backups.
But the backups are protected against access from other computers. Even if another user logs on on your computer, he will not be able to read your backup files.
- If the password is **not activated** for the decryption, it has to be re-entered whenever somebody wants to recover files from the password protected backups.

Additionally, you can set that the password shall be activated until the VersionBackup application is closed or until you log out or shut down the computer. The password activation duration is configured in the **>Password Dialog<** (see page 108, which can be opened on the dialog page **>General Settings<** with the button **>Password<**).

Please take care that the password will never be forgotten!

This is important also if the password is activated permanently in VersionBackup.

Please keep in mind: if you have to re-install VersionBackup after a serious disturbance, you have to enter the password again to get access to your backups.

If the password is lost, there is no possibility to use your backups any more.

3.7.2 Is the ZIP Password Protection a save encryption method?

There are different opinions about the strength of the ZIP Password Protection method.

The ZIP Password Protection is an encryption method in the medium security range. This means that the data are really encrypted. The ZIP applications not only refuse to unpack the files without the correct password, they definitely are not able to do this. On the other hand, there are encryption methods with higher security strength.

Therefore: if you have extremely high security requirements, you should not rely on the ZIP Password Protection. But for usual encryption tasks, this method is very suitable, if you choose a proper password.

You can find several applications in the Internet which are specialized "cracking" the ZIP Password Protection. They do it trying out all possible passwords in a certain range ("Brute Force Attack"). This is possible if a "weak" password is used, a password, which is either too short or which can be easily combined from words existing in a dictionary.

In principle, a Brute Force Attack is possible even with long passwords. But then, so many possibilities would have to be tried that it would last thousands of years even with very huge computers.

To crack the encryption using a Brute Force Attack is not something special with the ZIP Password Protection. Even the strongest password based encryption method can be cracked if you choose a weak password. Therefore, the argument is wrong, that the ZIP Password Protection is bad because it can be cracked with the Brute Force-Attack.

If you want to have safely protected backups, you should use a proper password.

Rules for strong Passwords:

- It should consist of at least 10 characters.
- If it does not have at least 13 characters, it should be combined not only from small characters, but even from capitals and numbers, in a mixed sequence.
- It may not exist in a dictionary of the commonly used languages. Furthermore, it may not be a simple combination of several dictionary words.
- You should not use the same password for different purposes. If you once entered a password to log in on an Internet Page, it is no more safe because you told it to a foreign site.
- And of course, you should take care, which persons get knowledge of the password and that the slip, where you noted the password, will not be lost or stolen..

3.7.3 What about changing the password?

You can change VersionBackup's encryption password at any time. This is also done in the Password Dialog (see page 108).

If you changed your password, then a part of your backup stock is encrypted with the old password. Later created backups will be encrypted with the next password. Therefore, to be able to recover all backup data, **both the old password and the new one will be necessary.**

You must take care that even the old password will be kept as long as the backups exist, which have been created with the old password.

VersionBackup is designed to keep many passwords for the decryption at the same time. Each ZIP file is decrypted with the right password.

If the input of several passwords is necessary for a recovery operation, you will be asked repeatedly to enter a password. You can enter them in an arbitrary order.

Password protection in Client-Server environments

Even if the backups are saved by a server, it is reasonable using the ZIP Password Protection. But some special things should be considered:

Usually, the system administrator is responsible that useful backups will always exist from the data, which are stored on the server. But any user who may modify the VersionBackup configuration by VersionBackup Client, could enable the password protection without informing the administrator. Or else, he could change the password. If this password will be forgotten or lost (maybe because the user has left the company), then even the backup stock will be useless.

To make it possible that the administrator ensures the availability of the backups, he may deactivate the function to modify the password protection from VersionBackup Client. This setting can be configured individually for each workstation.

3.8 The “Gnome” – Recovery with the USB Stick

Backup creation is not the main feature of VersionBackup. The highlight of VersionBackup is the recovery. Backup data can be found and recovered easily and fast.

It is possible performing the recovery not only on the computer where VersionBackup has been installed and to which the license has been assigned. The “Gnome“ makes you independent from hardware.

With one mouse click, you can copy a reduced VersionBackup system to an USB stick. This “**VersionBackup Gnome**” includes the software to view and recover the backups (Backup-Browser) together with the current configuration.

You will find the button to create the Gnome on the dialog page **>Settings/Logs< - >General settings<** (see on page 90).

To start the Gnome application, please double click on the link **>Launch VB Gnome<**, which has been created on the stick.

With the Gnome, you can...

- recover backups on any computer, which are stored on the USB Stick.
- recover backups on any computer with network access to the backup server (even Online Backups)
- run VersionBackup for demonstration and training purposes

To run the Gnome, there is no need to install VersionBackup on the Computer. A separate Software License or Product Activation is not required.

If you generally are storing your backups on an USB drive, you should also copy the Gnome to this drive. Then, your backups are to hand everywhere.

If you are storing your backups in the network, then the Gnome will provide you **additional security**. Equip an USB stick with the Gnome, even if you do not plan to use it. If your VersionBackup computer will be defective some time, you will be able to access your backups immediately from any other computer.

With the Gnome copy process, even your **VersionBackup configuration will be copied to the stick**. This includes your Source Path and Destination Paths, for instance. But please note that later changes of the configuration cannot be transferred to the stick automatically. Therefore, after a configuration change, you should plug in the stick again and repeat clicking on the Gnome copy button.

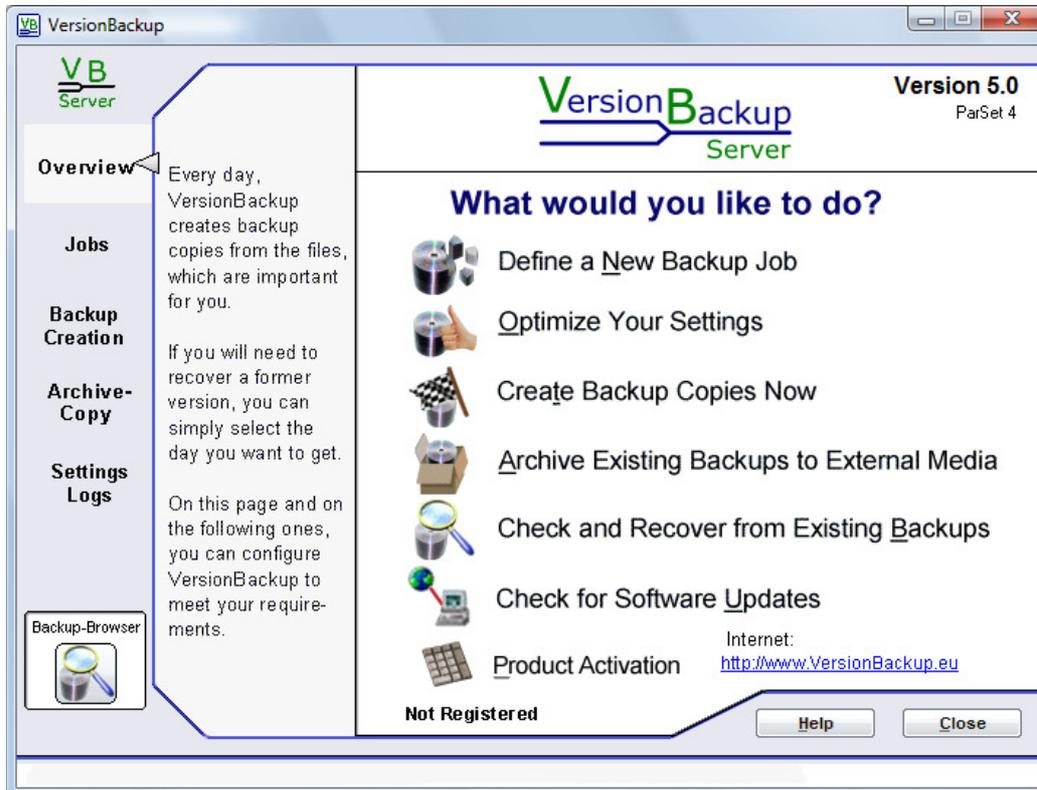
If this has been forgotten, you can also add the latest configuration changes in the dialogs of the Gnome application. But this will of course have no effect on the later backup creation. Furthermore, you can scan and use external archive media with the Gnome.

The Gnome copy process will create a subdirectory **>VB-System<** on the USB drive. It will contain the software and the VersionBackup configuration. Its size will be approx. 12 MB. Furthermore, there will be a start link on the drive with name **>Launch VB Gnome<**. You can copy this link to the computer’s desktop or to any other location to make the Gnome start more easy.

4 The Configuration Dialog Pages

4.1 Dialog page: Overview

Fast access to the main configuration functions



This page is the primary entry point into the VersionBackup-Program. It provides you a fast access to the main functions.

You can reach these functions also from the configuration dialogs, which can be selected with the grey buttons on the left side.

Input Fields:

- | | |
|--|--|
| • Define a New Backup Path | Starts the wizard to create a new Backup Job setting its parameters |
| • Optimize Your Settings | (see page 31) |
| • Create Backup Copies Now | Starts the backup creation |
| • Archive Existing Backups to External Media | Opens the dialog > Archive Copy< (see page 73) |
| • Check and Recover from Existing Backups | Opens the >Backup-Browser< (see page 110) |
| • Check for Software Updates | Gets information from the Internet about software updates and upgrades (see page 32) |
| • Product Activation | Starts the wizard to enter your Register Number |

4.1.1 Optimize Your Settings

Select Configuration

With this dialog, you can select which settings you want to change. This dialog is started from the main page >**Overview**< by clicking the button >**Optimize Your Settings**<.

If you choose one of the lower items relating to a Backup Job, the dialog >**Job Selection**< will be displayed next. There, you can choose, which of the Backup Jobs you want to modify.

You can access the same configuration dialogs also by clicking on the grey text buttons on the left side of the main dialog. With the tab buttons on the right upper side, you can select further dialog.

Input Fields:

- **Start Parameter Wizard**
- **Manual configuration of the start parameters (see page 61)**
- **General settings for the VersionBackup application (see page 88)**
- **Which files shall be excluded from the backup (see page 40)**
- **General settings for the Backup Job (see page 45)**
- **Time of the Full Backup runs (see page 53)**
- **Settings for the automatic deletion of old backups (see page 57)**

4.1.2 Check out, which new VersionBackup-Software is currently available

If you click **>Check for Software Updates<** on the dialog page **>Overview<**, VersionBackup contacts SB-AW by the Internet to fetch a list with the currently available additional functions and improvements. From this list, you can decide whether it is worth for you to download and install the new software.

VersionBackup sends only the request for the list. It will not send any information about your system to the Internet.

Step 1: **Check**

Click on this button to fetch the information about the current state of development.

Step 2: **Decide**

The box **>Newest software issue<** displays which software Release is ready for download now.

It furthermore informs you, whether your license is still valid for this Release.

Click on the button **>Expand<**. Then the list with the new or improved functional items will be displayed. The items in the list are actually the difference between your currently installed software and the newest issue.

You can select the display volume. Do you like to see only the main new features or even smaller development items?

With this information, you can decide to do the update or not. We recommend using software, which is as new as possible.

Step 3: **Download and Install**

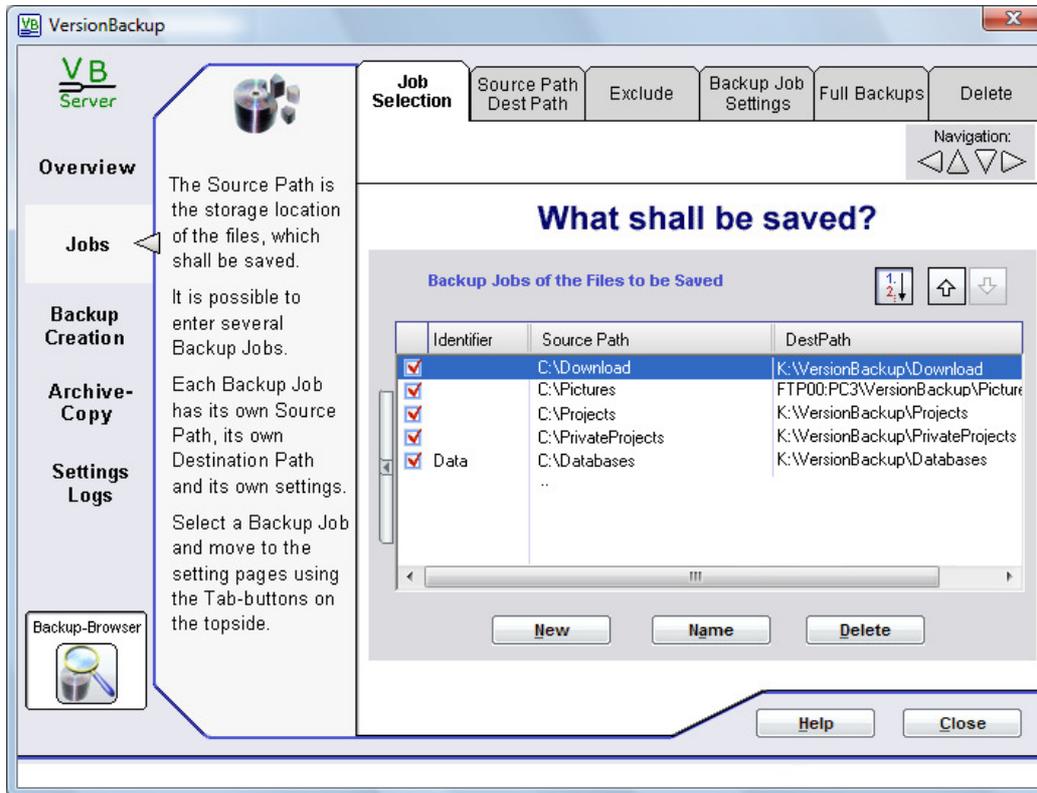
If you like to do the update, please click on the **>Update<** button. Then, the new software will be immediately loaded from the Internet.

After this, the update installation will start automatically. At first, the current VersionBackup application will be terminated. Immediately after the update run, you can start VersionBackup again and continue working, now using new software.

4.2 Jobs

4.2.1 Dialog page: Job Selection

Overall view of the Backup Jobs, which already have been configured



Only those files will be saved, which are stored in a directory, which has been configured as a **Source Path** in a Backup Job.

The data paths containing the files, which shall be saved, have to be announced to VersionBackup. Starting from this moment, each change of the files will be saved.

VersionBackup saves the files from different Backup Jobs separately.

For each Backup Job, VersionBackup creates a separate **Destination Path**. So, the backup area is still clearly arranged, even when there are a big number of backup files stored.

On this dialog page, you get an overall view of the Backup Jobs, which already have been configured. You can add a Backup Job, select it for editing or delete it.

You will find hints for special configurations in the chapter:
>Using Several Parameter Sets< (page 138)

Elements of the dialog >Job Selection<:

4.2.1.1 List >Backup Jobs of the Files to be Saved<

This list shows the Backup Jobs, which currently are configured in your VersionBackup-System. It has separate columns for the Source Paths and the Destination Paths and – if you defined them – the backup job identifiers.

Shifting the elements of the title line, you can modify the column widths and order of the columns. After a right-click on the title line, a menu will be displayed where you can hide columns, if you like. A click on the narrow vertical button on the left side of the list will increase the width of the list to display more content.

The Source Path is the path of a directory on the storage disk.

Example:

C:\Data\Letters

All files in this directory and in its subdirectories will be saved.
This is the standard setting.

If you do not want to have the subdirectories saved, select the field **>Save the Source Path without subdirectories<** on the dialog page **>Backup Job Settings<** (see page 46).

If you want to exclude some files from being saved, please enter their path or file name in the **Exclusion List** (see page 40).

The Destination Path is the directory path where the backups from this backup job will be stored.

Only those Backup Jobs will be processed, which are **active**. The active jobs are marked with a red checkmark. You can set or remove the checkmark with a mouse click.

Sorting of the list, copy order:

On top of the list, there are three buttons to change the sorting of the list.

If the **copy order button**  is active, you can recognize it by the shadow on the upper and left side. Then, the Backup Jobs are displayed in the same order like they are processed. This means, the job on the top position in the list will be processed first of all.

If you click into the list's headline, the entries will be sorted by the column where you clicked. This will be marked by a triangle in the headline field. After a click on the copy order button, the entries will be sorted in the copy order again.

You can modify the copy order with the **arrow buttons**  . They shift the selected job backward or forward in its copy order.

4.2.1.2 **Button >New<**

Click on this button to add a new Backup Job.

The dialog page **>Source Path / Dest Path<** will be opened, where you can enter the Source Path (see page 36). From this page, you can reach the other pages to configure the Backup Job parameter by clicking on the tab buttons above.

Insert position:

If the **copy order button**  is active (the list is displayed in the order of the copy runs), the **position** of the new job will be before the currently selected line.

Else, the new job will be located at the end of the list

4.2.1.3 **Button >Name<**

Click on this button to give the Backup Job a **name**, as you like.

Then you can enter an arbitrary identifier or short description for the Backup Job, which currently is selected in the list. VersionBackup will use this identifier to designate the Backup Job configuration record.

4.2.1.4 Button >Delete<

Click on this button, if you want to delete the selected Backup Job from the VersionBackup configuration.

After a confirmation request, the Backup Job will be **removed** from the Backup Job list.

If there are already backup files stored from this Backup Job, they will be kept. They will not be automatically deleted, neither now or in the future.

If you **want to delete the backups**, you have to do it manually (See >Manual Backup Deletion< (page 148, alternative way to proceed: >Deleting the Backups of one Backup Job Automatically Without Creation of New Backups<, page 148).

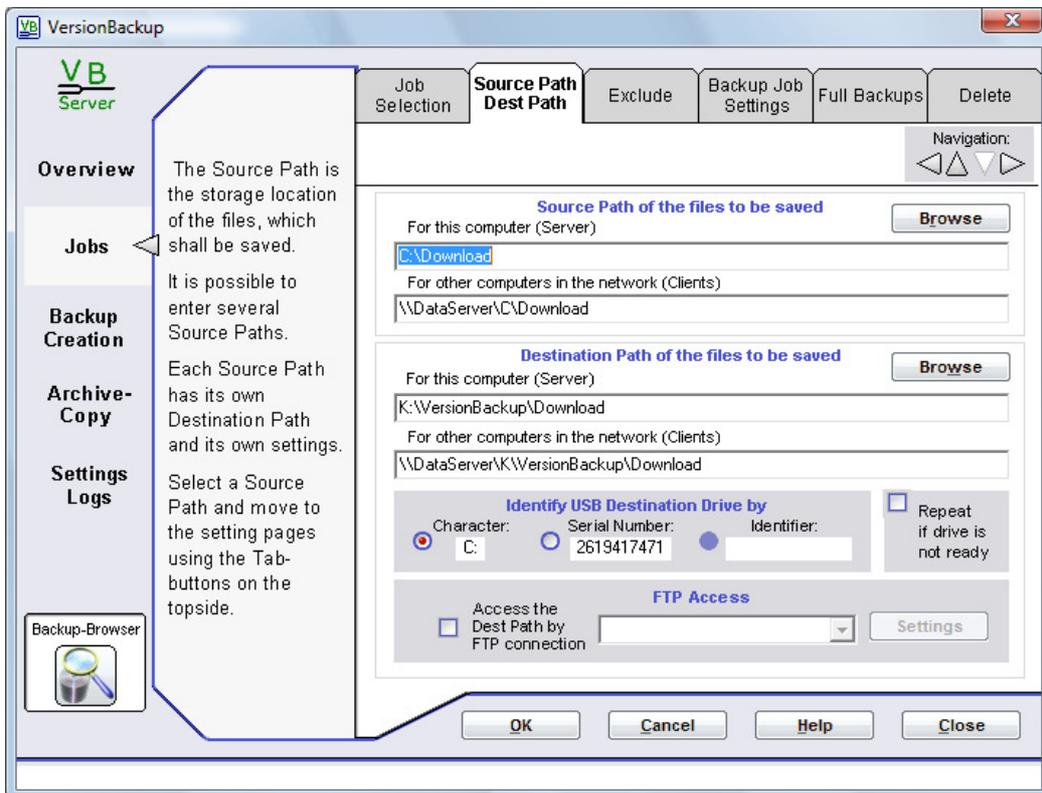
The automatic external archiving and the recovery with the Backup-Browser are still possible, even if you have deleted the Backup Job.

If you want to prevent the system from creating backups from this Backup Job only temporarily, you should not delete it, but **de-activate** it.

You can de-activate a Backup Job, if you remove the checkmark at the job (by mouse click).

4.2.2 Dialog Page: Source Path / Dest Path

Input Dialog for the Source Path and the Destination Path



This dialog page is used to

- enter a Source Path for the files, which have to be saved in this Backup Job,
- enter the corresponding Destination Path, to which location the backups from this Backup Job shall be copied.

To configure even the Client Computers, two different lines both for the Source Path and for the Destination Path exist. The upper line takes the path like it is used by the server itself. In the lower line, the same path is specified like it can be accessed from another computer by the network.

You can switch to the other configuration dialogs for this Backup Job by clicking on the tab buttons on the left upper side.

When you finished your input for this Backup Job, please click on the button >OK<. This will store your changes. The changes will also be stored, if you click on the tab button >Job Selection< or on one of the grey text buttons on the left side.

If you click >Cancel<, your input will be discarded.

Elements of the dialog >Source Path / Dest Path <:

4.2.2.1 Group >Source Path for the files to be saved <

Input line>For this Computer (Server)<:

This input line takes the directory **path, where the files to be saved are located.**

It is not reasonable, to configure the whole disk as one unit to be saved by VersionBackup. It is much better to enter the directories in different Backup Jobs, where the files you have worked on are stored. This operation mode makes it easier for you to find a single file in the huge backup stock.

The Source Path has to be entered completely. This means, that it has to start with a drive character with : and \ (>C:\< e.g.). Then usually the path to the desired subdirectory is appended. You either can enter the Source Path directly into the input field, or you can select it from the directory structure by clicking the **>Browse<** button. Server drives can be accessed by entering a path beginning with a double backslash and the computer name (e.g. > \\Server\c\..).

Input **in this upper line for the server** (in contrast to the lower line >for other computers in the network (Clients)<):

This line must take the path where the data can be accessed **by this server**. If the source directory is on a local drive on the server, then the path should start with a drive character.

If even the server accesses the disk by network, then the server path and the client path usually are the same.

Usually also the subdirectories of the Source Path will be saved.

If you intend to exclude some subdirectories or special files from the backup, please enter them on the dialog page **>Exclude<**.

Button >Browse< for the Source Path

Click on this button, if you do not want to enter the Source Path manually, but select it from the directory structure.

If you want to select a **network drive** (accessible by LAN), please click on the button **>Network<**. Then, a dialog box opens, where you can select one of the currently present network connections.

If you opened this dialog to see the directory structure of a server which is connected by **FTP**, it may last some time until the directories will be displayed. This is the time, which is necessary to load the directory structure from the Internet.

The string in the field **>Directory name<** is the result of your selection. If you want to, you can key in the desired name directly into this field. This is necessary if you want no enter a non-existing path.

Input line >For other computers in the network (Clients)<

This lower input line takes the directory path, how the files to be saved can be accessed **from other computers by the network**.

Usually, this path is on a server drive.

- Enter the path either starting with \\ (e.g.: "\\Server\My Share\My Data")
- or permanently connect the network path with a drive character. Then, you should specify the path starting with the drive character (e.g.: "S:\My Data").

If even the server accesses the disk by network, then the server path and the client path usually are the same.

4.2.2.2 Group >Destination Path for the files to be saved <

Input line: >For this computer (Server)<

This input line takes the directory path, where the backup files shall be stored by this backup job.

Here, automatically a path will be inserted, which is constructed from the Source Path. If it is necessary, you can modify this path according to your requirements.

The Destination Path has to be entered completely. This means, that it has to start with a drive character with : and \ ("C:\" e.g.). Then usually the path to the desired subdirectory is appended. Server drives, connected by LAN, can be accessed by entering a path beginning with a double backslash and the computer name (e.g. "\\Server\c\..").

You either can enter the Destination Path directly into the input field, or you can select it from the directory structure by clicking the >Browse< button.

Input **in this upper line for the server** (in contrast to the lower line >for other computers in the network (Clients)<):

This line must take the path where the backups can be accessed by this server. If the source directory is on a local drive on the server, then the path should start with a drive character.

If even the server accesses the disk by network, then the server path and the client path usually are the same.

If the primary backups shall be stored on a **FTP Server**, please activate the field **>Access the Dest Path by FTP connection<**. Then, this Destination Path line shall take the server identifier (in brackets) and behind this, the subdirectory, which shall be used on the server.

Button >Browse< for the Destination Path

Click on this button, if you do **not** want to **enter the Destination Path manually**, but select it from the directory structure.

For more info, see chapter 4.2.2.1.

Input line: >For other computers in the network (Clients) <

This lower input line takes the directory path, how the files to be saved can be accessed **from other computers by the network**.

Usually, this path is on a server drive.

- Enter the path either starting with \\ (e.g.: "\\Server\My Share\My Backups")
- or permanently connect the network path with a drive character. Then, you should specify the path starting with the drive character (e.g.: "S:\My Backups").

If even the server accesses the disk by network, then the server path and the client path usually are the same.

4.2.2.3 Group >Identify USB Destination Drive by<

If you are using a **USB stick** or a **USB hard disk** to store the primary backups, it maybe will not be plugged in or switched on all the time. If you connect it or switch the backup drive on, Windows© will assign a drive character to this new drive. But depending on the other configuration of the computer, the USB drive may receive a character which is different from the original one. Then, the drive could not be found according to the path which is configured in the >Dest Path< line.

To make it possible to find the drive in spite of a changed drive character, it should not be identified by the character. VersionBackup can identify a USB drive by **its serial number or the drive identifier**, which is stored in any USB drive. Then, the current drive character does not matter anymore.

If the USB drive is identifies by the serial number or identifier, then other USB drives will no more be used as backup media. If you connect different USB sticks, VersionBackup will only use the one which is intended for the backups.

Selection Box >Character<

This is the standard setting: Use the drive with the drive character at the beginning of the >Dest Path< input line.

Selection Box >Serial Number<

Use the drive with the displayed Serial Number.

The Serial Number is read automatically from the drive when it is plugged in and switched on (if necessary).

Selection Box >Identifier<

Use the drive with the displayed Drive Identifier.

The Drive Identifier is read automatically from the drive when it is plugged in and switched on (if necessary).

You can configure the Drive Identifier. This is done after a right-click on the drive in the Windows-Explorer© on the page >Properties<.

Selection Box >Repeat if drive is not ready<

If the item is **active**:

If the USB drive is not active at the scheduled copy time, then this will not be handled as an error. Instead, the copy run will be automatically restarted as soon as the drive will be plugged in (or switched on if necessary).

If the item is **not active**:

This is the standard setting. If the Destination Drive is not ready at the copy time, then this is an error. A restart at next USB activation will not be planned.

Warning: On many computers, you must dismount the USB drive before unplugging it or switching it off. If you ignore this, **data might be missing on the disk!**

4.2.2.4 Group >FTP Access <

Selection Box >Access the Dest Path by FTP Connection<

Activate this field if the primary backups shall be stored on a FTP server.

If you did not yet configure any FTP server connection data, the dialog >**FTP Connections**< will be opened automatically. Here you can enter the access data for the server. Later, you can open this dialog with the button >**Settings**< (see page 104).

Selection Box >FTP Access<

If you already defined more than one FTP servers in the dialog >**FTP Connections**<, you can choose with this field, which one you like to use.

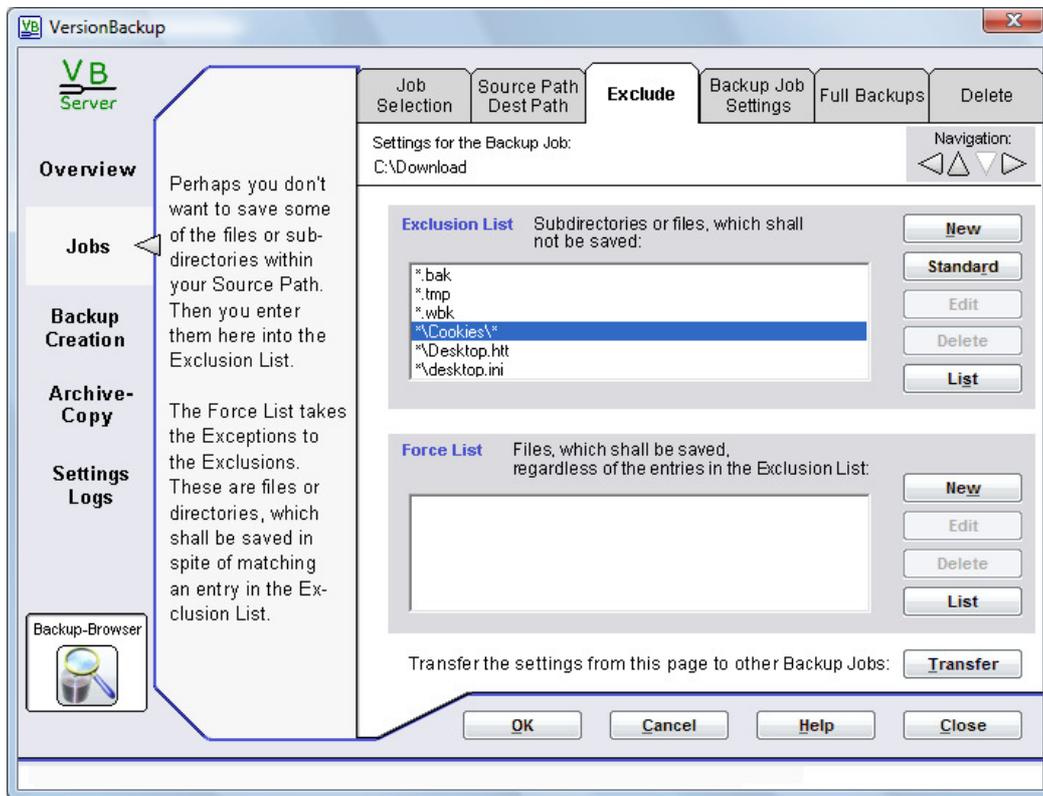
Button >Settings<

This button opens the dialog >**FTP Connections**<, where you can enter the access data for the FTP server.

This dialog is described on page 104.

4.2.3 Dialog Page: Exclude

Detailed configuration, which directories and files have to be saved



On the dialog page >Source Path/Dest Path<, you entered the name and path of the files, which shall be saved. If the option >**Also save the subdirectories of the Source Path**< in the dialog >**Backup Job Settings**< is set, VersionBackup will save also the subdirectories of this Source Path.

To prevent the volume of backup files from becoming too large, it can be reasonable however, to exclude special subdirectories or files from the backup.
To do this, please enter the identifier of these directories or files into the >**Exclusion List**<.

Sometimes it is useful to exclude a subdirectory. But one file from this directory shall be saved. Or all files with a certain type (*.bak e.g.) shall be excluded, but one or a little number of special files with this type shall be saved.

The second list on the dialog page (>**Force List**<) makes this possible. Directories or files, which are entered here, will be saved even if they match a condition in the Exclusion List.

Elements of the dialog >Exclude<:

4.2.3.1 List Field >Exclusion List<

Subdirectories or files, which not shall be saved

The Exclusion List contains all exclusion paths and exclusion file identifiers (file names, maybe with wildcard character *), which are defined for this Backup Job.

Files corresponding to one of these entries will not be copied into the backup area.

Exception: if the file or directory is listed in the >**Force List**<. Such files will be saved in spite of matching the exclusion conditions.

If you selected a line in the list, the buttons >**Edit**< and >**Delete**< below the list are active. You can change or remove the list entry with these buttons.

If you want to create a new entry in the list, please click on the button >**New**<.

Position of the new entry in the list:

If a line is selected, the position of the new entry will be before the selected line. If no line is selected, the position is at the end of the list.

See also: >Syntax for the Exclusion List and the Force List< (page 42)
>Saving Some Specified Files or Subdirectories Only< (page 139)

4.2.3.2 Button >New< and >Edit< (Exclusion List or Force List)

The Button >New< or >Edit< opens the dialog >**Path Input**<, where you can change the path, which is selected in the Exclusion or Force List.

Please enter a path term for the files, which shall be excluded from the backup or which shall be saved in spite of matching an exclusion condition.

There are several formats possible, either complete file paths (starting with drive character or computer name) or parts of it with an asterisk as wildcard character.

By clicking the button >**Wizard**<, you can start the >Exclusion Path Wizard< which helps you entering the path term.

4.2.3.3 Button >Standard<

This button automatically enters some **typical Exclusion Conditions** into the Exclusion List. It will not be necessary to enter these entries manually.

The Standard Exclusion Conditions are files, which cannot be copied, because they are permanently blocked by the operating system. Or else, they need not to be copied, because they are temporary files or backup files themselves.

You can change or delete these entries selecting them and clicking the buttons >**Edit**< or >**Delete**<.

4.2.3.4 Button >List<

If there are many entries in the Exclusion List, it is better to display them in a **larger dialog Window**.

Click to this button to show the entries in an extended List.
Even there, it will be possible to edit them.

4.2.3.5 List Field >Force List<

Files, which shall be saved regardless of the entries in the Exclusion List

This list is used, if you want to save only some special files from a subdirectory. On the other hand, if you want to save only some special files from the group of files with a certain substring in their name or type.

In such a case, please enter the exclusion term into the Exclusion List. Moreover, enter the term of the files, which shall be saved in spite of this, into the Force List.

See also next chapter.

4.2.3.6 Syntax for the Exclusion List and the Force List

The entries in the Exclusion List or Force List must be valid file paths according to the DOS Syntax. The character * is allowed. It is a wildcard for any number of any characters.

Examples:

C:\Data\2003-10-12*	All files in the directory >C:\Data\2003-10-12<
\\Server\C\Data*	All files on the computer >Server< on the share >C< in the directory >Data<
\Data	All files, whose path contains a directory >Data<
\Data	All files, whose path contains a directory with a name beginning with >Data<. And all files with a name beginning with >Data<
*\Picture27.jpg	The file >Picture27.jpg< in any directory
\Picture.jpg	All files, which have a name beginning with >Picture< and the type >jpg< in any directory
\Balance.	All Files with name >Balance< with any type in any directory
*.bak	All files with type >bak< in any directory
\S\Data*	All files in directories with >Data< in their path, which are the subdirectory of a directory beginning with >S<

You can construct the desired path term with any number of asterisks.

But please note, that the term

Picture27.jpg

(without an asterisk at the beginning) will lead to nothing, because any existing path begins with a drive term (>C:\< e.g.) or with a double backslash and the computer name.

If you do not want to name the path, you have to type

***\Picture27.jpg.**

You also can use the >**Exclusion Path Wizard**< if you want to be assisted. But note that this wizard is not able to construct any possible path definition.

See also: >Saving Some Specified Files or Subdirectories Only< (page 139)

Examples:

Here some examples are listed, how special descriptions for the selection of files can be defined.

Example 1:

Do not save the files with type `.BAK`, but save the files `MAIN.BAK` and `CONFIG.BAK`.

This is achieved by the input:

```
Exclusion term:    *.BAK
Force term:       MAIN.BAK
                  CONFIG.BAK
```

Example 2:

In the subdirectory `C:\Data\Pictures`, save only the files with type `.AFB`.

This is achieved by the input:

```
Exclusion term:    C:\Data\Pictures
Force term:       *.AFB
```

Example 3:

Do not save the files with type `.KBT`. But save the files in the subdirectory `TRANS`, even if their type is `.KBT`.

This is achieved by the input:

```
Exclusion term:    *.KBT
Force term:       *\TRANS\*
```

Example 4:

You are using a program, which shifts the existing files down to the next lower `BAK` directory at any file storage process.

You want to have the first `BAK` level saved, but not the lower levels.

This is achieved by the input:

```
Exclusion term:    *\BAK\BAK\*
```

4.2.3.7 Automatic transfer of file names to the Exclusion List

When VersionBackup creates new backups, sometimes it happens that a file cannot be copied because VersionBackup may not read it.

These are the **reasons** for this:

- The file currently is in use. And the application which uses the file has locked it against any foreign access.
- The access right configuration determines that the user, who runs VersionBackup, may not access the file or the whole disk range.

In both cases, Windows© watches over the file access. And this functionality cannot be bypassed.

But many of these files need not to be saved in a backup. An example is the Windows© swap file `>pagefile.sys<` containing only temporary information. Those file should be entered into VersionBackup's Exclusion List. Then, VersionBackup will no more try to copy them into a backup.

If not all files could be copied in a backup creation run, VersionBackup shows a **list with the affected files**. If an access error was the problem, then a checkbox is displayed on the left side of each file name. These boxes can be marked by a mouse click.

Please mark the files, which shall no more be copied, with a checkmark and close the dialog with >OK<.

Before you exclude files, you should carefully consider, whether you really want to do without the backups of these files. Maybe, it will be better arranging a solution to make the access to the files possible.

If the file has been blocked by another application, the solution would be creating the backup copies when this application is not running. Sometimes a file is blocked accidentally at that moment and the next copy run would be successful.

If missing access right definitions were the cause, then it might be possible removing the problem granting the necessary rights.

4.2.3.8 Button >Transfer the settings from this page to other Backup Jobs<

Each Backup Job has its own set of parameters.

The settings you enter in the Backup Job configuration pages are valid only for one Backup Job. This Backup Job is displayed on the top of the dialog.

You can transfer these settings to other Backup Jobs by clicking this button.

Then, the **>Backup Job Selection<** dialog will open, where you can select, which other Backup Jobs shall receive these parameters.

This transfer is done for the parameters of the **currently displayed page only**. If you want to transfer even the parameters of other configuration pages, you must switch to that pages and click on the button even there.

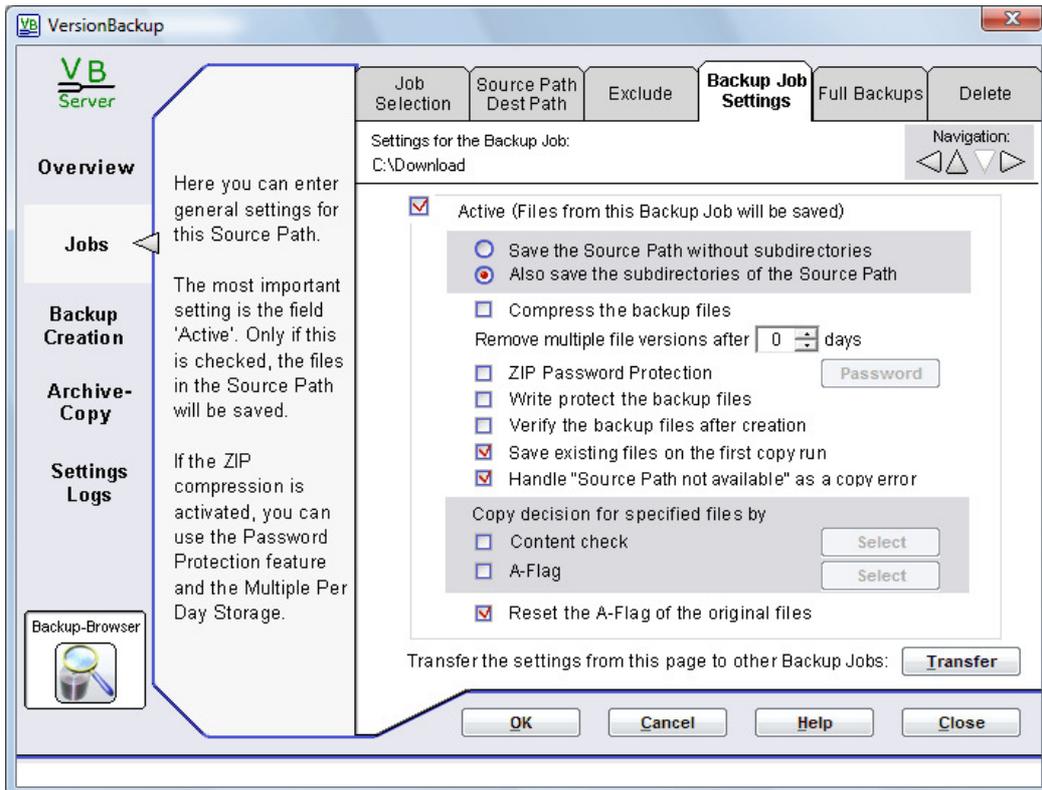
The dialog **>Backup Job Selection <** allows you to select the Backup Jobs where the parameters of the current configuration page shall be copied to.

Clicking on the squares by the Path Identifiers, you can set or remove a checkmark. The paths with checkmark will receive a copy of the parameter set.

Caution: When the button is clicked, the settings will be transferred immediately. It will not be more possible to cancel this operation later by clicking the **>Cancel<** button.

4.2.4 Dialog Page: Backup Job Settings

Configuration of general Backup Job parameters



Here you can define the general parameters for the backup saving of this Backup Job.

Please note, that different Backup Jobs have different sets of parameters. The settings you enter here are valid only for one Backup Job. This Backup Job is displayed on the top of the dialog. You can transfer these settings to all other Backup Jobs. To do this click on the button **>Transfer the settings from this page to other Backup Jobs<** (see previous section). This transfer is done page by page.

Elements of the dialog >Backup Job Settings<:

4.2.4.1 Selection Field >Active<

This selection field must **be active**, if the files from this Backup Job shall be saved.

If you want to switch off the backup generation for this Backup Job temporarily, you can de-activate the field. When it is de-activated, no change of the backup stock of this Backup Job will be done.

On the dialog page >Jobs< - >Job Selection<, you can recognize the deactivated Backup Jobs by the missing checkmark. You also can set or reset the >Active< property there by clicking on the boxes with the checkmarks.

When the Backup Job is de-activated, there will be no automatic deletion of old backup data. If you want to delete these old files, you have to do this manually.

See also: >Manual Backup Deletion< (page 148)
 >Deleting the Backups of one Backup Job Automatically Without Creation of New Backups< (page 148)

Even when the Backup Job is de-activated, the external archiving and recovery of the Backup Job data with the Backup-Browser will still work.

If the Backup Job is disabled, a red traffic light will mark this on all configuration pages of this job.

4.2.4.2 Selection Field >Save the Source Path without subdirectories<

If you choose this option, only those files will be saved, which are stored directly in the Source Path. The subdirectories will not be saved.

If you want to save also the subdirectories, please choose the alternative **>Also save the subdirectories of the Source Path<**.

If you want to save the subdirectories only in part, you should also select the field >Also save the subdirectories of the Source Path< and enter the directories or files, which shall not be saved, into the Exclusion List.

4.2.4.3 Selection Field > Also save the subdirectories of the Source Path <

If you choose this option, also the subdirectories of the Source Path will be saved.

If you do not want to save also the subdirectories, please choose the alternative **>Save the Source Path without subdirectories<**.

If you want to save the subdirectories only in part, you should also select this field and enter the directories or files, which shall not be saved, into the Exclusion List.

4.2.4.4 Selection Field > Compress the backup files <

If you choose this option, the backups will be **compressed with the ZIP-Method**.

The files from one Backup Job will be packed together into one or several ZIP files. The VersionBackup Recovery Procedure will extract the files automatically to their original state. Furthermore, it should be possible on your computer to open the ZIP files directly to get access to the backups even without VersionBackup.

The additional processing time caused by the packing and unpacking operation usually is insignificant. The reduced disk space requirement is only one of the advantages of the compression.

If the backups are transferred by a not very fast LAN or by the Internet, then compression will increase speed because less data have to be transmitted.

With ZIP compression, it is possible storing **several file issues** from the same day (see 4.2.5). This can be recommended if there are many changes during the day.

Compressed backups can be **password protected** (see 4.2.4.6 and 3.7). This is exceptionally important if the backups are stored in the Internet.

4.2.4.5 Input Field >Remove multiple file versions after x days<

The main purpose of VersionBackup is to keep the day's final state of each file for recovery. The Backup-Browser generally restores the latest file version of the day, which has been selected.

But if the ZIP compression is switched on, then even all versions from every copy run during the day can be kept separately.

This usually will be reasonable **only for a short period**, not for long-term backup storage. Therefore, VersionBackup will remove the multiple file issues when they are older than the number of calendar days, which can be set here. Only the last file issue of any day will be kept.

- If you **generally do not want to keep several file issues** from a day, please set this parameter to **Zero**. Then after a repeated copy run, older versions from the same day of the new copied files will be deleted immediately.
- If you like to keep the multiple versions from a day for **a certain period**, please set this parameter to 3, e.g. Then all copies will be kept until they are 3 days old. After this, all file issues except for the newest one will be deleted.
- If you like to store all issues for a **very long time**, please set the parameter to **9999**. Then, the multiple copies will be kept almost 30 years, if they will not be deleted due to another reason.

Please note also the following:

- Storing multiple files per day is only possible if the **ZIP Compression** is switched on.
- If the backups will be deleted due to another reason (manually or due to the settings on the Page >Storage Duration< or >Delete<), then even multiple copies will be removed. This means, the backups of a day can be **completely removed** even if the “Delete Multiples” value is set to a longer period.
- If you do an archiving run with backup days which are newer than the “Delete Multiples” limit, then **several issues** from the same day will be **copied even to the external media**. It is not possible to remove the multiple issues from the media later.
- The Backup-Browser’s usual recovery function restores only the latest file issue of the selected day. If you need an older state of a day, please right-click on the file in the middle list of the Backup-Browser. After choosing >Properties<, all stored file versions will be listed. With a double click on any version, you can **restore exactly that file issue**.

4.2.4.6 Selection Field >ZIP Password Protection<

If this field is active, the **ZIP Password Protection** will be enabled. Then, the backup files in the ZIP files will be protected against unauthorized reading or unauthorized usage.

This mechanism uses an encryption method with a medium security level. For details see >Using the ZIP-Password Protection< (page 26).

If you did not yet enter an encryption password, the >Password Dialog< (see page 108) will open automatically. Later, you can open this dialog with the >Password< button again.

The ZIP Password Protection is possible only if the option >Compress the backup files< is switched on.

4.2.4.7 Selection Field >Write protect the backup files<

If you choose this option, the backup copies of the files created by this Backup Job will be **write protected** (the >Write Protect Flag< of the files will be switched on).

Then it usually will not be possible to change these files.

But note that the Write Protect Flag easily can be reset again. Therefore, this feature cannot provide a safe file protection.

The properties of the original files will not be affected.

If the backup copies are write protected, you get the following **advantage**:

As it is possible to access the backup copies, created by VersionBackup directly from different applications, the danger exists, that you unintentionally change a backup (instead of changing the work version). This is prevented (with some security), if the Write Protect Flag is set.

If you recover the files, VersionBackup offers the function to reset all Write Protect Flags again (see dialog: >Recovery<, field: >Clear write protection for the recovered files<, page 117).

Please do not activate this feature, if it is important for you, that some of the files are write protected and some others are not. Only then, the information, which files may be written will be kept.

If you selected the setting **>Compress the backup files<**, the backups will be copied to one or several ZIP files. Therefore, there is no danger to overwrite them from any application. In a ZIP file, a special write protection is not provided. So this option cannot be used together with the file compression.

4.2.4.8 Selection Field >Verify the backup files<

If this verify function is switched on, the backups will be **checked immediately after their creation**.

When the files of one Backup Job have been copied, the just created backup files will be read again. If the backups are compressed, they will be unpacked. This function immediately checks, whether the backup files really exist and if they are readable. Then, **using the CRC method**, it is checked, whether the backup copies are identical to the original files.

Usually, it should not be possible that there is such a basic error. Therefore, the verify check should only be necessary if you have very high security requirements or if the system might be unstable.

Because all backup information is read again, the total processing time increases to approx. one and a half.

If the verify should detect copy errors, VersionBackup automatically repeats copying the affected files. Then, the verify check will be repeated.

If there is an error again, then the files will be planned for a **delayed error retry run**, if this feature is switched on on the page >Backup Creation< - **>Error Retry<**.

If still then there is a verify error, the affected files will be displayed in **an error dialog**. Furthermore, verify errors will be reported in the Copy Log, even if they could be fixed by a repeated copy process.

Please note, that the verify check will be done only immediately after a file has been created. The verify function cannot recognize, if a file will be damaged or lost some times later.

4.2.4.9 Selection Field >Save existing files on the first copy run<

If a Backup Job is newly configured and VersionBackup starts its first copy run with this Backup Job, there are two alternatives to proceed:

Alternative 1:

All files in the Source Path (which do not match an Exclusion Condition) will be copied to the backup stock in the first copy run.

This is the 'normal' behavior of VersionBackup, because it recognizes, that currently there exists up-to-date no backup copy.

If you want this proceeding, please **activate** this field.

Alternative 2:

The files, which are found in the first copy run, will **not be copied**. VersionBackup will only save every change and addition after the first run.

This is reasonable, if the data volume is voluminous and if either the past has been saved with a different backup method or there are many old files in the Source Path, which not yet have to be saved.

But note: if you later perform a Full Backup, in any case all files in the Source Path will be copied.

If you want this proceeding, please **de-activate** this field.

4.2.4.10 Selection Field >Handle "Source Path not available" as a copy error<

If during the backup creation, a directory, which is configured as the Source Path of a Backup Job, either does not exist or cannot be reached, then the Source Path is not able to create any backups.

If this directory is on a drive on a different computer, the reason may be that the network is not ready or the computer is offline.

This situation need not be an error. The changed files on a computer, which is offline, will be saved during the next VersionBackup copy run if the computer can be reached then.

You should **activate** the box if a non available Source Path shall be treated as an error.

Then, an error message will be displayed on the screen.

If the error retry function is activated, then VersionBackup will try to repeat copying this Source Path.

You should **deactivate** the box if a non available Source Path shall **not** be treated as an error.

Then, VersionBackup will handle this as a normal situation, where nothing has to be copied.

You only will find a short note about this in the Copy Log.

4.2.4.11 Selection Field >Copy decision for specified files by Content Check< and button >Select<

To determine, which files have to be copied in an Incremental Backup, VersionBackup must decide as fast as possible, which files are new or have been changed.

To do this decision, usually each file's actual last change time stamp is compared with the time stamp, when the last VersionBackup has been done.

If this field is activated, then you can define specified files which will not be regarded as new if their copy time differs from the latest value, but which are compared byte by byte to find differences.

The check is done by a **CRC**, which is a very fast method. But in any case it will last longer than the simple time check, because the file has to be completely loaded. This may take a lot of time if the Source Path is connected to the VersionBackup computer by a slow network (WLAN, e.g.).

Therefore, you should activate the Content Check only where this is reasonable.

To do this, please set a checkmark into this box. Furthermore, you have to define the file types, for which the Content Check shall be valid. To do this, please click on the **>Select<** button, which will open the **>Content Check Selection<** dialog (see page 49).

4.2.4.12 Selection Field >Copy decision for specified files by A-Flag< and button >Select<

To determine, which files have to be copied in an Incremental Backup, VersionBackup must decide as fast as possible, which files are new or have been changed.

To do this decision, usually each file's actual last change time stamp is compared with the time stamp, when the last VersionBackup has been done.

This **>new criterion<** gives the right decision, if all applications meet the specification that the last change time stamp will be updated each time when a file is changed and only then. Usually, this works. Therefore, the time stamp is a good criterion to determine new files.

But if an application should modify the time stamp in an improper way, VersionBackup can be configured to use a different new criterion instead of it. You can choose to use the **>Archive Flag<** as new criterion. And you can select, for which files the Archive Flag shall be evaluated.

To do this, please set a checkmark into this box. Furthermore, you have to define the file types, for which the Archive Flag shall be valid. To do this, please click on the **>Select<** button, which will open the **>Archive Flag Selection<** dialog.

If you use the Archive Flag as new criterion, the option **>When the backup is done, reset the Archive Flag of the original files<** will be switched on automatically.

4.2.4.13 Dialog: Content Check or Archive Flag Selection

In this dialog, you configure, for which file names and types the content check or the archive flag shall be used as new criterion.

To add a new entry, please click on **>New<** and enter the specification.
With the buttons **>Edit<** and **>Delete<**, you can modify or remove the selected entry.

The file specifications, you enter here, are valid only for this Backup Job.

You have to enter either complete paths (incl. drive character) or you can set an asterisk * for omitted characters.

Examples:

- C:\Data\File.dat Only this file in the specified file path
- *\File.dat File with this name at any position
- *.dat All files with type .dat
- *new* All files with >new< in their name or path
- *\processing* All files in the directory paths, which have a subdirectory level named \processing\
- * All files

Caution: If you only enter **>File.dat<**, this will not result in anything, because the path will never match exactly (the * before the file name is missing).

4.2.4.14 Selection Field > Reset the A-Flag of the original files <

For each file, the operating system stores different control information. One of these is the flag, whether a file still should be saved in a backup process (>Archive Flag< or >A-Flag<). Generally it is not defined, how this backup should be done (with which software on which media).

VersionBackup usually does not use this Archive Flag. In the standard configuration, the decision, which file should be copied, is done interpreting the date/time information of the last writing moment. (Only if the setting **>Copy decision for specified files by A-Flag<** is configured, the A-Flag of the files will be checked to determine if a file should be saved again).

Nevertheless, VersionBackup could reset the Archive Flag, when it has saved a file. This could be useful, if you additionally use other systems, which are interpreting the Archive Flag.

If you activate this option, VersionBackup resets the Archive Flag of each file, when it has saved the file. We recommend this setting. Different system then will be able to recognize, that a further backup is no more necessary.

If this option is de-activated, VersionBackup will not change the Archive Flag of the original files.

In the special configuration, if the copy decision by A-Flag is set, then the A-Flag will be reset after the copy in any case.

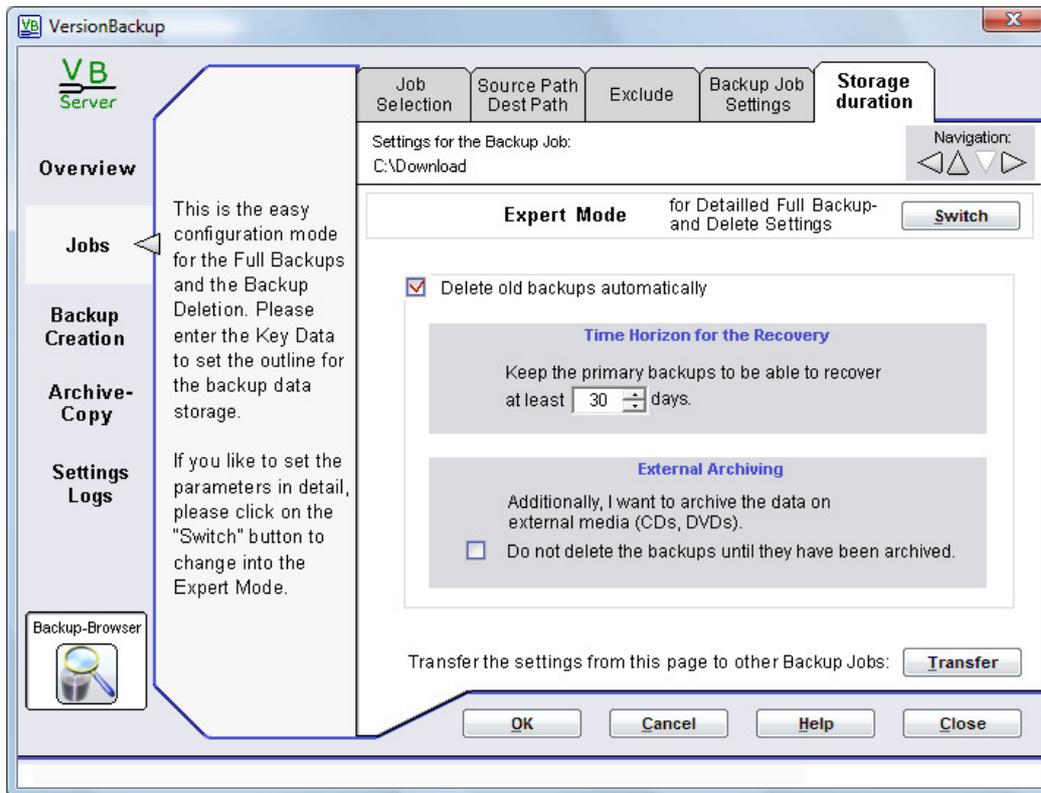
4.2.4.15 Button >Transfer the settings from this page to other Backup Jobs<

This button copies the settings, which are visible on this page, to other Backup Jobs.

Details see on page 44.

4.2.5 Dialog Page: Storage Duration

Easy configuration how long the primary backups shall be available for recovery



This dialog page can be selected if the **>Automatic Mode<** is set to configure the storage duration. Then, there is no need to enter the settings for the Full Backups and Deletion in detail. They will be set automatically due to the outline values from this page.

If you do not see the field **>Storage Duration<** at the upper right corner of the dialogs but the fields **>Full Backups<** and **>Delete<**, then the **>Expert Mode<** is set for this Backup Job, where the parameters can be determined in detail. You can switch to the Automatic Mode opening the page **>Full Backups<** or **>Delete<** and clicking on the button **>Switch<**.

If you like to configure the settings to your needs in detail, you should use the Expert Mode.

Elements of the dialog **>Storage Duration<**:

4.2.5.1 Button **>Switch<** to change into the Expert Mode

This button switches to the detailed configuration mode. Instead of this page **>Storage Duration<**, the dialog pages **>Full Backups<** and **>Delete<** will be available then (see chapters 4.2.6 and 4.2.7).

4.2.5.2 Selection Field **>Delete old backups automatically<**

This button enables the functionality to delete old backups automatically.

If the field is **not activated**, then old backups will not be deleted automatically. But of course, you can delete them manually (see page 148).

4.2.5.3 Input Field >Keep the primary backups to be able to recover at least X days<

Please enter the number of calendar days here, how far VersionBackup shall be able to recover the past from the primary backups.

Example: you set the value to 56 days. Then, at each new backup creation all file versions will be deleted, which are so old that they are no more necessary for the recovery of any date within the last 8 weeks.

This will result in partial deletion of the files of one backup. Some files in the backup may be deleted, other ones must be kept.

The time limit which is set here is valid **only for the Primary Backups**.

If you additionally do the **External Archiving**, then of course you can recover even older dates. Then, VersionBackup will ask you to insert the required media (CD or DVD, e.g.).

4.2.5.4 Selection Field >Do not delete the backups until they have been archived<

If you plan to archive your primary backups on external media, then of course the backups must be prevented from deletion until their archiving has been done.

In this case, please activate this button. Then, the backups will be kept on the primary disk at least until the **>archive it< mark** has been reset.

This will be done as soon as the backups have been successfully copied by the archiving function (see chapter 4.4.1) while on the page **>Archiving Source<**, the function **>Reset the “archive it” mark after successful archiving<** is activated.

It is possible setting or resetting the **“archive it” mark manually**. You can do this after clicking the lower **>Select<** button on the dialog page **>Archiving Source<** (see chapter 4.4.1.5).

Please note: This field should be **deactivated** if you will do **no external archiving**. Otherwise, the primary backups will **never be deleted** because VersionBackup will continue waiting for the archiving run.

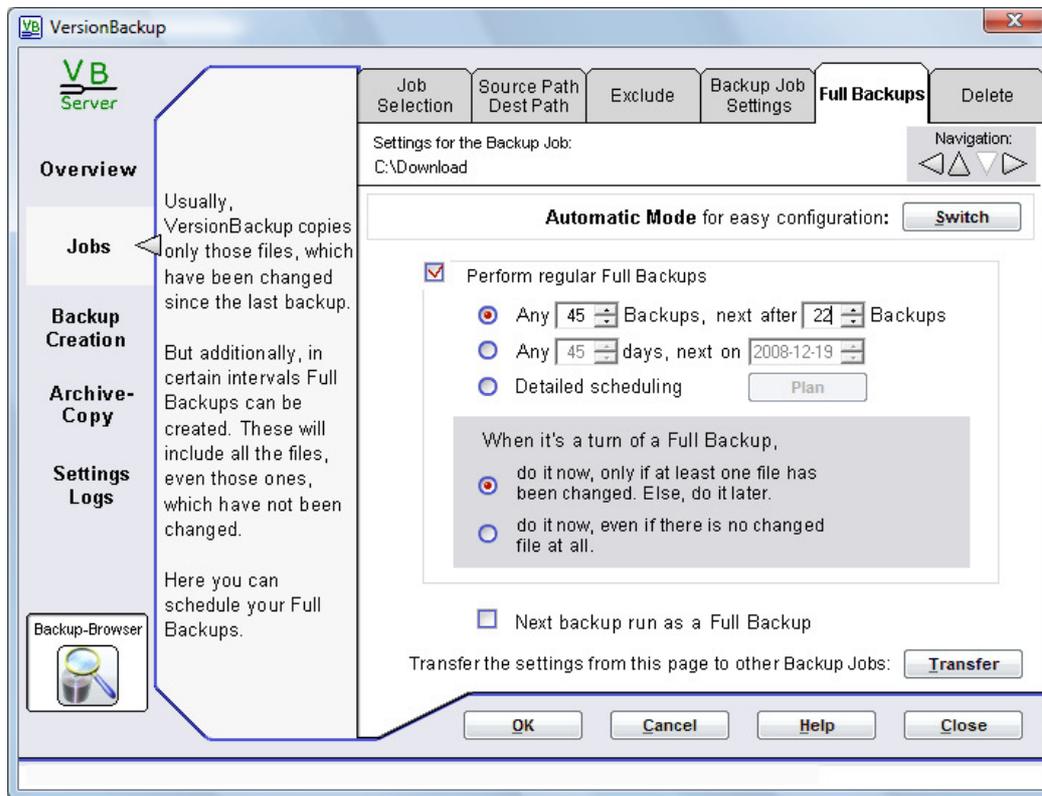
4.2.5.5 Button >Transfer the settings from this page to other Backup Jobs<

This button copies the settings, which are visible on this page, to other Backup Jobs.

Details see on page 44.

4.2.6 Dialog Page: Full Backups

Configuration, when a Full Backup shall be created



This dialog page can be selected if the **>Expert Mode<** is set to determine the Full Backups and Backup Deletion.

Then, the settings for the Full Backups and the Deletion can be set in detail. This enables you to configure VersionBackup exactly to your needs.

If you do not see the fields **>Full Backups<** and **>Delete<** at the upper right corner of the dialogs but the field **>Storage Duration<**, then the **>Automatic Mode<** is set for this Backup Job. In this mode, the parameters are set automatically due to your outline values. You can switch to the Expert Mode opening the page **>Storage Duration<** and clicking on the button **>Switch<**.

If you like to configure the settings in an easy way, you should use the Automatic Mode.

VersionBackup is able to create a Full Backup instead of an Incremental Backup after a pre-defined time (see also: **>General Remarks Regarding Full Backups<**, page 13).

On this dialog page the settings for the Full Backups will be done.

The Full Backup configuration is individual for each Backup Job.

Elements of the dialog >Full Backups<:

4.2.6.1 Button >Switch< to change into the Automatic Mode

This button switches to the easy configuration mode. Instead of this pages >Full Backups< and >Delete<, the dialog page >Storage Duration< will be available then (see chapter 4.2.5).

4.2.6.2 Selection Field >Perform regular Full Backups<

If this field is active, the mechanism to create Full Backups is switched on.

Then, after a configured number of backup runs or days or due to the special scheduling conditions, a Full Backup will be created instead of the Incremental Backup.

If this field is de-activated, Full Backups will **not** be generated **automatically**.

However, it is possible, to request a Full Backup manually.

This is done with the field >Next backup run as a Full Backup <. If you start the copy run manually, you alternatively can request a Full Backup setting a checkmark in the column >Full Backup< in the dialog >**Start Backup Creation**< (see page 65).

4.2.6.3 Selection Field >Any x backup runs, next after y Backups<

If you choose this option, VersionBackup creates the next Full Backup after a certain number of **backup runs**.

This setting results in a different behavior, than the Full Backup after a number of calendar days, because there are days, when there is no backup run. A backup run for a Backup Job is only started, if at least one file in this Source Path has been changed.

If the changes in a Source Path become more seldom, the duration between two Full Backups will increase. This may be a great advantage.

In the field >**next after y Backups**<, it is determined, when the next Full Backup shall be done.

Example: >next after 2 Backups< means that for the next two days with backups, the backups will be done as Incremental Backups. Then, the Full Backup will be created.

When the first backup will be created on a day, the field >next after y Backups< will be automatically updated.

Alternative:

If it is desired to have a fixed number of days between two Full Backups, please choose the alternative setting >**Any xx days, beginning on xxxx-xx-xx**<.

Independently from the automatic Full Backup Generation, it is possible to request a Full Backup with the field >**Next backup run as a Full Backup**<. If it is active, the next backup copy run will create a Full Backup for this Backup Job.

4.2.6.4 Selection Field >Any xx days, next on xxxx-xx-xx<

If you choose this option, VersionBackup creates the next Full Backup after a certain number of **calendar days**.

But if it is desired to have a duration between two Full Backups, which depends on the frequency of changes in the Source Path, please choose the alternative setting >**Any x backup runs, next after y Backups**<.

In the date field, the date of the next Full Backup can be set.

Please note: The Full Backup of one day shall contain the state of the files at the end of the configured day. Therefore, depending from your settings, the moment, when the Full Backup will be created, can be in the **morning of the following day**.

Please note also the setting of the parameter **>When it's a turn of a full backup, do it now, even if there is no changed file at all<**.

Only if this field is active, the Full Backup will be created in any case for that day. Else, the backup will not be created at that day, if none of the files file has been changed. It will be taken later, the next time when a file has been changed.

4.2.6.5 Selection Field >Detailed scheduling< and button >Plan<

If you choose this setting, you can define detailed rules for the Full Backups. It is possible to define several different rules.

If you click on the **>Plan<** button, the dialog **>Scheduling for the Full Backups<** (see page 102) opens, where you can configure your scheduling settings.

4.2.6.6 Selection Field >When it's a turn of a full backup, do it now, only if at least one file has been changed. Else do it later.<

To perform an incremental Backup, VersionBackup starts the backup copy run only if at least one file in the Source Path has been changed or has been added.

If this field is selected, this rule is valid also for Full Backups. Therefore, if the next copy run is scheduled as a Full Backup and there is no changed file, the copy run will not be done. It will be postponed until the next file change.

If you want to carry out the Full Backup run regardless of whether there are changed files, please select the option **>When it's a turn of a full backup, do it now, even if there is no changed file at all<** (see next chapter).

4.2.6.7 Selection Field >When it's a turn of a full backup, do it now, even if there is no changed file at all.<

To perform an incremental Backup, VersionBackup starts the backup copy run only if at least one file in the Source Path has been changed or has been added.

If this field is selected, this rule is not valid for Full Backups. If the next copy run is scheduled as a Full Backup, the copy run will be done, even if no file has been changed or added since the last copy run.

This gives the advantage, that the Full Backups will be created exactly on the scheduled day. It is a disadvantage, that you might waste storage space, if there are no or almost no changes in the Source Path. Then several Full Backups will be created, which are identical or almost identical.

If you want to carry out the Full Backup run only if there are changes in the files, please select the option **>When it's a turn of a full backup, do it now, only if at least one file has been changed. Else do it later.<**

4.2.6.8 Selection Field >Next Backup run as a Full Backup <

If you choose this option, the next Backup of this Backup Job will be a Full Backup.

With this field, you can

- request a Full Backup manually, even if you do not choose the option >Perform regular Full Backups<,
- control the automatic Full Backup generation function.

In this context, please note also the option **>When it's a turn of a Full Backup, do it now, even if there is no changed file at all<** (see above).

Alternatively you can create a Full Backup **for all Backup Jobs**, if you

- start the immediate backup creation (dialog page **>Backup Creation - Scheduling / Start<**, button **>Start<**).
- In the next visible dialog **>Start Backup Creation<**, please set a checkmark in the column **>Full Backup<** for all those paths, where a Full Backup is desired.

4.2.6.9 Button >Transfer the settings from this page to other Backup Jobs<

This button copies the settings, which are visible on this page, to other Backup Jobs.

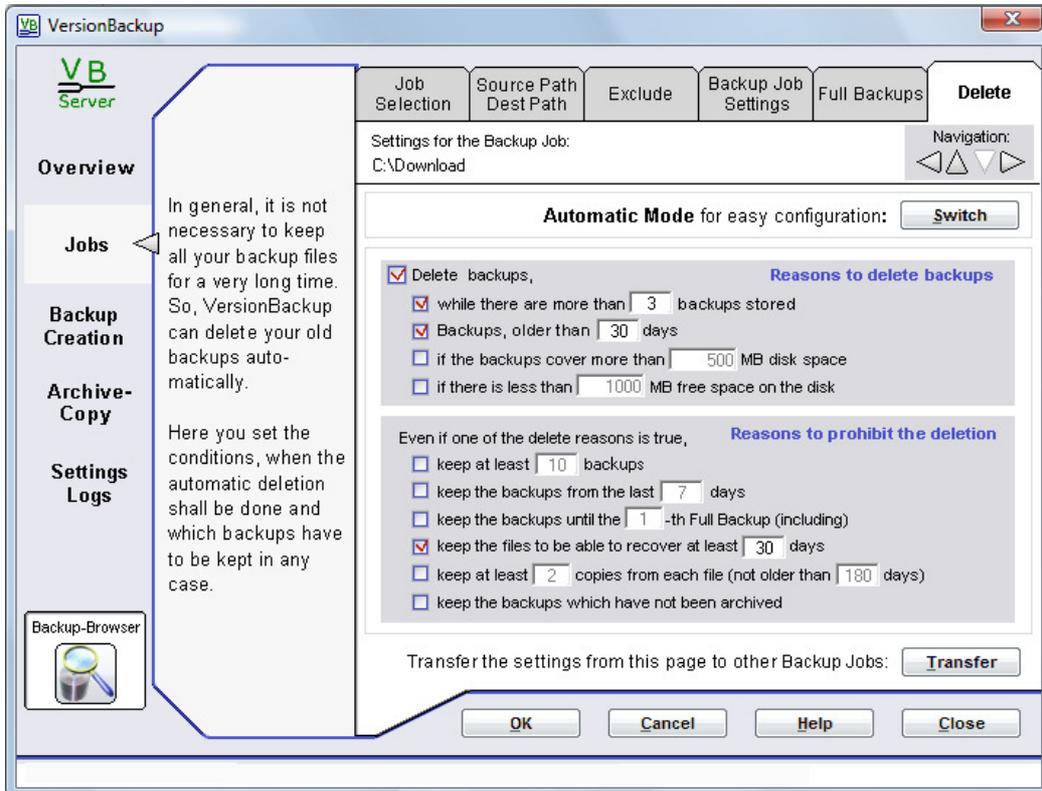
For details, see page 44.

If you want to select the parameter copy destination from this dialog page, you might find a restriction: The Backup Jobs which have been set to be configured in the **>Automatic Mode<** cannot be activated as destination for the parameter copy. This is because they cannot take the detailed configuration from the **>Full Backups<** or **>Delete<** page.

If you want to transfer the Full Backup or Delete settings to a Job, which currently is in the Automatic Mode, you must first change to this job and switch it to the **>Expert Mode<**.

4.2.7 Dialog Page: Delete

Configuration, when old backups shall be deleted from the primary backup disk



This dialog page can be selected if the **>Expert Mode<** is set to determine the Full Backups and Backup Deletion.

Then, **the settings for the Full Backups and the Deletion can be set in detail**. This enables you to configure VersionBackup exactly to your needs.

If you do not see the fields **>Full Backups<** and **>Delete<** at the upper right corner of the dialogs but the field **>Storage Duration<**, then the **>Automatic Mode<** is set for this Backup Job. In this mode, the parameters are set automatically due to your outline values. You can switch to the Expert Mode opening the page **>Storage Duration<** and clicking on the button **>Switch<**.

If you like to configure the settings in an easy way, you should use the Automatic Mode.

Elements of the dialog **>Delete<**:

VersionBackup creates new backups every day. Apart from the Full Backups, only the changed files are copied. Therefore, the disk space requirements for this complete backup of your file development are relatively low.

But on the long term, it is recommended to delete the very old backups from the hard disk.

This can be done

- **manually**, by deleting the old date directories in the Windows Explorer©,
- **automatically**, if you use the automatic delete function of VersionBackup. This function can be configured on this dialog page.

In addition to the storing on the primary hard disk, we recommend to archive the backups externally. Then, of course, the backups may not be deleted before the external archiving. This can be configured with the parameter **>keep the backups, which have not been archived<** (see page 59).

Several reasons to delete old backups can be active at the same time. They can be configured in the **upper part of the dialog**.

Furthermore, there may be reasons active, which forbid the deleting. They can be configured in the **lower part of the dialog**.

The deletion will be done day by day. All files of one Backup Job and one day will be deleted together. This is done by removing the date directory.

If at least one Delete Reason matches for the day and if there is no reason to prohibit the deletion, these backups will be deleted.

If there are matching Delete Reasons and at if least one prohibit reason matches, the backups will not be deleted.

At least one backup will be kept in any case. If you want to delete all backups from a Backup Job, you have to do this manually (see >Manual Backup Deletion<, page Seite 148).

The backups of one day and Backup Job will never be deleted partly. Either all backups of a day and Backup Job will be deleted or none of them.

The backups of a day a Backup Job will be deleted if at least one of the >**Reasons to delete backups**< is true but only if no one of the >**Reasons to prohibit the deletion**< is valid.

The deleting will not be done immediately but during the next VersionBackup copy run.

4.2.7.1 Button >Switch< to change into the Automatic Mode

This button switches to the easy configuration mode. Instead of this pages >Full Backups< and >Delete<, the dialog page >Storage Duration< will be available then (see chapter 4.2.5).

Reasons to delete backups:

4.2.7.2 Selection Field >Delete backups<

This selection field activates the automatic deletion function.

If the field is **not active**, VersionBackup will perform **no backup deletion**.

But you can delete the backups manually by deleting the date directories with the Windows Explorer© (see page 148).

4.2.7.3 Selection Field >while there are more than xx backups stored<

If you activate this option, the **number of the stored backups** from this Backup Job will be limited to the configured value.

If there are more backups from this Backup Job, the oldest ones will be deleted.

4.2.7.4 Selection Field >Backups, older than xx days<

If you activate this option, backups, which are older **than the configured number of days**, will be deleted.

4.2.7.5 Selection Field >if the backups cover more than xx MB disk space<

If you activate this option, the **storage space** for the backups of this Backup Job will be limited.

If the backups of this Backup Job need more megabytes than the configured value, the oldest ones will be deleted.

4.2.7.6 Selection Field >if there is less than xx MB free space on the disk<

If you activate this option, the backups will be deleted when the **backup disk is almost full**.

If the free storage space on the backup disk is smaller than the configured value, then the oldest backups will be deleted.

Please take care not to set this limit too high. Else, there possibly will be no space for the backup archive on the disk.

For all delete reasons:

If there is a reason forbidding the deletion of a backup, it will be kept.

Reasons to prohibit the deletion:

4.2.7.7 Selection Field >keep at least xx backups<

If you activate this option, **at least the configured number of backups** from this Backup Job will be kept.

4.2.7.8 Selection Field >keep the backups from the last xx days<

If you activate this option, the backups, which are **newer than the configured number of days**, will be kept.

4.2.7.9 Selection Field >keep the backups until the x-th Full Backup (including)<

If you activate this option, **at least the configured number of Full Backups** will be kept for this Backup Job. All Incremental Backups, which are newer than the oldest of these Full Backups, will be kept too.

4.2.7.10 Selection Field >keep the files to be able to recover at least xx days<

If you activate this option, the backups will be kept to enable the recovery **for the configured period** from the primary backups.

Example: you set the value to 56 days. Then, at each new backup creation all file versions will be deleted, which are so old that they are no more necessary for the recovery of any date within the last 8 weeks.

This will result in partial deletion of the files of one backup. Some files in the backup may be deleted, other ones must be kept.

You can find details to the partial deletion of backups in the chapter >Automatic Deleting Single Files from the Backup Archive< (Page 149).

The time limit which is set here is valid **only for the Primary Backups**.

If you additionally do the **External Archiving**, then of course you can recover even older dates. Then, VersionBackup will ask you to insert the required media (CD or DVD, e.g.).

4.2.7.11 Selection Field >keep at least x copies from each file (not older than y days)<

If you activate this option, the number of backup copies will be checked in the backup archive. For each file, VersionBackup will **count how many primary backups exist for different days**. Only if this number is bigger than the configured value, the deletion of the backup versions is permitted.

But this delete blocking will not be valid **for the backups which are older than the configured day limit**. This prevents the system from blocking the deletion of files which are very seldom or never changed.

You can find details in the chapter >Automatic Deleting Single Files from the Backup Archive< (Page 149).

4.2.7.12 Selection Field >keep the backups, which have not been archived<

If you plan to archive your primary backups on external media, then of course the backups must be prevented from deletion until their archiving has been done.

In this case, please activate this button. Then, the backups will be kept on the primary disk at least until the **>archive it< mark** has been reset.

This is done when the backups have been copied by the external archiving function while the function **>Reset the "archive it" mark after successful archiving<** is switched on.

You can also set or reset the "archive it" mark manually if you click on the lower **>Select<** button on the page **>Archiving Source<** (see page 74).

For all keep reasons:

At least one Delete Reason (see above) must apply to delete any backups. But if at least one Keep Reason is true for a backup, it will be kept even if there are Delete Reasons for this backup.

4.2.7.13 Button >Transfer the settings from this page to other Backup Jobs<

This button copies the settings, which are visible on this page, to other Backup Jobs.

Details see on page 44.

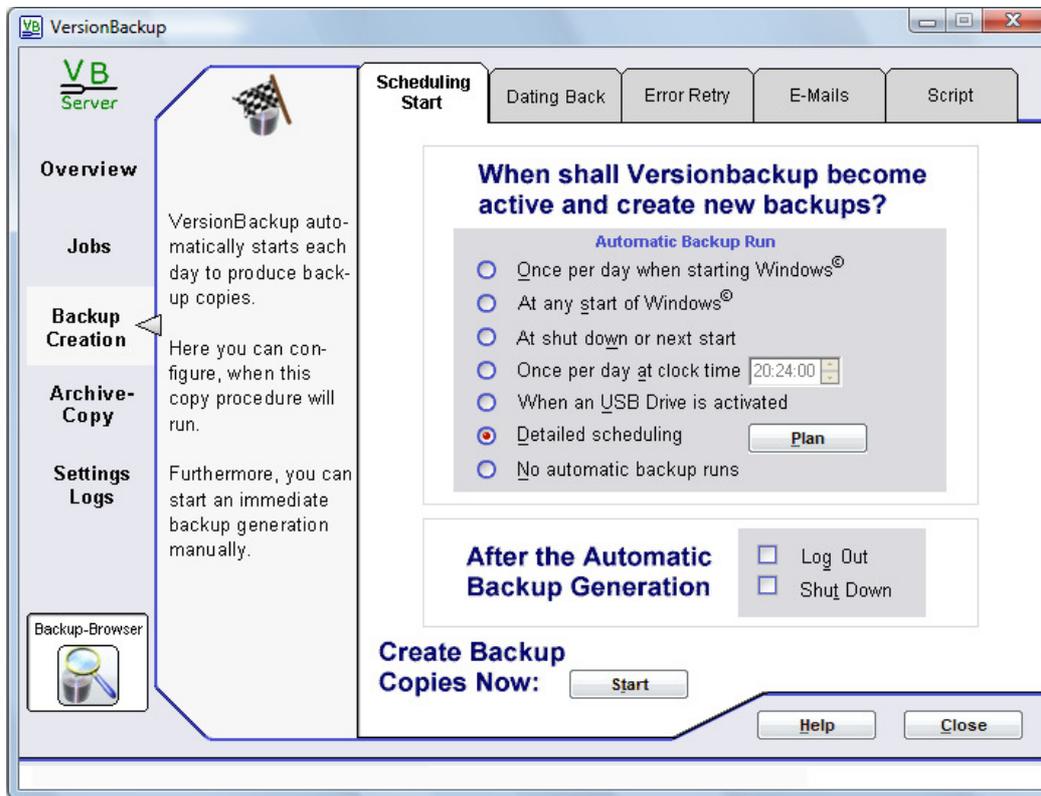
If you want to select the parameter copy destination from this dialog page, you might find a restriction: The Backup Jobs which have been set to be configured in the **>Automatic Mode<** cannot be activated as destination for the parameter copy. This is because they cannot take the detailed configuration from the **>Full Backups<** or **>Delete<** page.

If you want to transfer the Full Backup or Delete settings to a Job, which currently is in the Automatic Mode, you must first change to this job and switch it to the **>Expert Mode<**.

4.3 Backup Creation

4.3.1 Dialog Page: Scheduling/Start

When shall VersionBackup become active and create new backups?



VersionBackup will start automatically to create the backup copies from the configured Backup Jobs. On this dialog page, you configure, **when** this copy run has to be done.

Additionally, you can start the backup copy creation immediately.

Elements of the dialog >Scheduling/Start<:

4.3.1.1 Selection Field >Once per day when starting Windows®<

If you choose this setting, VersionBackup creates the backup copies when you log in, **but only once per day**. (If your system does not require a log in, VersionBackup does the copy run on the first boot each day.)

Then the files from the end of the last computer run will be saved. Usually this is the status of the preceding day.

If the computer is started again this day, VersionBackup will not do the copy run again. This avoids a useless extension of the start time. The status of the current day will be saved at the beginning of the following day.

This setting is recommended, if the computer is switched off at night.

If the computer continues running over night, with this setting it does not create backups, because there is no start up procedure in the morning.

Such an operation mode needs the setting >once per day at xx:xx:xx<.

4.3.1.2 Selection Field >At any start of Windows®<

If you choose this setting, VersionBackup creates the **backup copies at any time when you log in**. (If your system does not require a log in, VersionBackup does the copy run at every boot phase.)

If this is the first start this day, the files from the end of the last running day are saved.

If the computer is started again this day, another copy run is done. Then the file status of the moment is saved. If the files will be changed again this day, the backups will later be overwritten with the newer version. The final version will be saved at the beginning of the following day.

Using this setting is possible, if the computer is switched off at night.

If the computer continues running over night, with this setting it does not create backups, because there is no start up procedure each day.

Such an operation mode needs the setting **>once per day at xx:xx:xx<**.

4.3.1.3 Selection Field >At shut down or next start<

If you choose this setting, VersionBackup creates the backups every **time, when Windows® terminates**. This can be the user's log out or the shut down of the computer.

Please note: Usually, the backup creation will take some time. Therefore, the log out or shut down will be delayed significantly with this setting. If Windows® is terminated several times on the day, the backup creation will be done several times, too.

If you find this as nuisance, you should choose the setting **>Once per day when starting Windows®<** instead of this.

Using this setting is possible, if at the end of each day the user log out or the computer is shut down.

If the computer continues running without a log out, then it would not create backups with this setting. In such cases, please use the setting **>Once per day at xx:xx:xx<**.

If you are using the operating system **Windows Vista®**, please note also the chapter **>Shut Down with Backup Creation on Windows Vista®<** (see page 137).

See also: **>Shut Down After Backup Creation<** (page 136).

4.3.1.4 Selection Field >Once per day at xx:xx:xx<

If you choose this setting, VersionBackup creates the backups **at a fixed clock time each day**.

Therefore, it is not necessary to start up the computer each day.

This is the obligatory setting, if the computer continues running overnight.

If the computer is switched off at the configured backup time, the VersionBackup will be done as soon as possible. That is immediately after the next start up.

If you switch off the computer each night, we recommend to choose the setting **>Once per day when starting Windows®<**. Then less resource on your computer will be occupied, because VersionBackup will terminate immediately after the start up phase.

4.3.1.5 Selection Field >When an USB Drive is activated<

If the backup drive will be connected by USB, it may be reasonable starting the backup creation automatically when the USB stick will be plugged in or when the USB hard disk will be switched on. This will be done if you select this setting.

It is recommended not to identify the USB drive by its drive character but by its Serial Number or Identifier (see page 38). Then, it will be no problem if Windows© will assign a different drive character to the drive when it will be connected next time.

If you choose this configuration, then the backup creation will start only if the USB drive will be activated which is designated as the backup drive. Other USB sticks will be ignored by VersionBackup.

4.3.1.6 Selection Field >Detailed scheduling<, button >Plan<

If you choose this setting, you can define detailed rules for the copy run time. It is possible to define several different rules.

If you click on the >**Plan**< button, the dialog >**Scheduling for the backup creation**< (see page 102) opens, where you can configure your scheduling settings.

4.3.1.7 Selection Field >No automatic backup runs<

If you choose this setting, VersionBackup will **not start backup copy runs automatically**.

This is unusual.

You should use this setting only

- if you want to take VersionBackup out of operation (temporarily),
- if you want to start the copy run only manually.

4.3.1.8 Selection Field: After the Automatic Backup Generation >Logout<

If you choose this setting, VersionBackup will **log out the user after finishing the backup copy run**. The computer will continue running, but it is secured against non authorized user action.

This, for instance, is reasonable, if you start the backup run at a fixed time in the evening and the computer shall be locked after this.

See also: >Shut Down After Backup Creation< (page 136).

4.3.1.9 Selection Field: After the Automatic Backup Generation >Shut Down<

If you choose this setting, VersionBackup will **shut down the computer after finishing the backup copy run**.

This, for instance, is reasonable, if you start the backup run at a fixed time in the evening and the computer shall be switched off after this.

It depends from the hardware and the configuration of the computer, whether it able to switch off after shut down.

See also: >Shut Down After Backup Creation< (page 136).

4.3.1.10 Button >Start< - Create Backup Copies Now

If you click on this button, VersionBackup saves the files right now, in their current state.

Then, the dialog **>Start Backup Creation<** (see page 65) will be displayed. There you can select, which Backup Jobs shall be processed.

The backup copies are assigned to the current date. If you continue working on this day, these backups later will be overwritten by the latest version of this day.

Caution: There is only one backup state per day on the disk. If you run this function again this day, the earlier saved state will be overwritten.

So, click on the button again, only if you are sure, that your files are in a faultless state.

If they were not correct, the earlier saved faultless version would be lost. (see also:

>Storing Several Versions from One Day<, page **Fehler! Textmarke nicht definiert.**)

After the click on the >Start< button, one the following messages might be displayed:

Message: Overwrite the existing files for today?

For each Backup Job and each day, VersionBackup creates a date directory to store the backups separately.

The date based organizing of the backups storing succeeds in keeping the state of each day, even if later there are further versions of the same files. Because on later days, different date directories will be used for the storage.

But if you start the copy run several times on the same day, the backups will be copied to the same date directories. The files, which already have been saved for the day, will be overwritten, if they have been changed again.

VersionBackup here asks, if you agree to this.

If you confirm with **>OK<**, the files, which already have been saved today, will be overwritten, if they have been changed again.

If you click **>Cancel<**, no copy will be done now. The files will not be saved, because VersionBackup cannot save several versions for the same day.

But when the backup run starts automatically for today, the files, which have been saved today, will be overwritten in any case.

See also: >The Data Structures Created by VersionBackup< (page 150)
 >Storing Several Versions from One Day< (page **Fehler! Textmarke nicht definiert.**)

Message: Currently, a backup creation process is running. The new copy process will be started when the running one is finished.

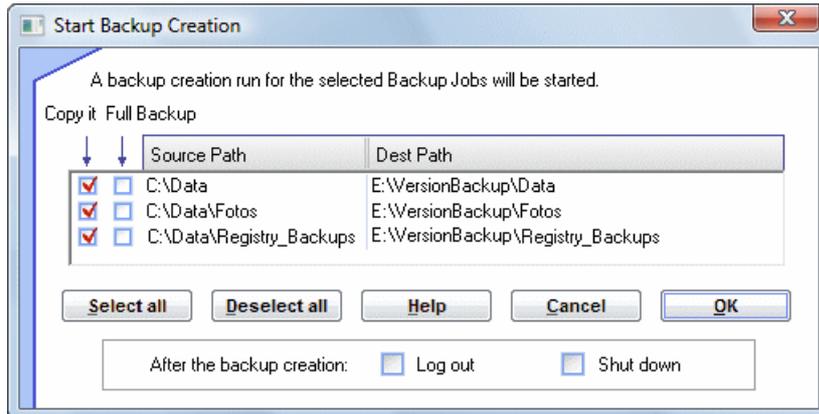
If several copy processes would be running at the same time, inconsistent copy results could be created because one process is reading the data which are currently saved by another process.

To prohibit such disturbances, VersionBackup blocks further copy processes while the first is still running. This is done for the creating of primary backups and for the external archive copies.

This means that the next copy process cannot be started before the actual one has terminated.

If you click on **>OK<**, you schedule the next copy process to start as soon as possible.

4.3.1.11 Dialog: Start Backup Creation



This dialog lists all currently active Backup Jobs.

If you confirm with **>OK<**, all Backup Jobs will be processed, which have a checkmark in the column **>Copy it<**.

All Jobs with a checkmark in the column **>Full Backup<** will be saved as Full Backup, even if there is no Full Backup reason due to the Full Backup Scheduling.

Scheduled Full Backups will be done even if there is no checkmark in the column >Full Backups<.

With the buttons **>Select all<** and **>Clear all<** the checkmarks in the column **>Copy it<** of all Backup Jobs will be set or removed.

Click on **>OK<** to start the copy run now.

Click on **>Cancel<**, if you do not want to start a copy run.

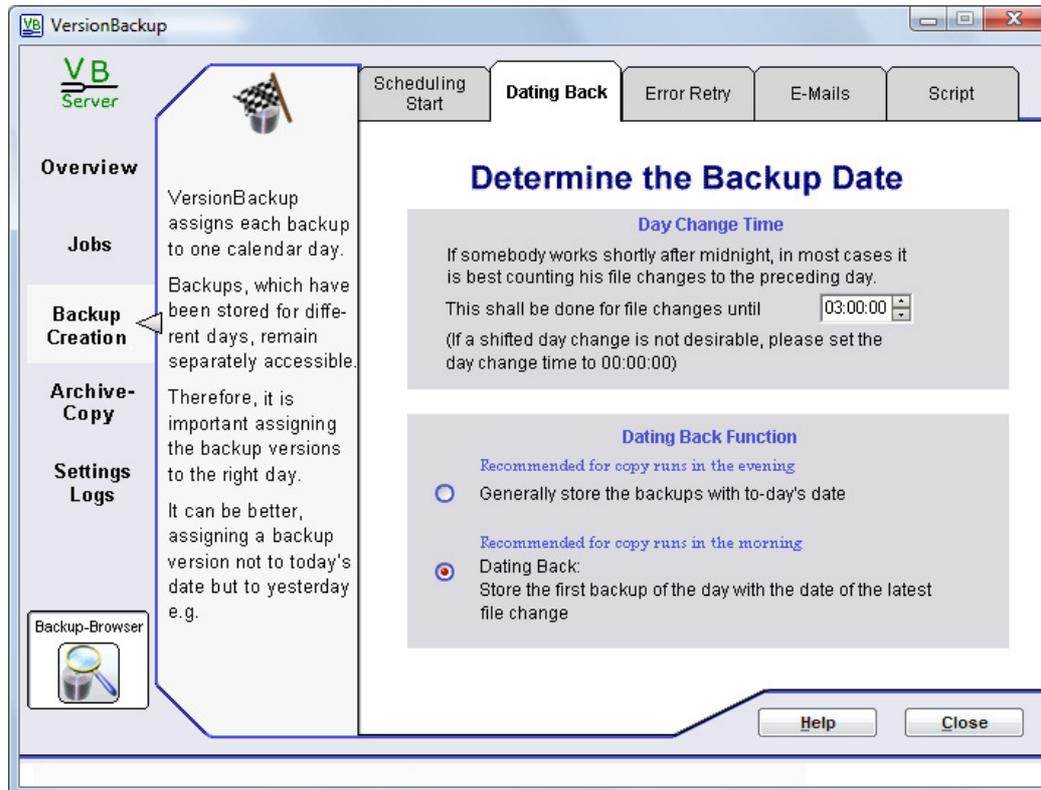
If there is a checkmark in the field **>Log out<**, after the end of the copy run the user will be logged out

If there is a checkmark in the field **>Shut Down<**, after the end of the copy run the computer will be shut down.

See also: **>Shut Down After Backup Creation<** (page 136).

4.3.2 Dialog Page: Dating Back

Determine the Backup Date



Elements of the dialog >Dating Back<:

4.3.2.1 Day Change Time

If the work on the computer will extend **longer than midnight**, the date related keeping of the backups versions could result in a problem:

A day related backup archive is clearly arranged only if you will find the **final state** of the work of each day, when you ask for a specified day's data. If, for instance, somebody works until 0:50 after midnight, the result of his work would be stored with the next day's date, if no Dating Back would be done. But this storage state is not secure. It will be overwritten, whenever a backup run is performed on the next working day.

Therefore, VersionBackup uses a configurable >Day Change Time<. If this time is set to 3:00 AM, all the changes between midnight and 3:00 will be **assigned to the preceding day**. This usually is reasonable, because the time period after midnight is the end of the preceding working day.

The day change time should be set to a time, when the last day's work is finished definitely and the work of the next day will not be started.

If this cannot be defined clearly, the day change shift should not be used. Then please enter 00:00:00 as Day Change Time, so everything after midnight will be assigned to the new day, as it is usual.

You can enter Day Change Time values between 00:00:00 and 08:00:00.

4.3.2.2 Selection Field: Dating Back

If at least one backup copy run is done **before the working day** (at start up of the computer or at a configured time in the early morning), the final state of the preceding day shall be saved.

This is done, if VersionBackup does not use the current date for the backup but the date when the computer **ran last**.

To ensure this, the **Dating Back function** should be **switched on** (>Store the first backup of the day with the date of the latest file change<).

Even if the last file change has been done between midnight and the configured Day Change Time, it will be assigned to the preceding day.

If the copy run will be started a second time after the Day Change Time or if at least one file in the Backup Job has been changed or created after the Day Change Time, the backup will be assigned to the current day in any case.

But if the backup copy run will be done only **after the working day** (at shut down or at a configured time in the evening), VersionBackup has to save the state of the current day.

Then, the **current date** should be used for the backup in any case.

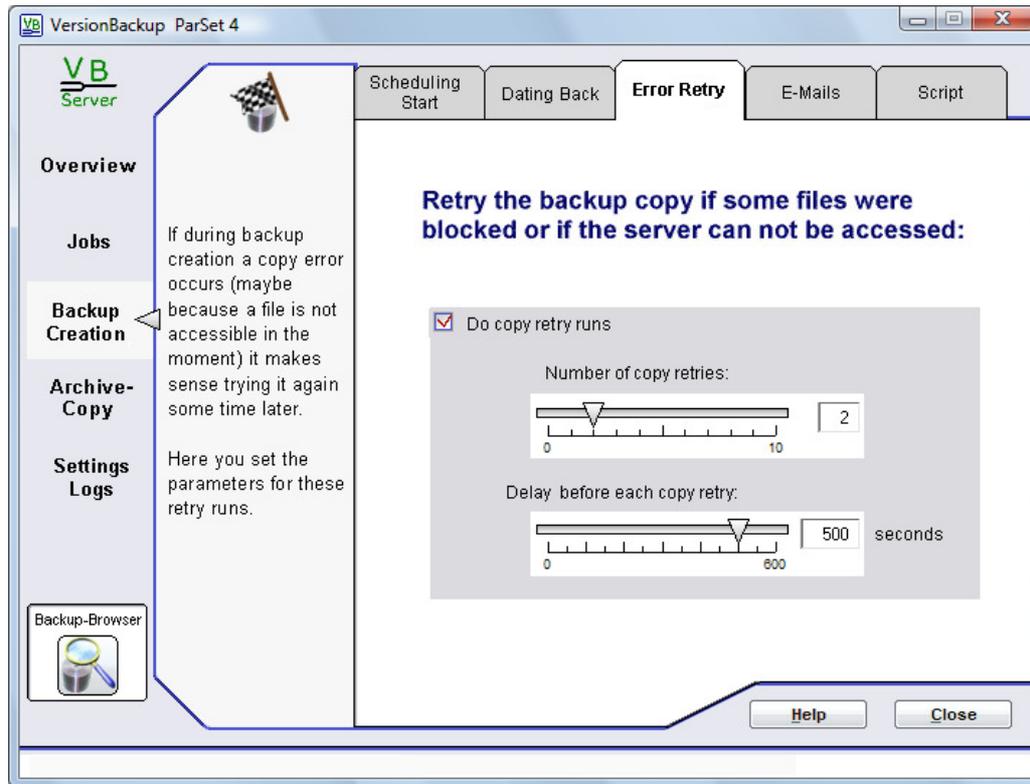
To ensure this, the Dating Back function should be **switched off** (>Generally store the backups with to-day's date<).

If you change the backup creation time from the morning to the evening or vice versa, the Dating Back function will be switched automatically to its optimum setting. VersionBackup notifies you about this with a message box. If necessary, you can adjust this setting later on this page to your special requirements.

See also: >The Data Structures Created by VersionBackup< (page 150)

4.3.3 Dialog Page: Error Retry

Repeat the backup copy if some files were blocked or if the server can not be accessed



Creating the primary backups, it can happen that **single files or directories could not be copied correctly**.

This may be because the files are blocked by other processes or if the computer, which shall be accessed by the network, is not ready. Or else, if the function >Verify the backup files< is switched on and detected a copy error.

If the copy retry function is switched on, VersionBackup repeats trying to copy the missing files after a certain waiting time. There are several retry runs possible.

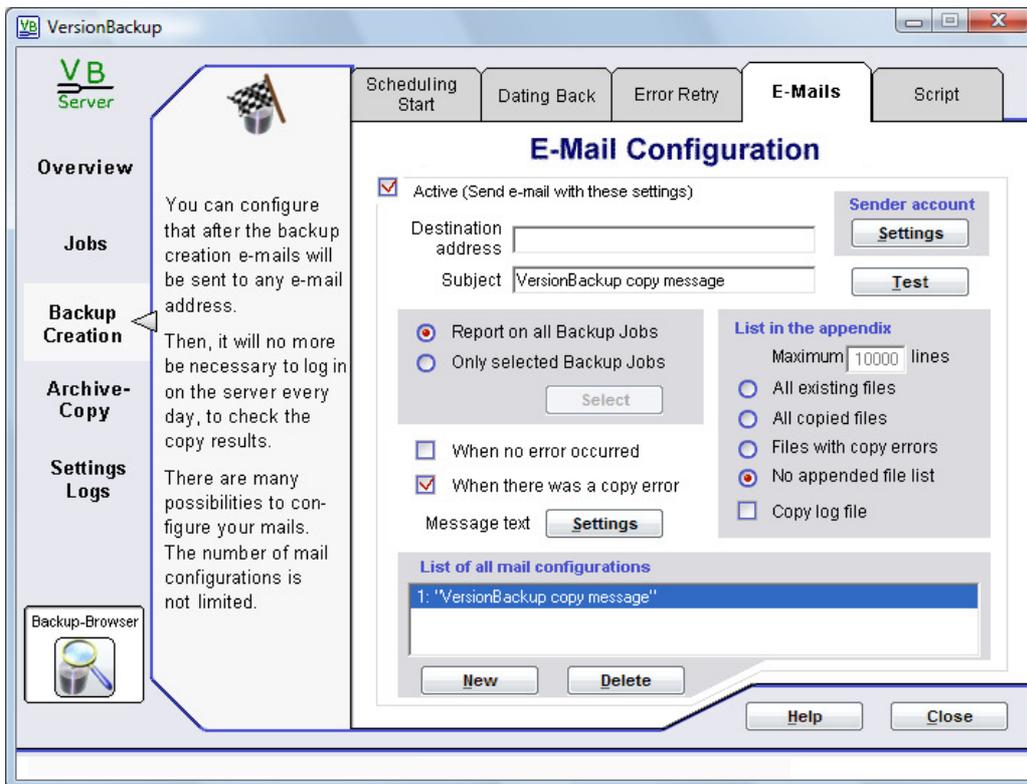
In a retry run, only those files will be copied, which were missing in the original copy run. If in the meantime additional files have been changed, they will not be copied. The backup date always will be the backup date of the original copy run.

Input Fields:

- **Do copy retry runs** This switches the Error Retry function on
Recommended setting: on
- **Number of copy retries** Maximum number of retry runs
Recommended setting: 12
- **Delay before each copy retry** Waiting time before each retry run
Recommended setting: 300 seconds

4.3.4 Dialog Page: E-Mails

Configuration of the e-mails, which will be sent automatically after backup creation



You can configure that VersionBackup Server will send e-mails to any e-mail address after the copy runs.

This is useful if you will log in on the server only from time to time.

You can choose the backup jobs on which the e-mails shall report. The mail text can be freely configured. You send lists with file names as appendix.

It is possible configuring any number of different mail configuration records.

If you like to add another definition record, please click on **>New<**. You find each configured data set in the **>List of mail configurations<**. The currently selected data set is displayed in the other dialog fields and can be edited.

Elements of the dialog >E-Mails<:

4.3.4.1 Selection Field >Active <

If there is a checkmark in this field, mails will be sent according to the displayed configuration.

The configuration records can be switched on and off separately.

4.3.4.2 Button: Sender account >Settings<

Here, you can determine the **settings for you e-mail sender account**.

The values which have to be entered here are similar like the account settings in any usual e-mail program (like Outlook Express®).

The sender account settings are the same for all e-mail configuration records.

Elements of the dialog:

- **Outgoing mail (SMTP) server** URL of the SMTP server, which shall be used for the mails.
- **Account name** Name of your Account on the SMTP server
- **Password** Password for your sender account
- **Sender Address** E-mail address, which shall be displayed as sender in the mails. If the mail receiver clicks on >Respond<, the response will be sent to this address.
- **Button >Test<** This sends a test mail to check the sender configuration. Only if this test gives positive results, VersionBackup will be able to send the desired mails. You cannot receive this mail. If you want to send a test mail to a certain address, please use the >Test< button on the dialog page >E-Mails<.

4.3.4.3 Button >Test<

This sends a test mail to the configured >Destination address<. This is to check your settings and the text configuration.

Only if this test gives positive results, VersionBackup will be able to send the desired mails.

4.3.4.4 Selection Field >Report on ... Backup Jobs<

This setting determines whether the mail shall report on all backup jobs or only on some selected ones. The button >Select< opens the dialog Job Selection.

In the dialog >Job Selection for the e-mails<, you select the backup jobs, the e-mail shall report on.

In the upper right corner of the dialog, you can select how the paths shall be displayed.

These are the possible settings:

- **Source Paths** The paths will be displayed where the **original data files** have been stored.
- **Destination Paths** The paths will be displayed where the **primary backups** are stored.

Click on the boxes at the left side of the paths to set or remove a checkmark.

If in the dialog >E-Mails< the selection >Only Selected Backup Jobs< is switched on, only the paths with checkmark will be considered.

4.3.4.5 Selection Field >List in the appendix<

You can determine that lists of file paths will be send as appendix of the mail. You can choose between the following lists:

- all files, which have been found in the Source Path (which do not match the Exclusion Conditions),
- all files, which had to be copied or
- all files with an error during their processing.

The lists have **ASCII format** and can be viewed with any text editor.

4.3.4.6 Selection Fields >When no error occurred / .. copy error<

Here, you determine whether the mail will be sent after any copy run or only if an error occurred or only if no error occurred.

If you create an e-mail configuration for copy runs without error and a different one for copy runs with error, then you can get different kinds of mails in the different situations.

4.3.4.7 Button: Message text >Settings<

If you like, you can configure the text which is sent in the e-mails.

The mail content will be assembled from the entered text and the variables (see below). If the regular text contains a variable name, it will be replaced by the actual information in the e-mails.

To avoid too long e-mails in case of serious errors, the number of error messages is limited to the value in the field **>maximum xx error messages<**. You can get further information from the file lists, which can be sent in the mail's appendix.

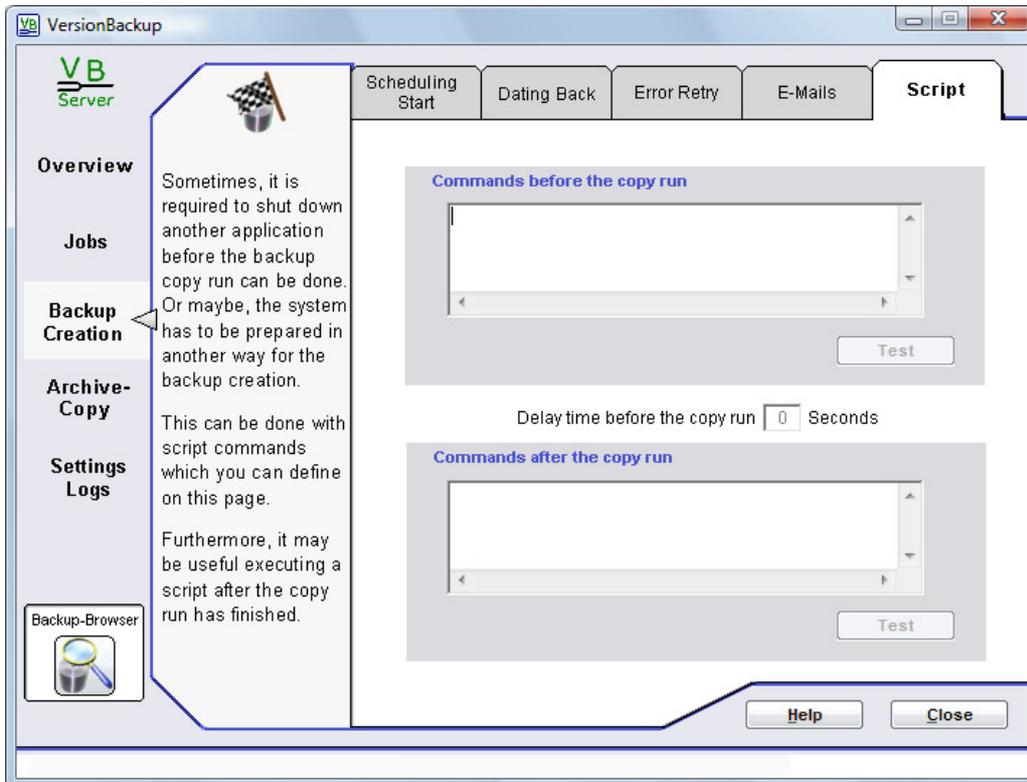
With the button **>Test<** on the page **>E-Mails<**, you can check the result of your text configuration.

Variables:

- **%SOURCEPATH** Source Path of the Backup Job
- **%SOURCENAME** Identifier Name of the Backup Job
- **%DESTPATH** Destination Path of the Backup Job
- **%ERRORCODE** Error number
- **%WINERRORTTEXT** Text of a Windows © error message
- **%VBERRORTTEXT** Text of an error message by VersionBackup
- **%SOURCEFILE** Path of the original file, which should be copied
- **%DESTFILE** Path of the destination file, which should be created
- **%NUMFILES** Number of copied files
- **%USEDSPACE** Data volume of the backups

4.3.5 Dialog Page: Script

Define script commands to be run before and after the backup creation



You can determine that a sequence of script commands shall be run before and after each backup copy creation.

Enter the commands into the **upper list**, which shall be executed before the copy run. And enter the commands into the **lower list**, which shall be executed after the copy run. Additionally, you can configure a **delay time** how long VersionBackup shall wait after terminating the pre-script until it starts the backup creation.

Usually, the commands will be executed synchronously. This means that VersionBackup will wait until the currently processed command has finished executing before it starts the next command.

Therefore, you must consider the following two facts:

- Please use only those commands, which do **not need any user interaction**. Otherwise, VersionBackup will wait infinitely for the user's confirmation. Because the copy run is done in the background, the dialogs waiting for your confirmation will usually not be visible. Then, the copy run would not be done or would not be terminated.
- Use only those commands, which will terminate. If a script command will hang, then VersionBackup will continue with the next step after **a timeout time**. The timeout time is determined in the Registry variable >ScriptTimeout< (see >Registry Settings for Special Configuration< (page 141)). Default value for the timeout is 60 seconds.

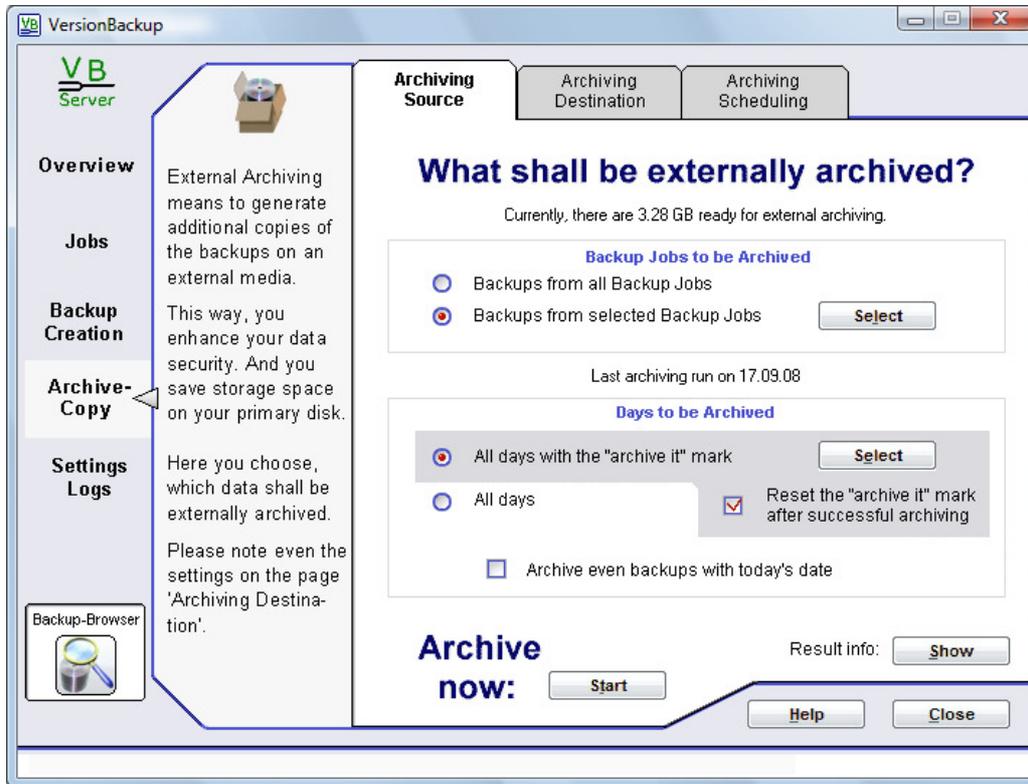
Additionally, it is possible running a **.VBS file** or **.JS file** with a Visual Basic Script or a Java Script. To do this, please enter the path of the script file.

With the **>Test<** buttons, you can check the each of the script operations.

4.4 Archive Copy

4.4.1 Dialog Page: Archiving Source

What shall be externally archived?



This dialog page is used to create external archives.

For the external archiving configuration, please note also the page >Archive Copy< - >Archiving Destination< (see page 78).

You find general information about the archiving process in:

- >General Remarks Regarding the External Archiving< (see page 14)
- >How to Create an External Archive Media< (see page 17)

Elements of the dialog >Archiving Source<:

4.4.1.1 Selection Field >Backups from all Backup Jobs<

The external archiving procedure will include either all Backup Jobs or only some Jobs, which can be selected.

If you select this option, **all Backup Jobs will be externally archived**, no matter whether they are defined at present or have been defined in the past.

If you want to archive only some Backup Jobs, please select the option >Backups from selected Backup Jobs<.

4.4.1.2 Selection Field >Backups from selected Backup Jobs<

The external archiving procedure will include either all Backup Jobs or only some Jobs, which can be selected.

If you select this option, **only those Backup Jobs** will be externally archived, **which are selected** by you. Then, also the Display of the data volume (see page 85), which is ready for external archiving, the archiving reminder messages and the automatic start of the external archiving run will consider only the selected Jobs.

Please press the button **>Select<** (see the following chapter) to perform the selection.

If you want to archive all Backup Jobs externally, please select the option **>Backups from all Backup Jobs<**.

See also: **>How to Create an External Archive Media<** (page 17).

4.4.1.3 Button: >Select< for the Backup Jobs

If you choose the option **>Selected Backup Jobs only<**, VersionBackup Server does not archive all Backup Jobs, but only those, which have been selected by you. To perform the selection, please click on this button **>Select<**.

In the upper right corner of this dialog, you can select how the paths shall be displayed.

These are the possible settings:

- **Source Paths** The paths will be displayed where the **original data files** have been stored.
- **Destination Paths** The paths will be displayed where the **primary backups** are stored.

The list shows both the currently configured Backup Jobs together with those Jobs, which have been configured in the past, if there are still backups for them stored.

Click on the boxes at the left side of the paths to set or remove a checkmark.

If in the dialog **>Archiving Source<** the selection **>Selected Backup Jobs only<** is switched on, only the jobs with checkmark will be considered. Then also the Display of the data volume, which is ready for external archiving, the archiving reminder messages and the automatic start of the external archiving run will consider only the paths, which are selected here.

Below the path list, it is displayed, how many Megabytes data are currently ready for external archiving in the selected jobs.

This display considers only those backups, which have the **"archive it" mark** set.

4.4.1.4 Selection Field >All days with the "archive it" mark<

For each day with backups, it is stored whether its data still shall be archived or not.

If you chose the setting **>All days with the "archive it" mark<**, only the backups of those days will be archived, where this is planned. But if you chose **>All Days<**, then each day will be archived, regardless of the "archive it" mark.

This way, usually it is prevented that one day is archived several times. Because with the setting **>Reset the "archive it" mark after successful archiving<**, VersionBackup remembers what already has been archived.

Additionally, you can set or reset the "archive it" mark manually. To do this, please click on the lower **>Select<** button.

4.4.1.5 Button: >Select< for the >Days to be Archived<

Click on this button if you want to check or edit the "archive it" marks.

The dialog **>Version Selection<** will open.

In this dialog, you can select the days which shall be externally archived. The dialog lists all days for which primary backups are stored.

Clicking on the square on the left side, you can switch each day on or off.

- A checkmark at the date means that the backups from this day still shall be archived.
- If the box is empty, then it is no more planned to archive that day. This is, when the backups day of the day already have been archived, e.g.
- If the box is red colored, then the backups from that day have been archived partly. Even then you can switch the day on or off by a mouse click. This means, the backups shall be archived again totally or they shall no more be archived.

Please note that the "archive it" mark only will be considered, if the setting **>All days with the "archive it" mark<** on the dialog page **>Archiving Source<** is active. If it is not active, then all days will be archived in any case.

When the backups of a day are archived, the "archive it" mark is automatically reset. But this is done only if the setting **>Reset the "archive it" mark after successful archiving<** is active.

If you set **>Backups from selected Backup Jobs<**, then only those days are listed, where the Backup Jobs have backups, which have been selected with the upper **>Select<** button in the dialog **>Archive Copy - Archiving Source<**.

Below the path list, it is displayed, how many Megabytes data are currently ready for external archiving in the selected days.

This value will be used also for the Archiving Reminder Messages and the Automatic Archiving.

4.4.1.6 Selection Field >"Reset the "archive it" mark after successful archiving<

For each day with backups, it is stored whether its data still shall be archived or not.

If this option is active, then this **"archive it" mark will be automatically deleted**, when the archiving procedure has run.

If you later start the external archiving with the option **>All with the "archive it" mark<**, these backups will not be archived once more.

If you only want to test the external archiving function, it is better to de-activate this setting.

4.4.1.7 Selection Field >All days<

If you choose this option, all primary day versions will be externally archived, even if they have been archived already in the past.

So you can perform an external archiving procedure including the complete set of backups, not only including the new, not yet archives versions.

If you alternatively want to archive only those versions, which have not been archived in the past, please choose the option **>All days with the "archive it" mark<**.

See also: >How to Create an External Archive Media< (page 17)

4.4.1.8 Selection Field >Archive even backups with today's date<

If you choose this option, also the backups, which already have been created for today, will be exported for the external archive media.

It makes not much sense to archive the data from today, if they will be changed by another backup run.

Therefore, this option usually should be switched off. Then, the data from today, which currently are not on their final state, will be archived later.

Please activate this field only if you are sure that the backups from today will no more be changed by another backup run. Or, if you - for any reason - need the backups from today in your external archive urgently.

If there are no backups from today yet, the setting of this field has no effect.

4.4.1.9 Button: Result info >Show<

After finishing the external archiving run, the **Archiving Result View** will be opened.

If you closed the Archiving Result View, you can open it again with this button.

In this window, the result messages about the archiving export runs are displayed.

You find the following information:

- How many files have been exported?
- What is the identifier of the media?
- To which direction the files have been exported?
- Which errors have been occurred?

If you prepared several external archive media in a single pass, separate information will be written for each media.

This information will be kept even if you run the next archiving export. You can scroll up to the older messages.

Only if you click on the corresponding **>Delete<** button on the dialog page **>Settings/Logs<** - **>Logging<** these messages will be deleted.

You can close this window and open it again with the button **>Show<**.

If you switched the archiving logging on also for the Copy Log (in the dialog **>Settings/Logs<** - **>Logging<**), then even the **general Copy Log file will show information about the archiving**.

4.4.1.10 Button: Archive now: >Start<

If you click on this button, the external archiving procedure is started, according to the settings on this dialog page.

Then, the dialog **>Media information for the external archiving<** will open, where you determine, how the information about the new external archive media will be stored in the data base. Afterwards, the archiving export will start.

In the dialog **>External Media<**, you determine, whether you want to store the new media in the backup data base.

If you select **>Yes<**, then the information about the content of the media will be stored permanently in the data base. **Usually, you should choose this option.**

Then, the file versions on the external archive media will be displayed by the Backup-Browser. If VersionBackup needs the media for a file recovery, you will be asked to insert it into the drive.

If you select **>No<**, then the information about the content of the media will be stored only until the VersionBackup application will be terminated.

This should be useful only in special situations (tests e.g.).

In the lower part of the dialog, you determine the media identifier. You can set the date and time. Furthermore, you can enter a comment, if you like. Only if there are several media with same date and time, the comment is mandatory.

Please do not forget to inscribe the media with this media identifier. For the file recovery, VersionBackup will ask you to insert this media, using this identifier.

Later, you can view the stored media in the dialog **>Managing the External Media<** (see page 128). There, you can change the media identifier or delete specified media from the data.

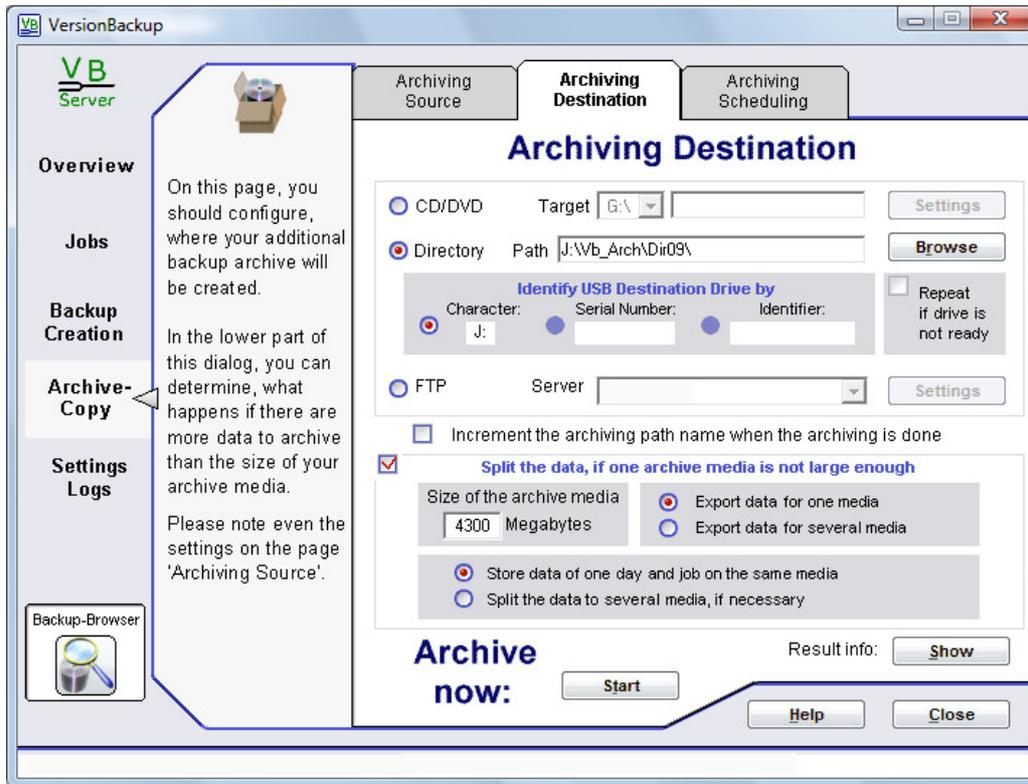
If you selected the options **>Split the data, if one archive media is not large enough<** and **>Export all data, which shall be archived, for several media<** (see page 82), VersionBackup will export the data for several media to several directories in one pass.

Then, the media identifier will be automatically modified, appending and incrementing a number. The final identifiers of the media will be displayed after the archiving export run in the **Archiving Result View** (see page 76).

See also: **>How to Create an External Archive Media<** (page 17)

4.4.2 Dialog Page: Archiving Destination

To which destination the external archiving shall be done?



This dialog page is used to create external archives.

For the external archiving configuration, please note also the preceding page >Archive Copy< - >Archiving Source< (see page 73).

You find general information about the archiving process in:
>General Remarks Regarding the External Archiving< (page 14)
>How to Create an External Archive Media< (page 17)

Elements of the dialog >Archiving Destination<:

4.4.2.1 Elements in the line >CD/DVD<

Choose this setting to burn your data **directly onto a CD or DVD** during the archiving procedure.

This is only possible if your computer is equipped with a burner drive.

Input Fields >Target for the CD/DVD burning<

The left field gives you the possibility to select the CD/DVD burner drive if your computer has more than one.

In the right field, you can enter a subdirectory on the disk.

Usually, this field may **remain empty**. Then, the root directory of the CD or DVD is taken as destination for the archiving.

But it is also possible to specify a subdirectory, where the archive data shall be stored.

Example 1:

In the following example, the CD burner has the drive character **D** and the primary Destination Paths are **>DestPath1<** and **> DestPath2<**.

If you choose the drive character **D: ** in the input line **>Target<** and leave the right field **empty**, then the date directories with the archived data will be created like this:

```
D:\DestPath1\2008-02-04
D:\DestPath1\2008-02-05
D:\DestPath2\2008-02-04
D:\DestPath2\2008-02-05
```

Example 2:

If you enter the subdirectory **>Backups<** to the right field of the line **>Target<**, then the date directory will be stored in the following paths:

```
D:\Backups\DestPath1\2008-02-04
D:\Backups\DestPath1\2008-02-05
D:\Backups\DestPath2\2008-02-04
D:\Backups\DestPath2\2008-02-05
```

If you activated the **multi session operation** in the **CD/DVD Dialog**, then you may not leave the line **>Target<** empty. Because every archiving run shall copy its data into a different subdirectory. This way, the data from different archiving processes will not be mixed.

If you activate the field **>Increment the archiving path name when the archiving is done<**, then the entry in the **>Target<** field will be modified, this means: on **>Backups<** will follow **>Backups01<**, **>Backups02<** etc.

Button >Settings for the CD/DVD burning<

If you clicked on the upper **>Settings<** button in the dialog **>Archiving Destination<**, the **>CD/DVD Dialog<** for the special CD/DVD burning options is opened.

Input Fields:

- **Media Identifier**
Here, you can enter an arbitrary name for the next burned disk.
- **Enter the size manually**
If this field is **not selected**, then the size of the disk will be determined **automatically** to use the entire space.
If the field is **selected**, then the maximum data volume to write on the disk is the value, which is **manually set** in the dialog **>Archiving Destination<** in the field **>Size of the archive media<**.
- **Verify disk after burning**
After the burning process, an automatic disk verify run will be done.
When the verify function is activated, the processing time for the archiving run will be significantly increased.

Please note that some burners have problems to execute the verify function. Then, error messages might be displayed even if the archive media is written correctly. In this case, please deactivate this feature.

- **No local file buffering**

Usually, all files will be copied to the local disk before the burning process will start.

But if the free space on the partition with the Temporary Directory (see page 90) is too small, please activate this item. This may slow down the processing speed.

If the data connection is slow (WLAN e.g.), this item may not be switched on. If the backups will be fetched by FTP, then they will be buffered in any case, regardless of the setting of this field.

- **Open tray, when finished**

After finishing with a desk, the burner drive tray will be opened automatically.

- **Don't finalize the disk (multi session operation)**

After burning the data, the CD/DVD will not be logically finalized to enable another writing operation.

If several archiving runs have been done with the same disk, VersionBackup will manage this media as several "virtual disks".

You should assign different subdirectories on the disk for each archiving run. Therefore, the input line **>Target<** on the dialog page **>Archiving Destination<** may not be empty if you will use the multi session mode.

Another recommendation: Activate the box **>Increment the archiving path name when the archiving is done<**. Then, switching to a new directory for the next archiving will be done automatically.

Caution: Multi-Session-CDs or -DVDs cannot be as safe as disks which have been finalized after burning.

If you like, you can create your archive disks as multi session disks. But we do not recommend to do this. You should finalize the disks after burning.

Some DVD formats do not allow multi session operation. Furthermore, it might occur that the data of the first session will be overwritten when you burn a second session. Some burners have general problems with multi session disks.

If there will appear any problem with the multi session operation, please deactivate this feature.

4.4.2.2 Elements in the line >Directory<

Please choose this setting if the backups shall be archived into a certain directory on a drive, which can be written like a hard disk.

This is useful ...

- when you archive to media, where the data can be written like in the standard way. These are Hard Disks, USB Sticks, ZIP Drives or MODs.
- when you archive to a server, which is accessed by LAN.
- if there are problems using the VersionBackup burning function with your burner device. Then, the archiving function should export the data to a buffer directory on the hard disk of this computer. Then, you can burn the content of that buffer directory to the CD or DVD with any standard burning software.

Input Line Path (Destination Path for the Archiving Export)

Please enter to this line to which path the archive copies shall be written.

If you chose **>Directory<**, because you want to copy the backups into a local directory or a LAN directory:

Enter the complete path of the archiving directory

(>F:\Archivedata01<, e.g.).

Server drives connected by LAN can be specified if you type a double backslash, the computer name and the path on the computer

(>\\Server\F\Archivedata01<, e.g.).

The path must be typed like it is shown in the title line of the Windows Explorer®.

If you chose **>FTP<** to archive the backups on a server which is connected by FTP:

Please select the server in the field below the **>Path<** line. (If not already done, you have to enter the connection data in the **>Server Dialog<**.)

Then please type the sub-path on the server into this **>Path<** line behind the server identifier (**>[Internet server]:Archive\Archivedata01<**, e.g.).

Button >Browse<

Press this button, if you do not want to enter the path for the external archiving destination manually, but choose it from the existing directory structure.

If you like to access a **network drive**, which is connected by LAN, please click on the **>Network<** button. A window with the currently available network connections will be opened, where you can do your selection.

The string in the field **>Directory name<** is the result of your selection. If you want to, you can key in the desired name directly into this field. This is necessary if you want to enter a non-existing path.

4.4.2.3 Elements in the Group >Identify USB Destination Drive by<

These settings are important if the Archiving copy run shall start automatically (see chapter 4.4.3).

If you are using a USB stick or a USB hard disk as destination for the Archiving Copy, it maybe will not be plugged in or switched on all the time. If you connect it or switch the backup drive on, Windows® will assign a drive character to this new drive. But depending on the other configuration of the computer, the USB drive may receive a character which is different from the original one. Then, the drive could not be found according to the path which is configured in the **>Dest Path<** line.

To make it possible to find the drive in spite of a changed drive character, it should not be identified by the character. VersionBackup can identify a USB drive by its serial number or the drive identifier, which is stored in any USB drive. Then, the current drive character does not matter anymore.

If the USB drive is identifies by the serial number or identifier, then other USB drives will no more be used as backup media. If you connect different USB sticks, VersionBackup will only use the one which is intended for the archiving.

Selection Box >Character<

This is the standard setting: Use the drive with the drive character at the beginning of the **>Dest Path<** input line.

Selection Box >Serial Number<

Use the drive with the displayed Serial Number.

The Serial Number is read automatically from the drive when it is plugged in and switched on (if necessary).

Selection Box >Identifier<

Use the drive with the displayed Drive Identifier.

The Drive Identifier is read automatically from the drive when it is plugged in and switched on (if necessary).

You can configure the Drive Identifier. This is done after a right-click on the drive in the Windows-Explorers® on the page **>Properties<**.

Selection Box >Repeat if drive is not ready<

If the item is **active**:

If the USB drive is not active at the scheduled copy time, then this will not be handled as an error. Instead, the copy run will be automatically restarted as soon as the drive will be plugged in (or switched on if necessary).

If the item is **not active**:

This is the standard setting. If the Destination Drive is not ready at the copy time, then this is an error. A restart at next USB activation will not be planned.

Warning: On many computers, you must dismount the USB drive before unplugging it or switching it off. If you ignore this, **data might be missing on the disk!**

4.4.2.4 Elements in the line >FTP<

Select this field if you want to archive the backups by FTP to a server, which is reached by the Internet, e.g.

If you switch to this setting for the first time, the dialog **>FTP Connections<** (see page 104) opens automatically. Here, you can configure the access data for the server. Later, you can open this dialog with the **>Settings<** button.

Selection Box >Server<

If you defined more than one server in the dialog **>FTP Connections<**, you can select with this box, which one of them shall be used as archiving destination.

Button >Settings for the FTP server<

This button opens the dialog **>FTP Connections<** (see page 104). Here, you can configure the access data for the server, which shall be used as archiving destination.

4.4.2.5 Selection Field >Increment the archiving path name when the archiving is done<

If this field is active, the archiving destination path name in line **>Target<** or **>Path<** will be automatically modified, when the archiving has been done.

This ensures using **a different archiving destination directory in each archiving run.**

The path name is modified in the following way:

- If the path does not end with a number, a number will be added.
- If the path ends with a number, the number will be incremented by one.

4.4.2.6 Selection Field >Split the data, if one archive media is not large enough<

If there are more data ready for external archiving than the capacity of one media, VersionBackup can split the data to several media. Please select this option, if this is desired.

If you burn the archiving data directly to a CD or DVD, the splitting according to the media size is done automatically.

Else, please enter the size of the data set, which shall be exported to one destination, into the field **>Size of the archive media<**.

Please note even the settings of the other parameters belonging to this function:

- **>Export data for one media<**
- **>Export data for several media<**
- **>Store data of one day and job on the same archive media<**
- **>Split the data to several archive media, if necessary<**

4.4.2.7 Input Field >Size of the archive media<

If you enabled the function **>Split the data, if one archive media is not large enough<**, VersionBackup will prepare only so many data for one external archive media, that its capacity will not be exceeded.

Please enter the size of the data set, which shall be exported to one destination, into this input field.

If you burn the archiving data directly to a CD or DVD, the splitting according to the media size is done automatically. The maximum data volume is the free space on the disk. Then, it is not necessary to specify the value in this field.

But if you like to set **the maximum data volume even when you burn the CD or DVD directly**, please click on the upper **>Settings<** button and set the field **>Enter the size manually<** in the **>CD/DVD Dialog<**. This, for instance, makes it possible to use the CD only partly.

4.4.2.8 Selection Field >Export data for one media<

If you choose this setting, VersionBackup will export so many data for archiving, which fit to one external archive media.

If you burn the archiving data directly to a CD or DVD, the size to be copied usually is determined automatically. Else, you can set the maximum archiving size in the field **>Size of the archive media<**.

Then the data export will stop. Before you will export further data, you will be able to change the media or burn the data to a CD or DVD.

VersionBackup will **export the oldest backup data first**. When the media capacity limit is reached, you can decide whether you want to export the next newer data for the next media. Alternatively, you can wait until more data are ready for external archiving.

If you like to export the data for several archive media in a single pass, you should use the alternative setting **>Export data for several media<**.

4.4.2.9 Selection Field >Export data for several media<

If you choose this setting, VersionBackup will export data for several archive media in one run.

First, so many data are exported, which **fit on the first CD or DVD** or which has been set in the field **>Size of the archive media<**.

If there are more data ready for external archiving, VersionBackup will ask for a new empty disk, if you **burn the data** directly.

If the data are archived to a **directory** (maybe by **FTP**), a new name for the destination path will be created, appending a number to the directory name.

Then, the data for the next media will be exported.

This will be continued, until all data are exported.

The final identifiers of the media will be displayed after the export run in the **>Archiving Result View<**.

If you like to export only the data for the first media, please use the alternative setting **>Export data for one media<**.

4.4.2.10 Selection Field >Store data of one day and job on the same archive media<

If you choose this setting, the data from one Backup Job and the same day will be completely stored to the **same external archive media**. This means, that each date directory will be exported completely and without any change for one media.

The advantage of this determination is that your backup archive will be more clearly arranged. It puts up with some non-used disk space on the external archive media. VersionBackup will begin the next media even if there is some space for a part of the backups from one day and Backup Job on the current media.

But in most cases, this disk space loss is small, because the date directories are much smaller than the external archive disk. Only if there is a huge amount of data from one day and Backup Job, this setting is disadvantageous.

If you want to split the data from one Backup Job and the same day to several external archive media to fill your archive media as much as possible, please use the alternative setting **>Split the data to several media, if necessary<**.

4.4.2.11 Selection Field >Split the data to several media, if necessary<

If you choose this setting, the data from one Backup Job and the same day will be **split to several external archive media**, if this is useful.

This fills the external archive media as much as possible. It puts up with a slightly less clearness of the backup archive.

In most cases, this split is not necessary, because the date directories are much smaller than the external archive disk. But if there is a huge amount of data from one day and Backup Job, this setting is advantageous.

If you want to keep the data from one Backup Job and the same day on the same external archive media to enhance the clearness of your backup archive, please use the alternative setting **>Store data of one day and job on the same archive media<**.

4.4.2.12 Button: Archive now: >Start<

When you click on this button, the external archiving procedure is started, according to the settings on this dialog page.

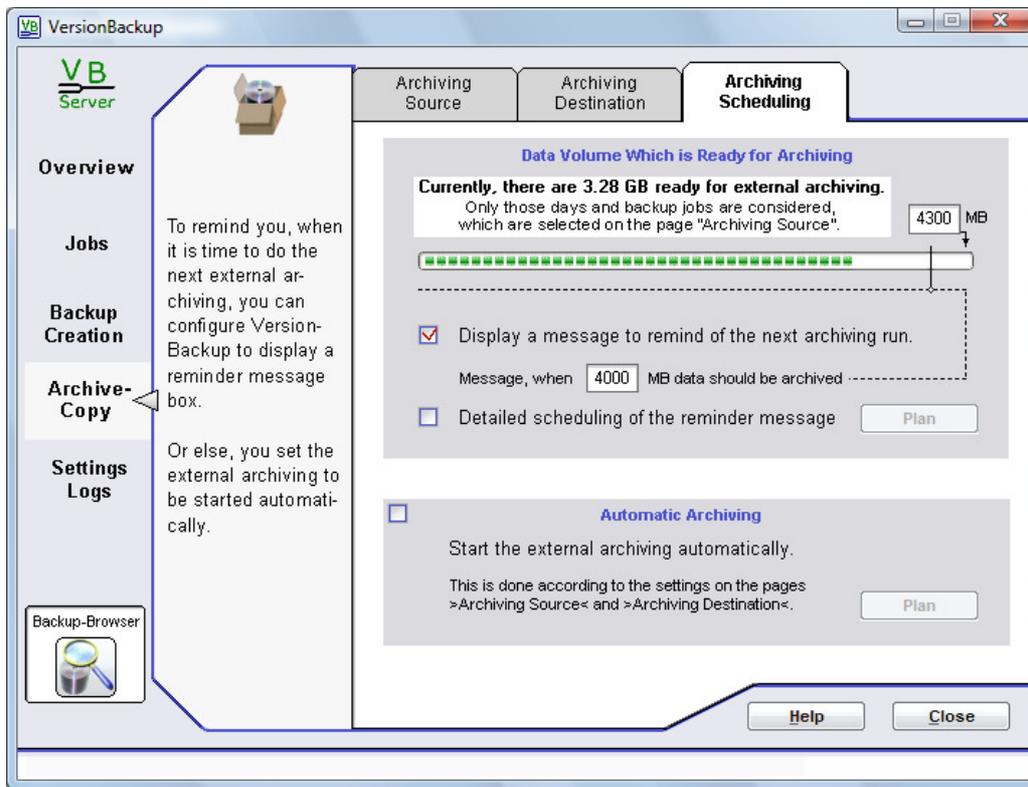
For details, see section 4.4.1.10 on page 77.

4.4.2.13 Button: Result info >Show<

The window with the Archiving Result Messages will be displayed again (see section 4.4.1.9).

4.4.3 Dialog Page: Archiving Scheduling

When should the next archiving be done?



This dialog shows how many data currently are available for external archiving. Furthermore, you can configure a reminder message, when the next external archiving should be done. Or else, you prepare the fully automatic external archiving.

The **green display bar** shows, how many backup data are ready to be copied to the external archive. The value additionally is displayed in figures (here 3.28 GB).

In the **field on the upper right side** (here 4300 MB), you can enter, to which value the full display bar corresponds. You can set it to the size of your external archive media, for instance. Then, the display bar will show, to which degree your archive media would be filled, if you would do the external archiving right now.

The **vertical mark on the broken line** (here just below the figure 4300) can be moved left and right with the mouse. Shift it to the filling proportion, where you like to get the archiving reminder message. This message level additionally is displayed **in figures** (here 4000 MB) and can be edited also typing in the desired number.

Due to this setting here, VersionBackup will display an archiving reminder message box, when there are more than 4000 Megabytes data ready for external archiving.

If you selected **>Backups from selected Backup Jobs<** on the dialog page **>Archiving Source<** (see page 73), the display considers only those Backup Jobs, which have been selected in the dialog **>Job Selection<**. This is valid also for the reminder messages and the automatic external archiving.

Further elements of the dialog:

4.4.3.1 Selection Field >Detailed scheduling of the reminder message< - Button >Plan<

If you enable this setting, the archiving reminder messages will not be determined by the movable mark on the green display bar, but they will be defined by a detailed scheduling.

When you click on the button >**Plan**<, the dialog >**Scheduling for the archiving reminder messages**< (see chapter after next and >Scheduling Dialog<, page 102) will open, where you can enter several detailed rules for the archiving reminder message.

4.4.3.2 Selection Field >Automatic Archiving<, Button>Plan<

If you switch on this function, the archiving export run will be started automatically.

When you click on the button >**Plan**<, the dialog >**Scheduling for the automatic archiving**< (see next chapter and >Scheduling Dialog< (page 102) will open, where you can enter several detailed rules to determine the automatic start of the archiving run.

The automatically started export runs will be done due to the settings, which are defined on the dialog pages >**Archiving Source**< and >**Archiving Destination**<. The media identifiers will be built from the date and time of the export run.

If you intend to store the data on a CD or DVD, of course you must ensure that there will be **an empty disk in the drive at the archiving time**.

If you will create your external backup archive on a hard disk drive, no manual action is necessary between the archiving runs.

In this case, you should use a different subdirectory for each archiving run. To ensure this automatically, switch the function >**Increment the archiving path name when the archiving is done**< on.

4.4.3.3 Dialog: Scheduling for the archiving reminder messages or for the automatic external archiving

In this dialog, you can define **one or several time scheduling rules**, which result in the archiving reminder messages or in the automatically started external archiving run.

Close the dialog with >**OK**<, if you want to accept your changes.

Close the dialog with >**Cancel**<, if you want to drop them.

Upper selection box: Day Selection

With this selection box, you define, on which days the reminder messages shall be displayed or the automatic external archiving shall be done.

You can set several settings (Button >**New**< below the List of scheduling records).

According to the setting of this box, additional input fields will appear on the right side. There, you can set the details of the configuration.

Possible settings and dependent additional input fields:

- Once
Date
Due to this scheduling record, the reminder message or the automatic archiving will be displayed only once. Then, the scheduling record will be deleted.
Date, when the action shall be done.
- Every Day
The message will be displayed every day.
- With fixed day interval
Next Date
Interval
After each message, which has been created or after each external archiving, which has been done, due to this scheduling record, the date for the next scheduled message or archiving run will be shifted a fixed number of days into the future.
Date for the next reminder message or archiving run.
Here you can enter the date for the first message or archiving run in the future. Later, you can view or change the date for the next message or run in this field.
Number of days between two reminder messages or archiving runs.
- On specific week days
Mo - Su
Week days, when the message will be displayed or when the archiving run will be started.
- Monthly
Every xx-th day of the month
Date day
Each month on a specific date day.
If you set the 31. here, the message will be displayed or the archiving run will be done on the last day of the month. (If the month is shorter, the run will be started on the 28., 29. or 30.)
- Data volume to archive
when xx MB are ready for archiving
When there is a certain volume of backup data ready for external archiving.
(only the jobs which are selected for archiving, see page 78)
- Fixed time after last archiving
Interval
Number of days after the last external archiving run.
This is independent from the way how the external archiving has been done.

Lower selection box >Clock time or situation<

In this selection box, you define when the reminder messages will be displayed or the external archiving run will be started on the configured day.

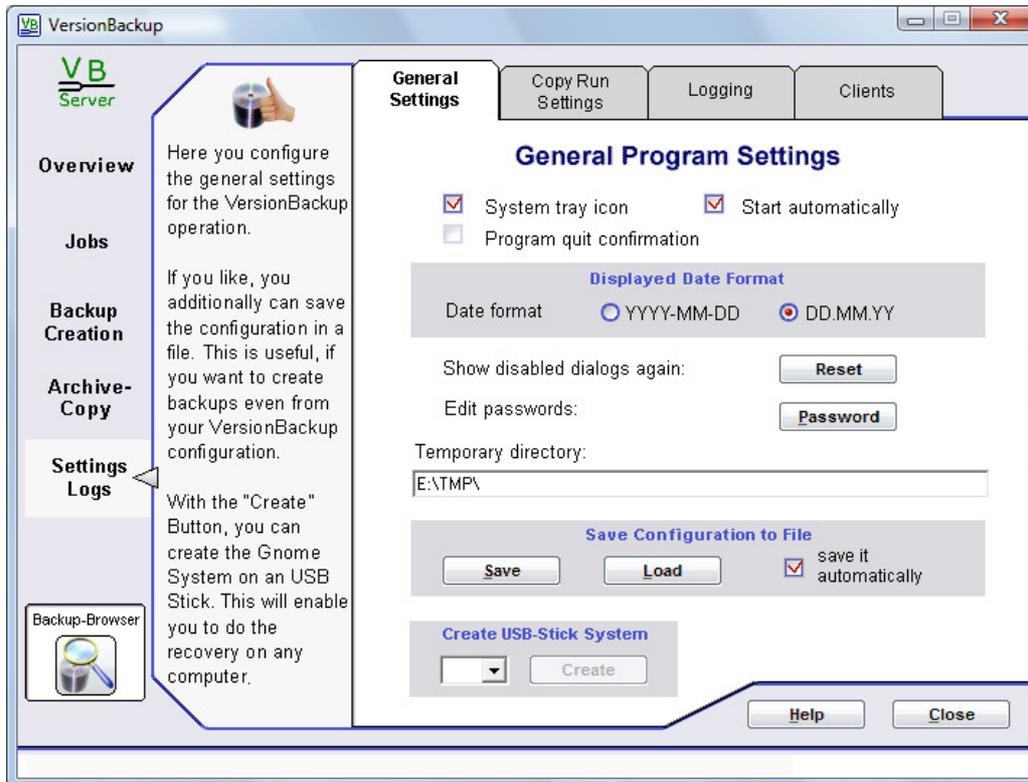
According to the setting of this box, additional input fields will appear on the right side. There, you can set the details of the configuration.

Possible settings and dependent additional input field:

- On the first start each day (on computer start or log in)
- On each computer start (on computer start or log in)
- At a fixed clock time
Clock time
- After the backup creation Immediately after finishing the primary backup copy run

4.5 General Settings

General program parameters



On this page, you can set general configuration parameters for VersionBackup.

Elements of the dialog >General Settings<:

4.5.1.1 Selection Field >System Tray Icon<

If you set this option, a VersionBackup Icon will be displayed in the System Tray (in the bottom right corner of the screen).

Then, a click on the >Close< button, will not terminate VersionBackup, but only minimize all windows. With a double click on the System Tray Icon, you can restore VersionBackup quickly and comfortably. When you right-click on the icon, a menu window will open, where you can select the desired function.

If you really want to terminate the VersionBackup application, please right click on the System Tray Icon and choose >Shut Down VersionBackup<.

4.5.1.2 Selection Field >Start automatically<

If you set this option, the VersionBackup configuration application (these dialogs) will start at any start of Windows®. The dialogs are initially invisible. But they can be opened quickly and comfortably with a double click on the System Tray Icon (in the bottom right corner of the screen).

To start automatic backup copy runs, it is not necessary setting a checkmark into this box. The copy process will start independently.

4.5.1.3 Selection Field >Program Quit Confirmation<

If you set this option, VersionBackup will not terminate immediately after you click on the **>Close<** button, but it will ask whether to terminate or not.

If the function is switched off, VersionBackup will terminate immediately when you click on the **>Close<** button.

(Exception: if **>Task Bar Icon<** is set, then VersionBackup will only minimize its windows.)

4.5.1.4 Selection Fields: Displayed Date Format

Here, you can choose in which format the date is displayed on the screen.

- **JJJJ-MM-TT** General Format (Year-Month-Day)
- **TT.MM.JJ** European Format (Day.Month.Year)

This is only a display setting. It has no effect on any functional properties.

4.5.1.5 Button, Dialog: >Show disabled dialogs again<

There are some dialog boxes, which have a selection field **>Please do not display this question again<** or **>Please do not display this message again<**.

If you set a checkmark into this field before closing the dialog, it will never be displayed again. (So, you normally have no chance to switch it on again.)

With a click on this button, all those dialogs will **be switched on again**.

As soon as they will be displayed again, you can hide those dialogs again, which are not needed.

4.5.1.6 Button >Password<

Click on this button to open the **>Password Dialog<**, where you can enter the passwords for the **ZIP-Password Protection**.

There, you can

- enter or change the **Password**, which is used for the encryption.
- set the **Password activation** time for the recovery.

Details see page 108.

4.5.1.7 Input line >Temporary directory<

For the compression and data management, VersionBackup must store some files temporarily.

This is done in the directory, which is set here.

You can change the path, if you want to place the temporary directory to another location.

If you do this, please not the following:

- The path must contain the string `\temp\` or `:\TMP\` (no matter whether in capitals or not).
- The disk or partition, where the temporary directory is placed, should have some Gigabytes free space.
- The temporary directory should be placed on a hard disk of this computer.
- Of course, the currently logged-in user must have full access rights to this directory.
- If there are files to save, which have a very long file path (more than 200 characters), you should set the path of the temporary directory as short as possible.

4.5.1.8 Buttons: Save Configuration to File

VersionBackup stores its configuration (Backup Job, Settings, dynamical data) in the registry. This storage location provides high security and fast, flexible access.

With this function, you can store the configuration **additionally** in a file.

This gives you the following **advantages**:

- You can create backups of this file (by placing it inside a VersionBackup Source Path e.g.).
- Before re-installing your computer, you can export the configuration. After re-installing, you can load the configuration easily and without errors.
- You can transfer the configuration to another computer.
- If you are working with different parameter sets (see page 138), you can transfer the configuration to another parameter set easily.

Input Fields:

- Button **>Save<** exports the configuration to a file. You will be asked for the file path and name.
- Button **>Load<** imports the configuration from a file.
Caution: the existing configuration will be overwritten.
- Selection field **>save it automatically<**: If it is checked, the configuration changes will be written to the file in real time. Clicking the button **>Save<** is not necessary.

4.5.1.9 Group >Create USB-Stick System<

This function will create the "VersionBackup Gnome"

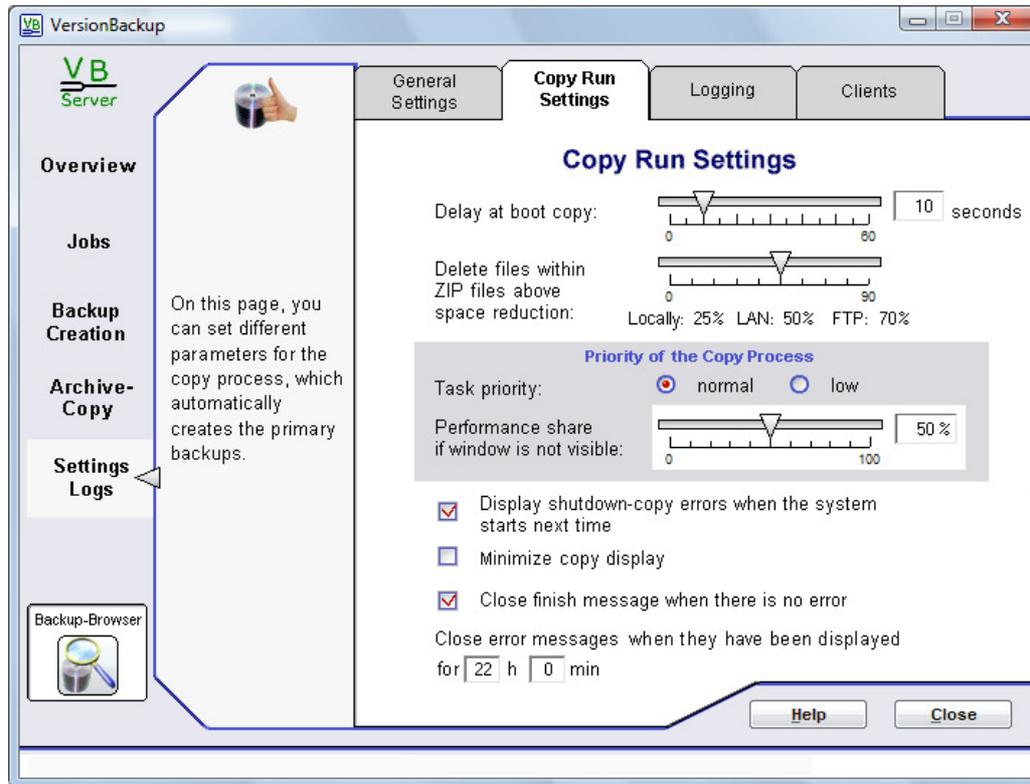
This is a VersionBackup recovery system on an USB stick. You can run it on any computer to do the VersionBackup recovery. Details can be found in chapter 3.8.

In the Selection Field, the currently active USB drives are listed. You can select the drive where the Gnome shall be copied to.

Then, click on the **>Create<** button. This will copy the Gnome software and the configuration files to the USB drive.

4.5.2 Dialog Page: Copy Run Settings

Special parameters for the primary backup creation



On this page, you can set the special configuration for the creation of new primary backups.

Elements of the dialog >Copy Run Settings<:

4.5.2.1 Slide >Delay at boot copy<

If VersionBackup is configured to create the backup copies at start-up, there are a lot of other processes running at that moment. This could be a problem,

- because storage drive might be not yet available (network access e.g.)
- because other processes could block some files..

Sometimes it is better, if VersionBackup does not start the copy run immediately, but **wait some time** before other starting processes are ready.

In this field you can set, how many seconds VersionBackup shall wait before starting the backup copy run.

4.5.2.2 Slide >Delete files within ZIP files above space reduction<

This slide configures how far single files will be deleted from a ZIP file.

If the slide is shifted to the left side, then single files will be always deleted. If it is at the rightmost limit, then parts of a ZIP file will only be deleted if this will reduce the size of the ZIP file a great deal.

Details see chapter 6.15.

4.5.2.3 Selection Fields >Task Priority<

The backup copy process can impair the other processes on the computer if it is running with a high task priority. The computer may be rather busy creating the copies.

To **optimize the system behavior**, you can choose between these two settings:

- **High task priority:** VersionBackup will finish the copy run as fast as possible.
- **Low task priority:** During the copy run, the impairment of the other processes will be low.

See also the next chapter.

4.5.2.4 Slide >Performance share if window is not visible<

If you set a value smaller than 100% here, the **VersionBackup copy process uses the computer only partly**. This is recommendable, if during backup creation, the computer is also used for other purposes.

Example: if you set 50%, the backup creation uses the processor time to only the half. The copy process can run in the background while you are working with the PC as usual.

The processor time share will be reduced only if the VersionBackup copy window is **not visible on the screen**. This is, if it is either minimized or if it is covered by other windows. While the copy window is visible, VersionBackup always copies as fast as possible.

You can set the value either shifting the slide or entering the desired value into the figure field on the right side of the slide..

4.5.2.5 Selection Field >Display shut down-copy errors when the system starts next time<

Generally, it is possible that errors occur during the backup creation (if files cannot be accessed, e.g.). Then an error message is displayed, which has to be confirmed by the user.

If the backups are created at shut down, displaying error messages is a disadvantage. The computer does no more shut down, instead of this, it waits for the confirmation.

When this field is activated, messages about errors during the shut down copy will not block the shut down process.

The messages are stored and displayed when Windows© starts next time.

4.5.2.6 Selection Field >Minimize copy display<

Usually, during the backup creation a dialog is displayed informing the user about the copy progress.

In some cases, the display of this dialog is not desired because it disturbs the other work.

If you activate this field, then the progress dialog will no more be visible.

It will be minimized in the task bar. If you like, you can open it from there.

4.5.2.7 Selection Field >Close finish message when there is no error<

This setting determines the display after successful backup creation.

If this field is **active**, then the final message will be displayed for some seconds. Then it will be **closed automatically** and the copy process terminates.

If this field is **not active**, then the final message will **stay on the screen** until it has been confirmed by a mouse click.

This is an advantage if the computer is running unattended. Then, you see even after some time, whether a copy run has been done.

4.5.2.8 Input Fields: Close error messages when they have been displayed for xx h yy min

Generally, it is possible that errors occur during the backup creation (if files cannot be accessed, e.g.). Then an error message is displayed, which has to be confirmed by the user.

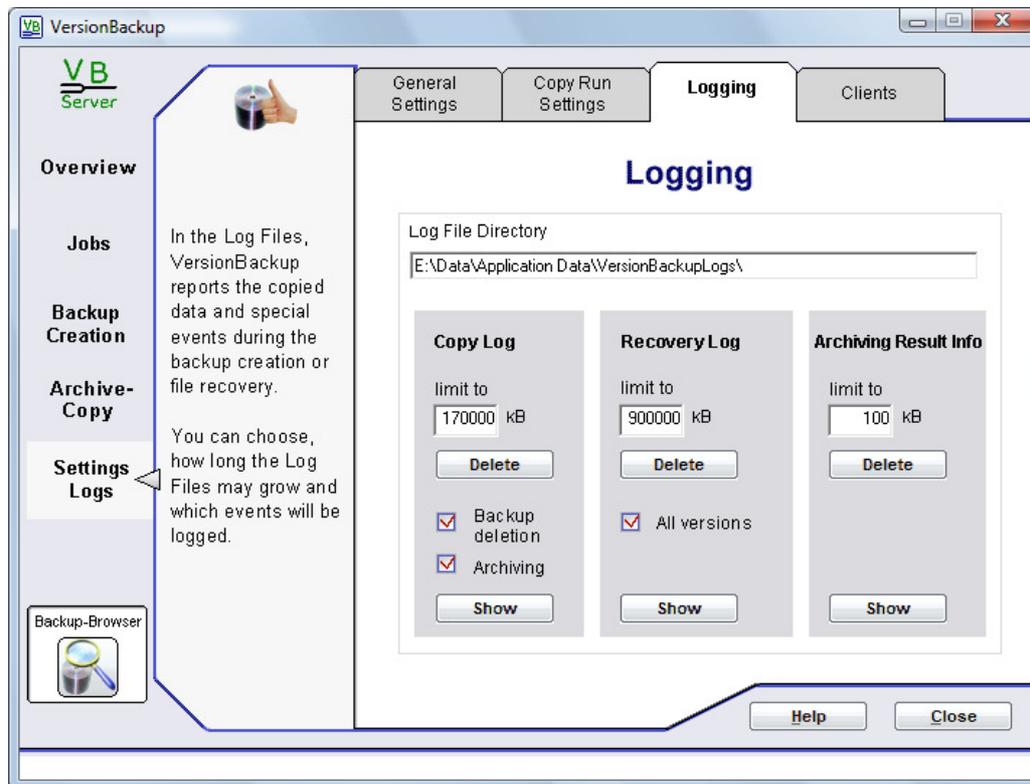
If the computer is running unintended for days, this error message would be on the screen for a very long time. At the latest, when the next copy run is started, the error messages should be closed.

After the waiting time, which is configured here, the error messages will be automatically closed.

Later, you can get all **necessary information** about the copy errors **from the logs**.

4.5.3 Dialog Page: Logging

Control the logging, which reports the VersionBackup action



VersionBackup reports all important events in several logs.

On this dialog page, you can configure this logging.

The logging is divided into three ranges:

1. Copy Log

This log reports the primary backup creation.

Furthermore, it gets entries about the data base repair, deleting backups (can be switched off) and the external archiving (can be switched off).

2. Recovery Log

This log reports the file recovery operations (restoring the files from the archive).

3. Archiving result information

This log reports the external archiving operations.

Even the entries about past archiving runs remain available until they will be deleted.

Additionally, archiving information can be written into the Copy Log.

To prevent the log files from growing too big, their length is automatically limited to the value, which is set in the field **>limit to<**.

4.5.3.7 Button: >Show< a Log File

When you click on one of these buttons, the log of the copy, recovery or archiving operations is displayed.

If new log entries may be added, while the log window is open, please press the **F5** key to update the display.

If you want to transfer a part of the text to other applications, please mark it by mouse dragging or by pressing the cursor keys while the Shift key is pressed. Then, please copy it to the copy buffer with **Ctrl+C** or with the menu item **>Edit< - >Copy<**.

To find a certain string, please press **F3** or click on the menu item **>Edit< - >Find<**.

Please enter the string, which you want to find, into the edit line **>Search for:<**.

If the field **>Capitals different<** takes a checkmark, capital letters and small letters will be distinguished.

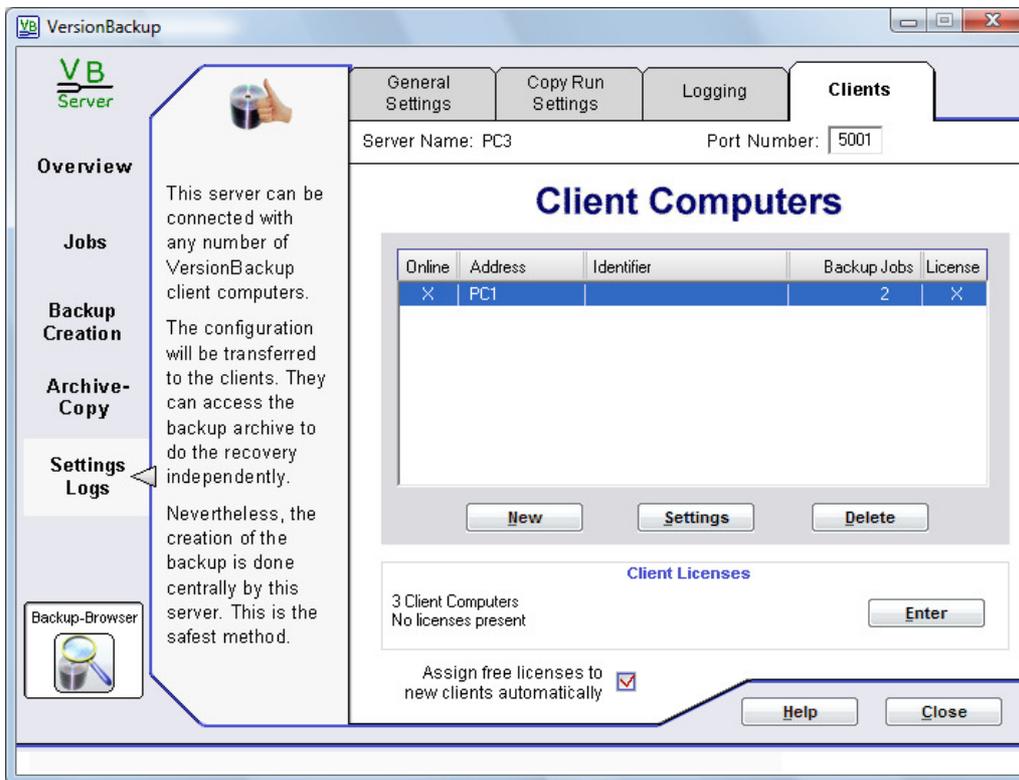
The search begins at the current cursor position. With **>downwards<** and **>upwards<** the search direction is determined.

If the first string position is found, you can search for the next position with **Ctrl+F3**, without opening this dialog again

Ctrl+F4 will close the window.

4.5.4 Dialog Page: Clients

Parameters of the client computers operating with this VersionBackup Server



VersionBackup Server can offer its backups to several client computers.

On the clients, the software issue **>VersionBackup Client<** is used.

The clients do not create their own backups. The backup creation and maintenance of the backup archive is done by the server. This guarantees that the guidelines for a systematic backup creation will be kept.

The users at the client computers can fetch old file or directory versions without the help of the administrator accessing the part of the backup archive, which is visible in "VersionBackup Client".

On the server, it will be set which backup jobs shall be accessible for **every client computer**. The client might be able to modify the backup creation configuration. On the server, it is set whether this shall be possible.

If the server is **online** when VersionBackup Client starts, then the up-to-date configuration will be automatically transmitted to the client computer. The files, which shall be recovered by the client computer, can be copied to a drive on the server. Or else, they can be copied to a local drive on the workstation.

If the server is **not online** when VersionBackup Client starts (because it is defect, e.g.), then the client computer works independently with the last stored configuration. If the backups are stored on a different backup station (not on the server's drives), then the client can access the backups without the server's attendance. It can restore the files on its local discs. It is easy to do this. Therefore every user can fetch his backups without the help of the system administrator.

The dialog **>Client Computers<** is used to configure the connection to the workstations which already are registered on the server. If a client contacts the server, it usually will be entered into this list automatically.

All clients can be configured individually. To do this, please select a client in the **List of the Client Computers** and click on the button **>Settings<**.

The **VersionBackup Client License** management is started clicking on the button **>Enter<**, which opens the dialog **>Client Licenses<**.

Requirements for the connection between client and server:

- Server and client must be in the same **Subnet** of the LAN.
- On the server, **>VersionBackup Server<** must be active, on the client computer **>VersionBackup Client<**.
- The **Computer Name of the server** or the TCP/IP Address of the server must be entered in the dialog **>Connection Data<** on the client. (The Computer Name is displayed on the server on top of the dialog **>Client Computers<**.)
- **The Port Number**, which is set on the server in the dialog **>Client Computers<** must be also set in the dialog **>Connection Data<** on the client computer.
- **For each client computer, a Client License is required** (One Server License includes the first Client License.)
- On the server, the backup jobs, which shall be visible on the client, must be defined. (To do this, please select the client in the list of and click on the **>Settings<** button.)
- If a **Firewall System** is used on the server, then the VersionBackup application or the used Port must be opened.

The dialog **>Client Computers<** is used to configure the connection to the workstations where the application **>VersionBackup Client<** is installed.

Elements of the dialog >Clients<:

4.5.4.1 Display line >Server Name<

This line displays the network name of this server.

The Server Name or the TCP/IP Address of the server must be entered at the client computers in the dialog **>Connection Data<**.

4.5.4.2 Input Field >Port Number<

This is the number of the port, which is used for the communication connection to the clients.

If the Port Number is set to a value which is in use by another process, you must change it here. The Port Number must be entered also at the client computers in the dialog **>Connection Data<** (see page 124).

4.5.4.3 List of the Client Computers<

This list contains all client computers, which have a configuration on this server or which already registered themselves on the server. If a client contacts the server, it usually will be entered into this list automatically.

Select the client, which you like to configure.

Clicking the button **>New<** starts the input of an additional client data set (usually this is not necessary because the client computers are entered automatically into the list).

If you want to delete the selected client computer from the list, click on the button **>Delete<**.

Clicking the button **>Settings<** the dialog **>Client Computer Settings<** will be opened, where you can edit the settings for the selected client computer.

Elements of the dialog:

- **Computer name of the client** This is the name of the client in the network. The computer name of the client is displayed on the client in the dialog **>Connection Data<** (see page 124). When the client registers on the server for the first time, its name usually is entered automatically.
- **Description/Comment** This is an arbitrary description for the client computer. You can enter any text or leave it blank.
- **May change the configuration** If there is a checkmark in this box, then the client can view and modify the backup configuration and the backup copy run can be started by the client.
Warning: Then, the user at the client could enter even wrong settings. Then, the backups would no more be created properly.
- **May configure the password protection** If there is a checkmark in this box, then the client can modify the encryption settings and change the password.
Warning: If the password, which may be changed on the client, is lost, then the backups can no more be recovered (even not on the server).
- **License assigned** On of the existing licenses has been assigned to this client computer. This is necessary to operate the client.
- **Last access** This output field displays the last time when the client computer fetched the configuration from the server. If the Client application currently is running, then the text “Online” is displayed.
- **Backup jobs** The backup jobs, which are marked with a checkmark in this list, are visible in the Backup-Browser on the client computer. Only the backups from these backup jobs can be recovered with VersionBackup on the client. To enable VersionBackup Client operation, at least one backup job must be offered here.
Warning: It is possible accessing the backups even without VersionBackup using other software. If due to privacy requirements, it must be impossible that the workstation users access foreign backups, you must lock the access also by the general network access right management.

4.5.4.4 Display Field >Client Licenses<

This field displays a summary about the **status** of the Client Licenses.

You can change the license assignments after clicking on the button **>Settings<**.

After a click on the button **>Enter<**, the dialog **>Client Licenses<** will be opened.

4.5.4.5 Dialog >Client Licenses<

In this dialog, you can check the licenses for the client computers and enter additional ones.

Elements of the dialog:

- **Server Register Number** This field displays the Register Number, which has been entered for the license of this **Server**. The Client Licenses are linked to this Server Register Number.
- **Table: Register Number, Client Computer** This table displays the Register Numbers of the Client Licenses. If the license is already assigned to a client computer, then the client name is written in the right part of the table.
- **Enter more Register Numbers:**
 - **from a file** if this field is active, then after click on **>Enter<**, a License File can be loaded from a file (see below).
 - **manually** if this field is active, then after click on **>Enter<**, a new Client Register Number can be typed in.
 - **Enter** starts the Client Register Number input (from a file or manually).
- **Close** stores the new input and closes the dialog.

If you want to load **more Register Numbers from a License File**, please select **>from a file<** and then click on **>Enter<**.

You can select and open the License File, which is stored on your disk, in a selection box. Then, the Register Numbers, which are stored in the file, will be loaded.

The type of the License Files is **.VLF** ("VersionBackup License File"). They contain a list of Client Register Numbers. Each of them entitles you to use VersionBackup Client on one workstation. The License File corresponds to a certain Server Register Number. It can be used only for the Server for which it has been issued.

If the field **>Assign free licenses to new clients automatically<** on the dialog page **>Clients<** is active, then the entered licenses will be automatically given to the clients, which not yet have a license.

If **for this Server**, the Product Activation has not yet been done, then the **Product Activation Wizard** will be launched after loading the License File.

4.5.4.6 Selection Field >Assign free licenses to new clients automatically<

If there is a checkmark in this field, then unused licenses will be assigned automatically to client computers, which do not yet have a license.

This function should be switched off only if some computers shall not receive a Client License.

4.5.4.7 Dialog >Connection Data<

This dialog is available only with **>VersionBackup Client<**. It is used to configure the network connection to **>VersionBackup Server<**.

The client must contact the server to load the backup configuration. Only if this has been done at least once, VersionBackup Client operation is possible.

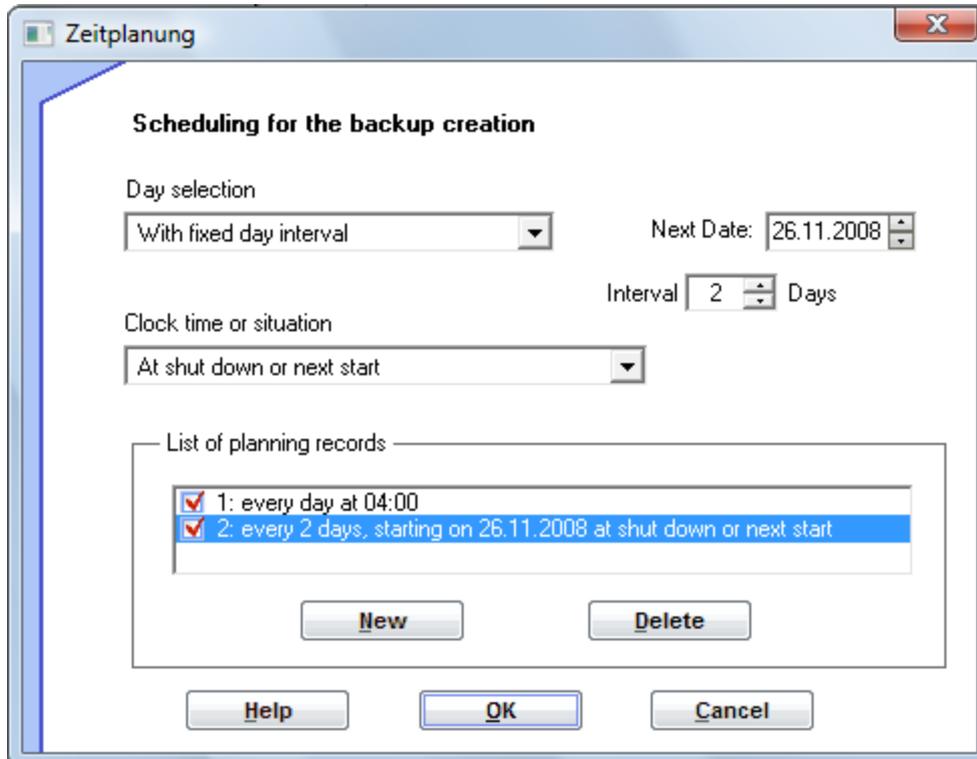
If the server should be not inaccessible later, then the client will continue operating with the settings which have been stored at the last contact.

Elements of the dialog:

- **Computer name of this client** Here, the network name of this client computer is displayed. The name is used to identify this computer in the **>Client Configuration<** on the VersionBackup Server.
- **Network Identification of the server** Please enter the **computer name** or the **TCP/IP Address** of the VersionBackup Server here. This server's computer name is displayed on the server in the top line of the dialog **>Clients<**.
- **Port number of the server** Number of the port of the VersionBackup Server, which is used for the communication to this client. This number is configured on the server in the top line of the dialog **>Clients<**.
- **Connection test** This button is to test whether a VersionBackup Server can be currently reached with these settings.
- **Load configuration** When you click on this button and the server can be reached with these settings, then the **configuration will be loaded from the server**. Usually clicking this button is not necessary, because the configuration is **loaded automatically** whenever the VersionBackup Client application is started. You can also reload the configuration **by pressing the >F5< key in the Backup-Browser**.

4.6 Special Dialog Pages

4.6.1 Scheduling Dialog



Using the Scheduling Dialog, you can **plan** different events **in detail**. You can determine the date or time for one of the following actions:

- creation of primary backups
- creation of Full Backups instead of Incremental Backups
- archiving reminder messages
- automatically started external archiving run

In the Scheduling Dialog, you can define one or several time scheduling rules. The scheduling dialog is opened with a click on the button **>Plan<**.

According to the settings in the selection fields, additional input fields will appear on the right side.

The Scheduling for the **>archiving reminder messages<** or for the **>automatic external archiving<** is described in chapter **>Archiving Scheduling<** 4.4.3.3 (see page 86).

Elements of the **>Scheduling Dialog<**:

4.6.1.1 Selection Box **>Day Selection<**

With this selection box, you define on which days the action shall be done.

You can set several settings (Button **>New<** below the List of scheduling records).

According to the setting of this box, additional input fields will appear on the right side. There, you can set the details of the configuration.

Possible settings and dependent additional input fields:

- Once
Date
Due to this scheduling record, the action will be done only once. Then, the scheduling record will be deleted.
Date, when the action will be done.
- Every Day
The action will be done for each day.
- With fixed day interval
Next Date
Interval
After each action, which has been done due to this scheduling record, the date for the next scheduled action will be shifted a fixed number of days into the future.
Date for the next action.
Here you can enter the date of the first future action. Later, you can view or change the date for the next action in this field.
Number of days between two actions.
- With fixed backup interval
All xx days with backups
From the xx. backup
The backup runs will be counted (used in the dialog >Scheduling for the Full Backups<).
If the file changes are seldom, then the backup runs are seldom and also are the Full Backups.
Period of backups with one Full Backup.
Number of backups from now until the next Full Backup.
- On specific week days
Mo - Su
Week days, when the action shall be done
- Monthly
every xx-th day of the month
date day
Each month on a specific date day.
(If you set the 31. here, the Full Backup will be done for the last day of the month. (If the month is shorter, the Full Backup will be done for the 28., 29. or 30.)

4.6.1.2 Selection Box >Clock time or situation<

In this selection box, you define when the action shall be done on the configured day.

According to the setting of this box, additional input fields will appear on the right side. There, you can set the details of the configuration.

Possible settings and dependent additional input field:

- On the first start each day
on the first server start
- On each computer start
on server start
- At a fixed clock time
Clock time
- repeatedly in fixed intervals
Using this setting, you define not only one action but a series repeating as long as the Server is running.
E.g.: if you set >every hour (on the hour)<, then the action will be done each time an hour is completed.
- On the activation of a USB drive
When an USB drive has been plugged in or switched on, which has been configured as copy destination
- On log out or shut down
(If you are using the operating system Windows Vista®, please note also the chapter >Shut Down with Backup Creation on Windows Vista®< (page 137))

4.6.1.3 List >List of scheduling records<

This list displays the scheduling records, which already have been entered.

If you click on one line, the input fields above will be switched to this entry. Then you can edit this scheduling record.

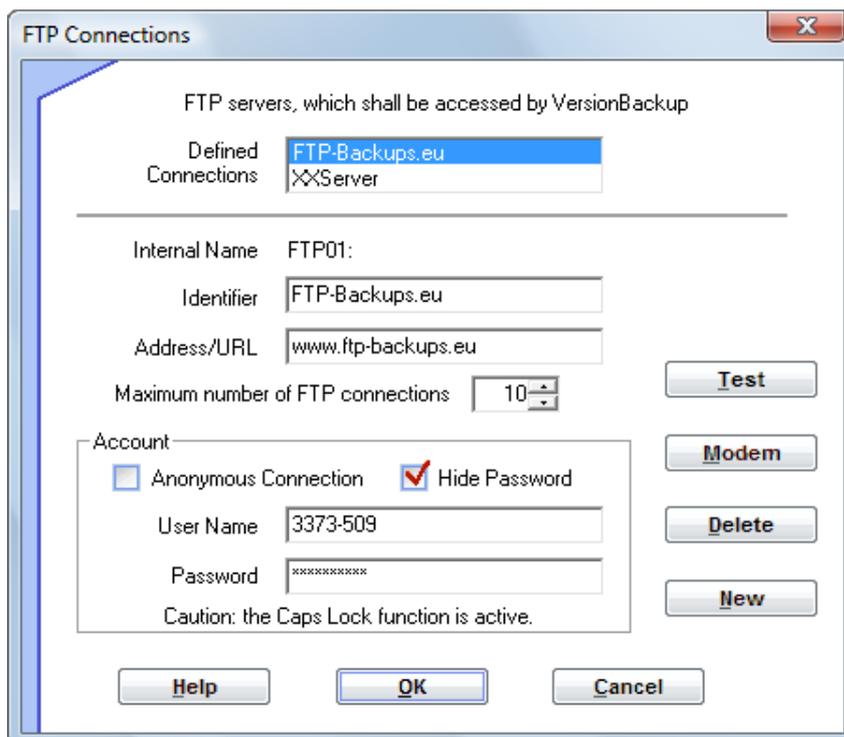
A scheduling record will only be executed if there is a checkmark in the box at the left side. With a mouse click, you can remove or set this checkmark. This enables you deactivating a scheduling record, if it shall not be executed temporarily.

If there are many records in the list, you should increase the height of the list. To do this, please drag the lower border of the dialog downwards, using the mouse.

Below the list, there are two buttons:

- **New**
It adds an **additional scheduling record**.
The currently selected entry will be doubled. Then, you can modify the settings of one of the entries.
- **Delete**
The selected list entry will be removed (after a confirmation request).

4.6.2 FTP Connections Dialog



In this dialog, you can define the connections to the FTP servers, which are used as destination for the **primary backups** or for the **external archiving**.

You can define as many server connections as you want.

Elements of the dialog >FTP Connections<:

4.6.2.1 Selection List >Defined Connections<

(This field will only be displayed if there are several servers defined.)

Here, the **already defined** connections are listed.

All fields below show the parameters of the server, which is **selected in this list**.

If you want to check or change the parameter set of a server record, please first click on its entry in this list to switch to its parameters.

If you want to add another server entry, please click on the >**New**< button.

4.6.2.2 Output Field >Internal Name<

This field displays **the short name of the server**, which is used for VersionBackup's internal data management.

For example, this Internal Name is used in the path specification in the log files.

(Path "FTP02:Sub" means the subdirectory "Sub" on the FTP server with the Internal Name "FTP02".)

4.6.2.3 Input Field >Identifier<

Here, you can enter an **arbitrary name or short description for the server**.

This identifier will be displayed in the >**Server**< Selection Box and in brackets in the FTP paths.

You also may leave this field empty. Then, the entry in the field >**Address/URL**< will be taken as identifier.

4.6.2.4 Input Field >Address/URL<

Please enter the address (Internet Address e.g.) into this field, where the server can be found.

If it is an Internet Address, the entry may start with >**www.**<. But this is not necessary.

The prefix >**ftp://**< at the beginning of the string is not necessary.

Important: Please enter only the **address of the server share** here. Do **not** enter **any subdirectory** on the server. The subdirectory path is not in the server configuration. It is defined in the path specification. (Of course, you can use several subdirectories on the same server.)

After finishing the input of the server data, you can use the >**Test**< button to check the connection immediately.

4.6.2.5 Input Field >Maximum number of FTP connections<

Some FTP servers refuse any further access from one IP Address, if too many connections (sessions) have been opened at the same time. This is to prevent from web attacks to block the server.

In some situations, VersionBackup opens several connections to the same server to achieve maximum performance. If the server tolerates only some connections, please reduce this setting to an optimum value.

If you set the value smaller than 3, then VersionBackup's functionality will be impaired. You should not set it less than necessary.

4.6.2.6 Selection Field >Anonymous Connection<

Some FTP Shares allow **access without user name and password**. These connections are called >anonymous connections<.

Activate this field if you want to use an anonymous connection.

We advise you against using anonymous connections for your backups, even if you password protect the data. On an anonymous share, everybody can delete your data if he likes to do this!

4.6.2.7 Selection Field >Hide Password<

If this field is active, then the password will **not be displayed** in this dialog. Instead of this, a line of asterisks will be shown.

The setting has no affect on the connection to the server.

4.6.2.8 Input Field >User Name<

To access a **FTP share, which is not anonymous**, a User Name is required. With this User Name and the corresponding Password, the user authorizes himself.

Please enter the User Name into this field, which is defined for the FTP share.

If you want to use an anonymous connection (without User Name and Password), then set a checkmark into the field >**anonymous connection**<.

After finishing the input of the server data, you can use the >**Test**< button to check the connection immediately.

4.6.2.9 Input Field >Password<

To access a **FTP share, which is not anonymous**, a User Name and Password is required. With these data, the user authorizes himself.

Please enter the Password into this field, which is defined for the FTP share.

If you want to use an anonymous connection (without User Name and Password), then set a checkmark into the field >**anonymous connection**<.

After finishing the input of the server data, you can use the >**Test**< button to check the connection immediately.

4.6.2.10 Button >Test<

After finishing the input of the server data, you can use this button to check immediately if the connection is possible with the configured data.

VersionBackup will then access the server and perform some tests. Then the results will be displayed.

4.6.2.11 Button >Modem<

This button is only necessary if your computer **accesses the Internet with a modem**.

When you click on it, then the **>Modem Dialog<** opens.

In this dialog, you can perform some special settings if a modem is used for the Internet connection.

Dialog elements:

- **>Hang up the modem after VersionBackup's configuration, recovery and archiving<**
If this field is active, the modem connection will be released when the Internet actions of the VersionBackup configuration application are finished.
- **>Hang up the modem after backup creation<**
If this field is active, the modem connection will be released when the creation of primary backups by FTP is finished.
- Modem Configuration **>Settings<**
Click on this button to open the Windows© configuration dialog for the modem.

Please note: Windows© provides more configuration settings for the Internet access by modem.

Usually, these are done together with the Internet Browser.

4.6.2.12 Button >Delete<

This button deletes the currently displayed server data record from the server configuration.

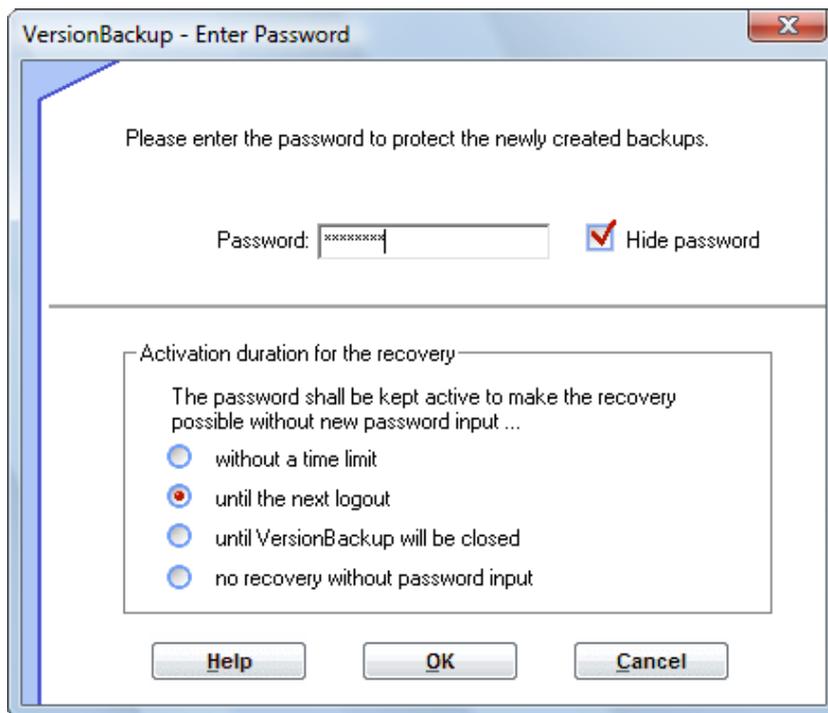
If several server connections are defined, then the other connections, which currently are not selected in the list **>Defined Connections<** will not be not affected.

4.6.2.13 Button >New<

This button adds a new server connection to the server configuration.

After clicking this button, you can enter the settings for another server.

4.6.3 Password Dialog



This password dialog has two parts:

1. Enter or change the password for the ZIP files

In the upper part, you define the password which is used to encrypt the backups, which will be created in the future.

If a password already has been entered before, you find two password input lines. The first one is to enter the old password. The second one is for the new password.

Selection field: **>Hide Password<**:

If there is a checkmark in this field, the passwords will not be displayed in this dialog. They will be hidden by asterisks.

2. Define the activation duration of the password for recovery operations

In the lower part of the dialog, you can define, how long the passwords will be used for recovery processes without a need to re-enter them again.

Elements of the >Password Dialog<:

Upper part: Enter Password:

4.6.3.1 Selection Field >Hide Password<

If there is a checkmark in this field, the passwords will in this dialog. They will be hidden by asterisks.

4.6.3.2 Selection Field >Enter one more password<

(This field is visible only if the password has to be entered for the recovery.)

If you know that several passwords will be required for your recovery operation, it may be easier to **enter them in a direct sequence**. Then, you should activate this field and you will get the opportunity to enter the next password immediately.

If you do not activate this field and more passwords are needed, then you will be asked for the next password as soon as files will be processed which cannot be decrypted with the known passwords.

4.6.3.3 Button >Cancel<

Click on this button if **you cannot enter more passwords or do not want to do this**. The recovery operation will be done as far as it is possible with the already known passwords. VersionBackup will display a detailed message about the result.

Lower part: activation duration of the password:

4.6.3.4 Selection Field >without a time limit<

The password will be active for recovery without a limitation.

It will not be necessary to enter it again for a recovery.

This makes the recovery from password protected backups as easy as if the backups would not be password protected. Nevertheless, the backups are protected against access from other computers.

Caution: Even if the password is permanently active, you must keep it in mind or note it to make it possible to re-enter it. If you have to re-install VersionBackup after a serious disturbance, you must enter the password to get access to your backups.

4.6.3.5 Selection Field >until the next logout<

The password will be kept active for recovery operations until you **logout** or **shut down** the computer.

If you will do a recovery after this, you have to enter it again.

4.6.3.6 Selection Field >until VersionBackup will be closed<

The password will be kept active for recovery operations **until VersionBackup will be closed** (with the button >Close< e.g.).

If you will do a recovery after this, you have to enter it again.

4.6.3.7 Selection Field >for this recovery only<

The password will not be kept active for other recovery operations. You will have to **enter it again for the next recovery operation**.

4.6.3.8 Selection Field >no recovery without a password input<

The password will not be kept active for recovery operations. You have to **enter it again for each recovery operation**.

Please read also the information in the chapter >Using the ZIP-Password Protection< (see page 26), especially to chose a proper password.

4.6.3.9 Information: Currently, already a password is activated for the recovery

This hint is displayed, when you **increase the activation duration of the passwords, while there are already stored passwords active**.

For security, it is not allowed to increase the activation duration of already stored passwords.

Therefore, the already stored recovery passwords will be deleted.

Imagine the **following example**:

You entered a password and configured that it shall be valid only until the next shut down.

This means, it shall be possible recovering the password protected backups without re-entering the password until the next shut down.

Now, imagine that you leave the room for some minutes. Meanwhile, another person switches the activation duration of the recovery password to "unlimited".

You return, shut down your computer and believe that your backups are protected, because according to your setting, the password should be deactivated on shut down.

Later, the other person restarts your computer. Because he set the password to unlimited, it is still active. Now, the other person is able to recover your backups.

This scenario is impossible, because it is not allowed to increase the activation duration of already stored passwords.

If you click on >**OK**<, the stored recovery password will be deleted. If you need it again for a recovery operation, you will have to enter it again.

If you click on >**Cancel**<, then the activation duration will not be increased.

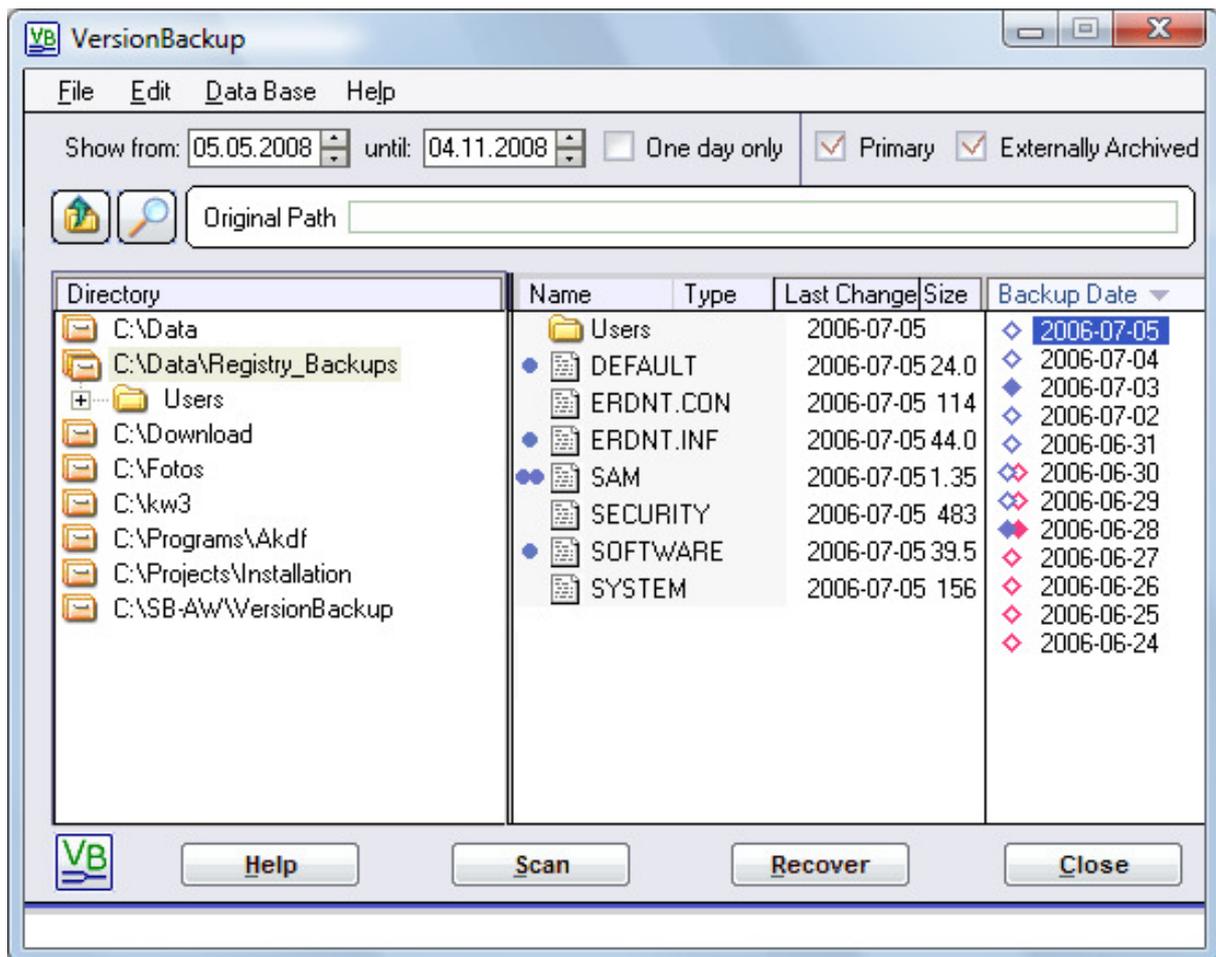
This setting is irrelevant for the creation of new backups.

5 Working with the existing Backups

5.1 Backup-Browser

The Backup-Browser displays all the file versions in your backup stock.

The backups are sorted to their Source Path, Subdirectory of the Source Path, file names and versions (change date).



In contrast to the Windows-Explorer©), you will not only see the structure:

Path - File,

but the structure:

Path - File - Version.

This means, that you cannot only chose the files (at a given date) but also the date of the files.

The blue and red symbols ● on the left side of the file names and version dates are explained in sections 5.1.8 and 5.1.9.

Elements of the Backup-Browser:

5.1.1 Date field >Show from<

To keep the display clear, even if you have a big backup archive, you can restrict the display range to a certain date interval.

For this display filter, the **backup version date** from the right column is used.

The date in this field is the **start date** of the display interval. Initially, it is set with a date, which is 6 months ago.

You can set this display start date to any other date.

5.1.2 Date field >Show until<

To keep the display clear, even if you have a big backup archive, you can restrict the display range to a certain date interval.

For this display filter, the **backup version date** from the right column is used.

The date in this field is the **end date** of the display interval. Initially, it is set to today.

You can set this date to any other date.

5.1.3 Selection Field >One day only<

If this field has a checkmark, the Backup-Browser will display only those backup versions, which have been created **for a specified date**.

You can enter the date in the date edit field.

5.1.4 Selection Field >Primary Backups<

If this field has a checkmark, the Backup-Browser will **display the primary backups**.

The primary backups are those ones, which usually are created daily on the hard disk.

If you want to see only the externally archived backups, please click on the field to remove the checkmark.

5.1.5 Selection Field >Externally Archived Backups<

If this field has a checkmark, the Backup-Browser will **display the externally archived backups**.

The externally archived backups are those ones, which have been exported with the external archiving function.

If you want to see only the primary backups, please click on the field to remove the checkmark.

5.1.6 Output Line >Original path<

This output field shows the path, which is currently selected in the list >**Directory**<.

The path consists of the Source Path and possibly a subdirectory path.

This is the path, where the **original files have been located**, before having been copied by VersionBackup.

In the list >**Name**< the files are displayed, which are present in this path.

5.1.7 List >Directory<

This list is used for the display and selection of the directories, from where backups are stored.

This is the path, where the original files have been located, before having been copied by VersionBackup.

It is the original path, where the files have been located, before having been copied by VersionBackup.

The paths, which are marked with the symbol  are the **Source Paths**, which have been configured on the dialog page >Jobs< - >Job Selection<.

The paths, which are marked with the symbol  are **subdirectories to the Source Paths**.

You can open and select the paths with the mouse or with the cursor keys.

The selected path name is displayed in the line >Original Path<.

In the list >Name<, all files are displayed, which have been present in the selected path, when a backup copy run has been done.

5.1.8 List >Name<

This list is used for the display and selection of the files in the directory, which is selected in the list >Directory<.

The objects, which are marked with the symbol  are **subdirectories in the selected path**. They can be opened with a double click or with the return key.

The objects, which are marked with the symbol  are **files**.

Files and subdirectories can be selected. This is done either with a mouse click or with the cursor keys when the shift key is pressed. By dragging with the mouse or by clicking with pressed shift or control key, you can select several objects.

If no object is selected, then the whole list content is taken as selected.

In the list >Backup Date<, all the versions are displayed, which are present to the selected objects.

If one of these versions is selected, you can recover the files by clicking the button >Recover<.

Left beside the file symbol, a blue **existence symbol** can be displayed:

- Filled circle: There is a backup copy of this file from the date, which currently is selected in the rightmost list >Backup Date<.
- Double circle: There are several backup copies of this file from the selected date, which have been created at different clock times.
- ▲ Triangle with tip up: On the selected date, this file did **no more exist**. It is a file from the time **before the date**, which is selected in the rightmost list.
- ▼ Triangle with tip down: On the selected date, this file did **not yet exist**. It is a file from the time **after the date**, which is selected in the rightmost list.

If there is no symbol by the file name, then there **is no backup copy for this date** because the file has not been changed.

If there is a **Full Backup** for the selected date, then all the files, which were present on that date, will be marked with a circle.

If you click on the items in the headline (>Name<, >Type<, >Last Change< or >Size<), the list will be sorted by the entries in that column. (>Type< will sort the list by the file type, that is the string after the last dot in the file name.) A second click will reverse the sort order.

The columns **>Last Change<** and **>Size<** show the dates of the file when it has been saved for the last time. Of course, older file versions have different change times and often a different size. **>Last Change<** and **>Size<** are displayed even for the subdirectories.

You can change the column widths dragging the **marks in the headline** left and right of **>Last Change<** with the mouse.

If you type a character while the file list is ordered by name, then the selection mark will jump to the first file with its name starting with the character.

5.1.9 List **>Backup Date<**

This list is used for the display and selection of the versions of the files, which are selected in the list **>Name<**.

The **blue and red rhombs** on the left side of the date values mean this:

- ◊ Rhombs with a white center indicate an **Incremental Backup**.
- ◆ Filled rhombs mean a **Full Backup**.
Blue rhombs mean **primary** backups,
◊ red rhombs mean **externally archived** backups.
- ◊◆ Double blue-red rhombs indicate backups which are stored both on the primary disk and on an external archive media.

One of these date versions can be selected with a mouse click. Alternatively, you can move the selection with the cursor keys.

If you click on the **>Recover<** button or double click on a version date entry, you will start the recovery of the selected version.

This list usually is sorted with the **newest date on top**. A mouse click on **>Backup Date<** in the headline, will reverse the sorting order.

5.1.10 Button **>Scan<**

The Backup-Browser displays the backup versions, which are stored in the backup data base. These are the primary backups and all backups, which have been archived to external media when the function to store the media content has been activated.

With this button, you can import backup information, which is missing in the backup data base: After the button click, you can select the directory path where the backup files are located.

If an external media is not known in the Data Base, you should scan it to have its content on-hand any time. To do this, please insert the media into the drive and click on the **>Scan<** button.

If you had to start the function **>Repair Data Base<**, because your data base had been damaged, maybe the information about the external archive media is affected, too. Please repeat scanning your media even in such a case.

You can view the media, which are stored in the data base, with the function **>Manage External Media<** (see page 128).

After clicking the Scan button, the dialog **>Scan External Archive Media<** opens, where you perform the required settings for the scanning.

If you want to scan several media, please click on the button **>Scan<** (in the Backup-Browser) again.

Further information: Section **>Scan External Archive Media<** (page 131).

5.1.11 Button >Recover<

Clicking this button, you start the **recovery function**.

It copies the saved files back to their original location or any other location on the disk system.

For the recovery, it is necessary to select a version date in the list >**Backup Date**<. Then from the selected files or paths, the version of the selected day will be recovered.

If there are several file versions from different clock times assigned to the day, which is selected for the recovery, then a dialog to **select the clock time** (see **Fehler! Verweisquelle konnte nicht gefunden werden.**) will be displayed after the click on the Recovery button.

After this, the dialog >**Recovery**< opens (see chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**), where you can perform the further actions for the file recovery.

You can also start the recovery, if you double click on a file name or on a version date.

See also next chapter.

5.2 Recovering Files

When you click on the button >Recover<, you will start the recovery from the files and directories which are selected in the both columns on the left in the Backup-Browser.

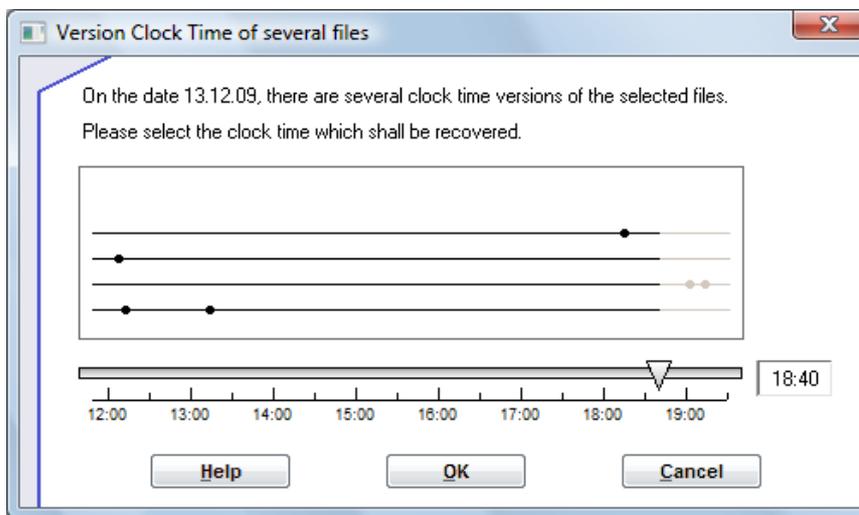
5.2.1 Select the clock time of the file

To do a data recovery, you select the files in the Backup-Browser together with the date of the file versions you like to restore.

If there exist several backup file issues from the selected day, VersionBackup will ask you which one you like to get.

If only **one file** has been selected, then a dialog with a selection list will be displayed. In this list you can select the clock time of the file.

If you selected several files, then the recovery clock time will be set for the whole set of files:



The Clock Time Slider initially is set to the end of the day. If you keep this setting, then the final state of the day will be recovered.

But you can **shift** the slider **left** to earlier clock times. Then, all files will be copied in a way to recover the earlier time of the day. (Of course, this is only possible as far as backup files are existing.)

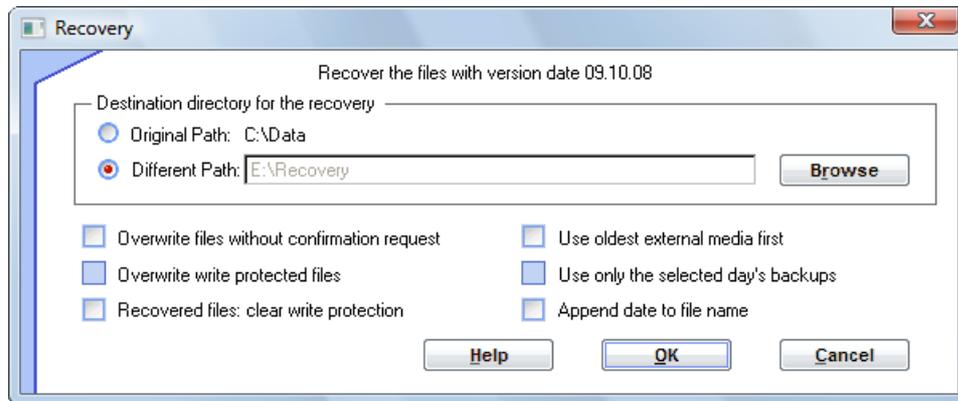
In the graphic display, each horizontal **line** represents the backups of one file. If you move the mouse cursor on a line, a small window will appear displaying the corresponding file name.

Each **dot** on the lines represents an existing backup copy of the file. If you move the mouse cursor on a dot, then the clock time of that version will be displayed.

For the recovery, the newest file versions will be used, which is not newer than the time defined by the slider setting. Those files, which are displayed without any dots, have not been saved for that day because they had not been changed. These files will be recovered from the newest former day - regardless of the setting of the slider.

5.2.2 Dialog >Recovery<

The path and the version date of the files, which have to be recovered, have been selected. Now, the other parameters for the file recovery can be set.



The most important input is the >**Destination directory for the recovery**<. You can select the Original Path. This is the directory, from where the files have been copied in the backup copy run. But you also can enter any other path.

When you click on the >**OK**<-button, the recovery copy will be done.

5.2.2.1 Selection Field >Original Path<

If you choose this option, the recovery procedure will copy the files back to the location, from where they originally have been copied in the backup copy run.

Caution: If you recover the files to the Original Path, the newer files, which are stored there now, will be overwritten by the older backup versions, if you confirm this.

If you are not sure, whether these new files may be overwritten, please enter a path as destination directory, which is empty or does not yet exist.

5.2.2.2 Selection Field >Different Path<

If you choose this option, the recovery procedure will copy the files to the location, which is specified in the Input Line.

5.2.2.3 Input line >Different Path<

The recovery procedure will copy the files to this **path**.

Files, which originally were located in the path, which has been selected in the left list in the Backup-Browser, will be copied **into the directory**, specified in this line. Files, which have been located in a subdirectory, will be copied to a **corresponding subdirectory** of this path.

If you want to change this destination directory, you either can enter it directly into this line. Alternatively, you can select it from the directory structure by clicking the button **>Browse<** on the right side.

Caution: **If the directory you have specified is not empty, the newer files, which are stored there, will be overwritten by the older backup versions** if you confirm this.
If you are not sure, whether these new files may be overwritten, please enter a path as destination directory, which is empty or does not yet exist.

5.2.2.4 Button >Browse<

Click on this button, if you do not want to enter the path manually, but select it from the existing directory structure.

The string in the field **>Directory name<** is the result of your selection. If you want to, you can key in the desired name directly into this field. This is necessary if you want to enter a non-existing path.

5.2.2.5 Selection Field >Overwrite files without confirmation request<

If this selection field is active, the existing files in the recovery destination path will be overwritten by files with same name and type without a question.

Caution: **The existing files usually are newer than the backup files. Therefore, the overwriting could result in a loss of data.** You should allow the overwriting only if you are sure, that you do not need the existing file versions any more.

If this selection field is **not activated**, VersionBackup will ask you, if there is a file with same path, name and type, whether it may be overwritten.

5.2.2.6 Selection Field >Overwrite write protected files<

With this setting you can generally allow, that **even write protected files can be overwritten** during the recovery.

If this selection field is **not activated**, VersionBackup will ask you, if there is a write protected file with same path, name and type, whether it may be overwritten.

5.2.2.7 Selection Field >clear write protection<

If you choose the option **>Write protect the backup files<** on the dialog page **>Backup Job Settings<** (see page 45), VersionBackup has set the write protection flag for all backup files.

If you recover the files, it can be advantageous, if the **general write protection will be removed again**.

To do this, please select this field. Then none of the recovered files will be write protected. The write protection of the files in the backup stock will remain.

If the compression function is switched on, the write protection will not be set for the backup files. Therefore, it is not necessary to activate this field to remove the write protection.

Please do not activate this feature, if you did not write protect all backup files and if it is important for you, that some of the files are write protected and some others are not. Only then, the information, which files may be written will be kept.

5.2.2.8 Selection Field >Use oldest external media first<

It is not unusual, that one file version will be stored several times on different media or in different date directories. Especially, if there are several Full Backups saved on your external archive media, there will be many files, where VersionBackup can make the decision, which of the equal copies shall be used for the recovery.

If this selection field is **not checked**,

VersionBackup will start requesting to get the data from the media, which can be **most easily accessed**. This may be the hard disk or the currently inserted CD or DVD.

If the needed file version is not present there, then a list with identifiers of the media, which can be used, will be displayed. You can insert the media, which you have at hand first.

If this selection field is checked,

VersionBackup will choose the way for **maximum security**.

It provides maximum security using the oldest media for recovery.

If a virus or a system disturbance has affected the computer, it might have modified the file without changing the last change time stamp. Therefore, backup copies, which have been created later, might be useless regardless they seem to be identical due to their time stamp.

From all backup copies with the desired time stamp, the oldest one provides the maximum chance to get non-affected content for the recovery.

Therefore, if you argue that the newer backup copies might be damaged, please activate this option. In this case, the recovery may be a bit tiring, because maybe you will be asked to insert a lot of external archive media.

5.2.2.9 Selection Field >Use only the selected day' backups<

If many files have to be copied in this file recovery run and this box is **not checked**,

then VersionBackup will recover all files **as they existed on the disk on the selected date**.

This means, even those files will be recovered, which have not been changed on the selected date.

If no Full Backup has been created for that day, the unchanged files will automatically be collected from the backup runs of the earlier days.

If this box is **checked**,

VersionBackup will recover only those files, which have **been copied to the backup of the selected day**. Files, which have not been copied to that backup because they have not been changed, will not be recovered.

Therefore, you will get only those files, which were new or have been changed on the selected day. (If there was a Full Backup for that day, you will get all files in any case.)

5.2.2.10 Selection Field >Append date to file name<

If this selection field is active, the name of the recovered files will be changed to indicate the version date of the recovery process.

The date which you chose as recovery date in the rightmost list of the Backup-Browser will be appended to the name of each recovered file (before the last dot in the combination >filename.type<).

Example:

If you chose November 18th, 2008 as recovery date then file >MyFavoritePhoto.jpg< will be recovered with the name >MyFavoritePhoto_2008-11-18.jpg<.

The appended version date is useful if you do not want to overwrite the original files by the recovered ones. After the recovery, you will have both the original files and the recovered files in the same directory.

Furthermore, you can easily compare several file versions if the version date is appended to the file name. Recover them with appended version date into the same directory. Then, you have several file issues side by side.

5.2.2.11 List of files, which have been created later than the selected date

This list will be displayed only if there are files, which match this condition described below.

If you selected many files or a complete directory, it is possible, that some of the files did **not yet** exist at the version date, which you have chosen.

These files **only exist with newer versions**. But as you require a recovery of a state, when these files were not present, they will not be copied.

The concerning files are registered in the list.

If previously a corresponding dialog box (see chapter 5.2.4.1) has been displayed, the reason for this can also be that there is no Full Backup available, which is at least as old as the chosen recovery date.

5.2.2.12 List of files, which did no longer exist at the selected date

This list will be displayed only if there are files, which match this condition described below.

If you selected many files or a complete directory, it is possible, that some of the files did **no longer** exist at the version date, which you have chosen.

These files **only exist with older** versions. But as you require a recovery of a state, when these files were not present, they will not be copied.

The concerning files are registered in the list.

5.2.2.13 Button >OK<

This button starts the recovery of the files.

The specified file versions will be copied into the recovery destination path and corresponding subdirectories.

5.2.2.14 Button >Cancel<

This button **aborts** the recovery function.

The Dialog will be closed without any change. You can continue your work with the Backup-Browser.

5.2.3 Request To Insert an External Archive Media

5.2.3.1 Dialog: Media Insert Request

If the recovery needs an external archive media, VersionBackup will ask you to insert it displaying the media identifier. If you did not enter a special media name, then the identifier consists of the date and time of the archiving run.

Please insert the media into the drive.

If the media already is in the drive, this dialog has been displayed, because **the media cannot be accessed**.

Then maybe the access path is not set correctly. Please check and correct the path, where VersionBackup can find the data on the media. You can use the **>Browse<** button to select the path from the directory structure.

If the correct path, where the media can be accessed, has been entered, VersionBackup will remember it for the next time.

If you choose **>Skip<**, then VersionBackup will try to do the recovery without this media. It will copy the file versions from other media as far as this is possible (unless you selected **>Use only the oldest media (for maximum security)<**, page 118).

But after **>Skip<**, maybe the recovery will remain incomplete.

5.2.3.2 Dialog: List of media, which can be used for the recovery

For the recovery, external archive media are required.

The file versions, which shall be recovered, are **spread on several media**. Often, the same file version has been copied to several media. Therefore, maybe **not all media** in the list will be **necessary**.

You can choose which media you want to insert first. But **we recommend using the topmost listed media first**. These media contain the largest number of required file versions. Maybe, some of the media listed below will not be needed, if you insert the upper ones.

If a file on one media should not be readable, VersionBackup will automatically try to get the same version from another media.

You can follow this process in the Recovery Log File, if you switched the item **>All versions<** on the dialog page **>Settings/Logs<** - **>Logging<** on.

If the media already is in the drive but **cannot be accessed**, obviously the media path is not set correctly.

Please check and correct the path, where VersionBackup can find the data on the media. You can use the **>Browse<** button to select the path from the directory structure.

If the correct path, where the media can be accessed, has been entered, VersionBackup will remember it for the next time.

5.2.3.3 External Media Path for the Recovery

To make it possible that VersionBackup will find the backups on the external archive media, you must **enter the correct path for the media**. The dialogs asking to enter the media have an input field for this path.

VersionBackup stores this path for each media separately.

Example 1:

VersionBackup is configured to save two Source Paths: >C:\Data< und >C:\Letters<. The Destination Paths of the primary backups (the backups, which are not externally archived) also end with >Data< und >Letters<.

You are using CDs or DVDs as external media. Your CD/DVD drive has the drive character D:

If there is no special structure on your archive media, the archived backups are stored in the following directories:

```
D:
|__ ArchMark.dat
|__ Data
|  |__ 2008-11-20
|  |__ 2008-11-21
|  |__ ...
|__ Letters
|  |__ 2008-11-20
|  |__ 2008-11-21
|  |__ ...
```

When VersionBackup asks you to enter the disk and does not find the path with the current setting, please enter as path: >D:\<. The subdirectories for the Destination Paths (>Data< and >Letters<) will be added automatically.

Example 2:

You are storing the backups of several computers on one VersionBackup archive media. Or else, you are using the archive media even for other data.

For example, your backups are located in these directories on the archive media:

```
D:
|__ Computer1
|  |__ ArchMark.dat
|  |__ Data
|  |  |__ 2008-11-20
|  |  |__ 2008-11-21
|  |  |__ ...
|  |__ Letters
|  |  |__ 2008-11-20
|  |  |__ 2008-11-21
|  |  |__ ...
|__ Computer2
|  |__ ...
```

Then, please enter >D:\Computer1< as archive media path.

Example 3:

You are using the server share \\sv77\ as your backup archive media. Here, you store all your archived backups.

For example, your backups are located in these paths:

```
\\SV77\  
|_ VersionBackup-Archive  
|   |_ Media001  
|     |_ ArchMark.dat  
|     |_ Data  
|       |_ 2008-11-20  
|       |_ 2008-11-21  
|       ...  
|     |_ Letters  
|       |_ 2008-11-20  
|       |_ 2008-11-21  
|       ...  
|   |_ Media002  
|     ...
```

Then, please enter >\\sv77\VersionBackup-Archive\Media001< as archive media path.

Conclusion: **Please enter the path for the media, where the file ArchMark.dat can be found.** This directory also contains the Destination Path related directories. The Destination Path related directories contain the date directories with the data files.

5.2.4 Messages during the Recovery

5.2.4.1 No Full Backup found:

Before opening the Recovery Dialog the following message may appear:

>The Full Backup for the selected date is missing in the already performed scans. Therefore, some of the files possibly can not be restored.<

If the available backups do not include a Full Backup, which is older or from the same date, you have chosen for the version to be recovered, the recovery process has a problem:

You chose to recover several files or a complete directory. But some of these files are not included in the stored Incremental Backups, because they were not changed, when the backups have been created. A Full Backup would have been necessary to copy them.

(For details see >General Remarks Regarding Full Backups<, page 13.)

However, the required Full Backup currently is not available for the recovery. This can have one of these **reasons**:

- The Backup Job was newly configured. At the first copy run, **no Full Backup** has been done.
- You currently are working only with backups, which are **stored on your primary disk**. But the required Full Backup already has been externally archived and deleted on the primary media.
- You scanned only the external archive media with the Incremental Backups. **You did not yet scan the media with the Full Backup.**

Without access to the Full Backup, there are no file versions present, which fit to the required date. Therefore, these files cannot be recovered.

Next the >Recovery< dialog will be shown. It displays a list of files, which could not be restored. But from the present data, VersionBackup it is not able to determine, whether the files really did exist at the desired date. It also is possible, that they have been created on a later date.

5.2.4.2 Error List >Recovery<

During the Recovery Copy, file related errors occurred.

One or several files could not be recovered, because

- a. they have **not been found** among the backup copies or they have **not been readable**
or
- b. the destination files could **not been written**.

These files are listed in the display.

You can get further information about the failed copy processes from the log file. To get the full information, we recommend to switch the option **>All versions<** on the dialog page **>Settings/Logs<** - **>Logging<** on (see page 94).

Case a): Backup not present or not readable

VersionBackup has searched for readable files with the requested version date in all available date directories, but without success.

Errors like this should not occur in a correctly working, undisturbed file system.

There may be the following **reasons for this error**:

- The files in the date directories have been deleted, moved or renamed manually or by a different program.
- The directory structure, created by VersionBackup (Destination Paths, date directories with their subdirectories or ZIP files) has been changed manually or by a different program.
- One of the Control Files **>VersionBackup.txt<** has been modified, so VersionBackup is looking for file versions, which did never exist.
- The storage drive is temporarily inaccessible. Therefore, existing files are reported as not existing.
- The storage media is (partly) not yet readable.

See also: **>The Data Structures Created by VersionBackup <**, page 150.

You can do the following:

- If you have an external archive media, where the missing files could be stored, scan it and repeat the recovery.
- If the access to the storage media might be unstable, please repeat the recovery operation for the first step with the same parameters. Maybe it will improve the situation, if you boot your system before this.
- Try to find the missing files in the date directories or ZIP files manually. This should be possible, if the reason for the problem is a changed directory structure.
- If the data carrier is defect, you should try to recover the content of the date directories with special data saving methods.

Case b): Destination file could not be written

The backup version of the file, which should be restored, was present and readable. But it was not possible to write a copy of it to the intended location.

There may be the following **reasons for this error**:

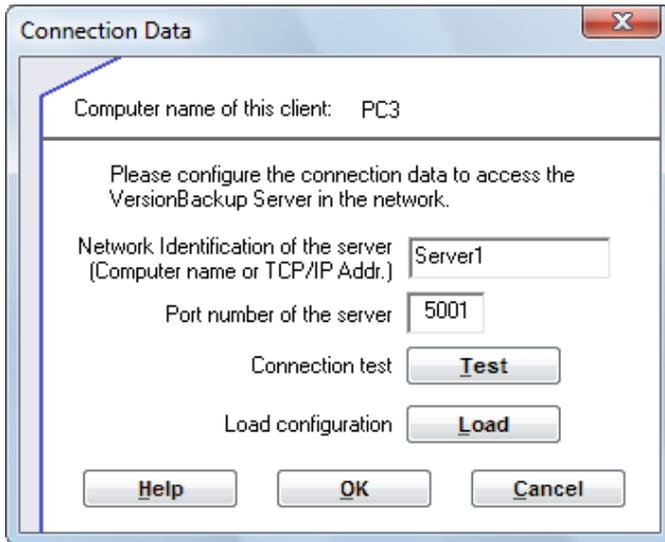
- The directory, where the file should be written, could not be created.
- In the directory, where the file should be written, a file with that name and type already exists. But it was not possible to overwrite it, either because the user did not have the privileges to do this or because the file currently is in use by another process.
- The destination data carrier is full.
- The access to the destination data carrier is unstable. So some files cannot be written.

You can do the following:

- Repeat the recovery later with the same conditions.
- Re-boot the system before a new recovery attempt.
- Delete the destination directory before a new recovery attempt.
- Configure a different destination path for the recovery (maybe on a different storage drive).

5.3 Dialog: Connection Data

This dialog is available only with >VersionBackup Client<.



It is used to configure the **network connection to >VersionBackup Server<**.

The client must contact the server to load the backup configuration. Only if this has been done at least once, VersionBackup Client operation is possible.

If the server should be not inaccessible later, then the client will continue operating with the settings which have been stored at the last contact.

Elements of the dialog:

- **Computer name of this client** Here, the network name of this client computer is displayed. The name is used to identify this computer in the >Client Configuration< (see page 97) on the VersionBackup Server.
- **Network Identification of the server** Please enter the computer name or the TCP/IP Address of the VersionBackup Server here. This server's computer name is displayed on the server in the top line of the dialog >Clients<.
- **Port number of the server** Number of the port of the VersionBackup Server, which is used for the communication to this client. This number is configured on the server in the top line of the dialog >Clients<.
- **Connection test** This button is to test whether a VersionBackup Server can be currently reached with these settings. When you click on this button and the server can be reached with these settings, then **the configuration will be loaded from the server.**
- **Load configuration** Usually clicking this button is not necessary, because the configuration is loaded automatically whenever the VersionBackup Client application is started. You can also reload the configuration by pressing the >F5< key in the Backup-Browser.

5.4 Dialog: File Properties

You can open the dialog >File Properties<, if you right-click on a file in the middle Backup-Browser list and select >File Properties<. Or else, you select a file and choose the menu item >File - >File Properties<.

Displayed Information:

Header:

- File Name of the file
- Path Original data path of the file
- existed from ... until Time interval, when this file was present in this directory. Several intervals can be displayed.

List >Stored Versions<:

- Backup Date Version date for the file version
- Last Change >Last Change< time stamp of this file version
- Zip Number of the ZIP file, containing the version
- Media Number, date, time and comment of the external archive media, where the version is stored (if it is a primary backup: -- Primary Disk --)

Only displayed, if applicable:

- Load Loads older data base components to show even all older file versions

Buttons at the bottom of the dialog:

- Help Displays this help text
 - Recover Starts the recovery of a version (see below)
 - Close Closes the dialog
-

If you select one of the versions in the list and click on the **>Recover<** button, then the dialog **>Recovery<** will open. Exactly this selected version will be used for the recovery.

You can start the recovery even with a double click in the list.

5.5 Dialog: “Backup Job Selection” to delete Backups

To delete a backup from the backup archive, please select a version date in the right Backup-Browser list **>Backup Date<**.

Then, select **>Edit<** - **>Delete Backup<** in the headline menu. Or else, open the mouse menu clicking on the date with the right mouse key and choose the menu item **>Delete Backup<**.

This function will delete one backup version.

A **list with the Backup Jobs** is displayed. The backups of the selected paths will be deleted. Please set the checkmarks by the paths, where you want to delete the backups from the selected day.

If no identifier has been given to a Backup Job, the Source Path is displayed. This is the path of the original data files. You need not care where the backup files are located.

The **externally archived backups** usually are located on media, which are not accessible and which usually cannot be deleted (CDs or DVDs) partly.

Therefore, even the data base information for these versions will not be deleted.

Attention: There is no function to restore the deleted file versions. Therefore, please use this function with caution!

Dialog: External backups can not be deleted

This dialog will appear if you want to delete all backups from a selected day but there are also externally archived backups.

On the external archive media, the data files are permanently stored. Therefore, they generally cannot be deleted.

On the one hand, these media usually are not accessible for the computer.

On the other hand, external archive media usually cannot be deleted in parts (CDs or DVDs e.g.).

Therefore, these backup versions will not be deleted even from the data base. This means, they will be displayed in the Backup-Browser even in the future and they can be used for the recovery.

If you are obliged to delete these data (maybe due to the data privacy act), you have to delete or destroy the external archive media. Then, you should remove the media information in the data base with the function **>Manage External Media<** (see page 128).

If you want to check, which data have been deleted on the primary disk, please remove the checkmark in the field **>Externally archived Backups<**. Then, only the primary backups will be displayed.

5.6 Dialog: “Version Selection” to delete files or directories

To delete files or directories from the backup archive, you selected a Source Path or the files and directories, you want to delete in the left or middle list of the Backup-Browser. Then right-click on the selection and choose **>Delete File<**. Or else, after selection please choose the menu item **>Edit< - >Delete File<**.

At first, you are asked whether you want to delete all day versions or only some of them.

- If you click on **>all<**, then the selected files and directories will be removed with all their versions.
- If you click on **>only some<**, then a list with the version dates will be displayed. In this list, you can select which day versions shall be deleted. Days, which are not marked with a checkmark, will be kept.

If you apply this function on a Source Path **in the left list** of the Backup-Browser and choose **>all<**, then the whole Source Path will be removed from the Backup Data Base.

The **externally archived backups** usually are located on archive media, which are not accessible and which usually cannot be deleted (CDs or DVDs) partly.

Therefore, even the data base information for these versions will not be deleted.

Attention: There is no function to restore the deleted file versions. Therefore, please use this function with caution!

5.7 Dialog: Find File

You can open this dialog in the Backup-Browser with a click on the button  or with the F3 key. Or else, you can choose the menu item **>File< - >Find File<**.

This function searches files in the backup data base, which have a certain string in their name and/or path.

It is a most efficient function to find files in your data stock. Usually, it is much faster than the Windows© find function.

Another advantage: If you are searching for a file, the reason for this may be that the file is no more at its regular place. Maybe, it has been deleted by accident or it has been shifted into another directory. The VersionBackup Find Function shows the files not only where they currently are but also where they have been in the past. Missing files can be immediately recovered from the backup stock.

Elements of the Dialog:

- **Search string in file name** Here, you enter the string, which shall be present in the name or path of the searched files.
You may use the asterisk * for any substring.
It is not necessary to enter an asterisk before and after the specified string.
- **Search in Source Path** You can choose **>-- all Source Paths --<** or any of your Source Paths from the list. Then only the files in this Path will be listed.
- **Capitals different** If there is a checkmark in this field, capital letters and small letters will be distinguished for the search.
- **Only in name of file** The search string must be present in the name of the file.
- **Search in the whole path** The search string must be present in the name of the file or in the file path.
- **In primary backups** Files will be listed, which are stored on the primary disk.
- **In externally archived backups** Files will be listed, which are stored on an external archive media.
- **Range of backup date** Here, you can set a date interval, where at least one backup copy of the file must be created.

- **Date of last file change** Date of last file change.

A click on **>Find<** starts the search. The found files will be displayed in the list.

If you click on the **>Select<** button or do a double click on a file entry in the list, this file will be displayed in the Backup-Browser.

5.8 **Dialog: Managing the External Archive Media**

You can start this function in the Backup-Browser selecting the menu item **>Data Base< - >Manage External Media<**.

This dialog shows you a list with all external archive media, which are permanently stored in the data base.

The list is sorted to show the newest media on top.

Columns of the list:

- **Index** Internal Index of the media
- **Date** Media date (belonging to the media identifier)
- **Time** Media clock time, if not zero (belonging to the media identifier)
- **Media Identifier** Comment

If you want to change the data belonging to the media identifier, you can select a media and click on the button **>Edit<**. Then, the dialog **>External Media<** will open.

If you want to delete the media information in the data base, select one or several media in the list and click **>Delete<**. (This deleting of the media information can be reversed by **>Scanning<** the media again.)

5.8.1.1 Dialog: External Media

In this dialog, you can **enter the parts of a media identifier and the data path**.

The media identifier consists of

- **Date**
- **Time**
- **Comment**

All three parts can be changed.

Different media must have a different media identifier.

That means, at least one of the components of the identifier must be different.

Please take care to that the media is inscribed exactly with the media identifier. When VersionBackup will ask you to insert this media, you should be able to identify it.

Furthermore, you can enter **the media** path in this dialog. In this path, VersionBackup will try to read the data from the media. (If the reading fails, VersionBackup will ask you again for that path. So, it will be possible to correct it then.)

5.9 Statistics report

VersionBackup Master												2007-12-13 10:16	
Statistics of the Stored File Versions													
Source Path	Directories	Files	Versions			Backups (primary)	Full Backups (primary)	Storage Space (primary)	To Archive	Oldest Backup			
			primary	external	total					primary	external		
C:\Bilder	15	307	235	589	824	20	2	224.2 MB	2.4 MB	06-05-04	04-08-05		
C:\Database\deinstall	1	4	22	0	22	6	3	0.1 MB	0.0 MB*)	06-08-20			
C:\Data	2	61	112	0	112	23	2	13.2 MB	10.8 MB	07-02-05			
C:\Documents and Settings\P2\Local Settings\Applicationdata\identities\188BC9A2-F7D4-4CB1-BAB5-57C12DC932BE\Microsoft\Outlook Express	1	17	98	201	299	25	2	41.6 MB	3.9 MB	07-02-19	07-02-17		
C:\Download	76	230	435	0	435	5	2	577.4 MB	577.4 MB*)	06-03-06			
C:\EarthView	1	5	0	5	5						05-10-30		
C:\Projects	1 493	11 747	8 306	28 403	36 709	84	1	1 678.4 MB	1 528 MB	07-07-16	05-11-28		
C:\Text	9	35	117	110	227	13	4	0.7 MB	0.5 MB	05-01-06	04-07-26		
Total	1 589	12 406	9 325	29 308	38 633	176	16	2 535.6 MB	2 123 MB	05-01-06	04-07-26		

*) Archiving currently switched off
 Number of external archive media: 31

HTML-File: C:\Documents and Settings\P2\Applicationdata\SB-AW\VersionBackup\FileStatistics.html [Help](#)

If you select the menu item **>Data Base< - >Statistics<** in the Backup-Browser menu, a statistics report about all stored backup versions will be generated.

The display of the report is done in your HTML-Browser (Internet Explorer e.g.). With this application, you also can start a printout of this report.

At the bottom of the report, the name and path of the report file is written. You can access this file directly to copy or archive it.

Description of the statistics report columns:

Source Path

The Source Path is the **original position of the files**.

If you change a Source Path in the VersionBackup configuration, the files before and after the change will be listed in separate Source Path lines.

Directories

Number of directories, which are saved for this Source Path.

If there are only files from the Source Path directory (not from a subdirectory), the number is 1. Each subdirectory with saved files or further subdirectories increases the number by 1.

Files

Number of the stored files.

Even if many versions of a file are stored, it is counted here only once.

If a file has been renamed or moved to another directory, it is counted as a new file after the change.

Versions primary

Number of the stored file versions, added up over all files.

Example: if 5 files have 3 versions each, then the version number is 15.

In this column, only the versions on the **primary** disk are counted. The versions on the external archive media are not counted here.

Versions external

Like Versions primary, but in this column, only the versions on the **external archive** media are counted.

Versions total

Versions primary plus Versions external.

Backups (primary)

Number of the version dates, for which **backups are stored** for this Backup Job.

Each backup version is designated by a calendar date. The maximum number of versions per file is this number of backups.

Only the backups on the primary disk are counted. The backups on the external archive media are not counted here.

Full Backups (primary)

Number, how many of the stored backups are Full Backups.

Only the **Full Backups on the primary disk** are counted. The Full Backups on the external archive media are not counted here.

Storage Space (primary)

Disk space, which is covered by the backups **on the primary disk**.

To Archive

Total size of the backups, which **not have been marked as externally archived**.

The archiving of some paths may be switched off (dialog page **>Archiving Source<** in the Section **>Backup Jobs to be Archived<** (page 73 to 76)). These paths will be marked with *) in this column.

Oldest Backup primary

Date of the oldest backup on the primary disk.

Oldest Backup external

Date of the oldest backup on the external archive media.

5.10 Trouble Shooting

5.10.1 Scan External Archive Media

The button >Scan< is used to provide the information about the externally archived backups to the Backup-Browser.

The dialog >**Scan External Archive Media**< will open.

This dialog is used to enter the settings to scan an external archive media.

An external archive media (a CD or DVD e.g., which has been used for external archiving backup files) can be scanned by VersionBackup Master. **This transfers the information about the versions, which are stored on the media into the backup data base.**

If this is done once, **a new scan of the media is no more necessary**. Because the version information will be stored permanently in the backup data base.

Elements of the dialog >Scan External Archive Media<:

5.10.1.1 Input line >Path<

Please enter the file path here, where the backups can be found on the external archive media.

5.10.1.2 Button >Browse<

Please use this button, if you want to select the path from the directory structure of the external archive media.

The button >**Browse**< opens the **Path Select Box**, which lets you select the path from the existing directory structure (see also page 117). The Path Select Box will show only those directories containing backup files created by VersionBackup Server.

In the Path Select Box, please select the directory with the externally archived backups you want to scan.

There are some other displays and messages in the context of scanning external media:

5.10.1.3 Dialog: Select Directory for the media scan

With this special Path Finder Box, you can select a path from the existing directory structure.

The special thing of this selection box is that it displays only those directories, which contain VersionBackup backup directories.

At first, you should choose the drive character from the field >**Drives**< at the bottom.

If you want to select a network drive, please click on the button >**Network**<. Then, a dialog box opens, where you can select one of the currently present network connections.

If you selected the drive, the directory tree is displayed in the **list field** in the middle part of the dialog.

You can open and close the directories with a mouse click.

Directories containing a subdirectory are marked with a plus character in the directory symbol.

The mouse click furthermore transfers the path into the field **>Directory name<** above.

The string in the field **>Directory name<** is the result of your selection. If you want to, you can key in the desired name directly into this field. This is necessary if you want to enter a non-existing path.

The button **>OK<** takes over the content of the field **>Directory name<**.

5.10.1.4 Dialog: Media information about the scanned media

This dialog informs you about the **result of the media scan** and allows entering additional information. You can determine **whether** the media will be stored in the backup data base and **which identifier** it will take.

If you select **>Yes<**, then the information about the content of the media **will be stored permanently**. Then, the version on the media will be displayed in the Backup-Browser in future. When VersionBackup will need this media for a recovery process, you will be asked to insert it.

If you select **>No<**, then the information about the versions on the media will be present **only until VersionBackup will terminate running**.

This is useful only in special situations (tests e.g.).

In the lower part, you can determine the **media identifier**. You can change the date and time, which belong to the media identifier.

Additionally, you can enter any media comment. This comment is mandatory only if there are several media with the same date and time.

Please enter the inscription of the media as comment or inscribe the media like the identifier. When VersionBackup will ask you to insert this media, you should be able to identify it.

Later, you can view a list of all stored media, using the function **>Manage External Media<** (see page 128). There, you can change the media identifier or delete the media information from the data base.

5.10.2 Repair Data Base

You can start this function in the Backup-Browser selecting the menu item >Data Base< - >Repair Data Base<.

The VersionBackup Data Base keeps the information about all file versions which are stored in the Backup Archive. Based on this information, the Copy Process decides which files shall be copied to the next Incremental Backup.

Furthermore, the Backup-Browser creates its display content from this data base. This is the reason why you can select the files for the recovery very fast.

The Backup Data Base has information both about the Primary Backups and about all Archive Media, as far as their content has been saved during their creation or when the media has been scanned.

After a **system error** or after **manipulating the Backup Archive**, the Backup Data Base might be inconsistent or they might not have the correct content. Then, it can be completed or created anew with this Repair Function.

Predominantly, it works on the Primary Backups, because only the Primary Backups are permanently available for analysis. If it will be necessary repairing the information about the **External Archive Media**, the affected media should be deleted with the function >Data Base< - >Manage External Media< in the Backup-Browser. Afterwards, the media should be rescanned using the >Scan< button. If the archive media are CDs or DVDs, they have to be inserted into the drive to scan them.

The following dialogs might be displayed during the Data Base Repair:

5.10.2.1 Dialog: Backup Job Selection

The Data Base Repair can be done for the complete Data Base or for only some selected Backup Jobs.

If it is only necessary repairing the data of some selected Backup Jobs, please remove the checkmark at the left side of the Jobs which need not be processed.

5.10.2.2 Dialog: Do you want to add missing information to the Data Base or create it new?

The Data Base repair function reads backup version information from the second data source. This is the set of >VersionBackup.txt< files, which are stored in the date directories.

The version information from the >VersionBackup.txt< files will be stored in the Data Base.

There are two ways to proceed:

- If you only want to extend the Data Base content by the information from the >VersionBackup.txt< files, please leave the selection on >add<.
- If you want to remove all existing primary versions from the Data Base (because they might be incorrect) and rebuild the Data Base only from the information in >VersionBackup.txt<, please select >create new<.

There is no standard answer to the question: "**Should I select >add< or >create new<.**" If everything is o.k., then it does not matter which selection you will choose. But usually, you will start the Data Base Repair only when something is not o.k. There may be a lot of non predictable situations.

You should choose >add< if something seems to be missing in the Data Base. This should lead to the same result like >create new< but it is safer because if some data would be missing in the second Data Base, then they will be still present after the Data Base Repair.

Please click on >create new< if you assume that there is something in the Data Base which should be removed or if it seems that there is a defect in the structure of the Data Base. Then, the Data Base will be deleted in the first step. After this, it will be rebuilt. After the repair, it will contain only the information from the second Data Base.

The information about the **externally archived backups** will be kept in any case, if this is possible. But if they have fundamental errors, they will be deleted. Later, you should scan the external archive media again, to make their content available for the Backup-Browser.

5.10.2.3 Dialog: Incomplete VersionBackup.txt files

This dialog will be displayed, if the data base shall be new created and **errors in the second data source** have been recognized. The second data source consists of the **>VersionBackup.txt<** files, which are stored in the date directories.

Because the second data source is not complete, information may be lost. New creating the Data Base means that the information which currently is existing in the Data Base will not be kept.

- If you still want to create the Data Base new and take the data only from the incomplete second data source, please confirm with **>Yes<**.
- If you want to keep the information from the existing data base and only add the (incomplete) information from the second data source, please click **>No<**. Then the Repair Function will work in the **>add< mode**.

5.10.2.4 Dialog: Delete Inconsistent Media Data

When the data base information about the external archive media has been checked, structural errors have been found.

The list shows the media with the corrupt information.

Our recommendation:

- 1) Confirm with **>OK<**, while all media entries in the list are selected.
Then, the inconsistent information will be deleted in the data base.
- 2) **Scan** the affected media again.

Before closing the dialog with >OK<, you should have a careful look on the displayed list.

Some entries may be useless (entries with **>(unknown)<** e.g.). After their deletion, nothing else is to do.

But if you recognize, that existing external archive media are listed, you should **note their identifiers**. With the function **>Manage External Media<** (see page 128), you can check, which media are missing in the data base.

Please scan the missing media after finishing the data base repair. Then, they will be available for the Backup-Browser correctly.

When you click **>OK<**, **only the selected media information** will be deleted. It is possible to delete only some of the media, if you take care that only their entries are selected.

But on the other hand, there may be reasons **not to delete** the media information:

- If you are using **different Parameter Sets** (see page 138), when the same Destination Path is accessed by several Parameter Sets.
- If several Parameter Sets are using the **same Central Data Area** (see the Registry Parameter **>CentralDataPath<**, page 141).
- If it will **not** be possible to **scan the media again**.

If this applies, you either should reduce the selection to those media, which shall be deleted. Or else, you should click on the **>Cancel<** button. Then, the data base will be reconstructed without any change of the media information.

Later, you can read in the Copy Log File, which media have been deleted.

5.10.3 Continue using the backup archive after new installation

You installed Windows® anew or you are working on a different computer now and want to use the backups created by VersionBackup.

VersionBackup stores the information, where the backups can be found, in the Registry. After a new installation or on a different computer, this information initially cannot be present.

Don't be startled. The Backup-Browser will **not display anything** at first. But if the backups are still available, they can be announced to VersionBackup easily.

The Destination Paths have to be re-configured. This is most easy, if you **saved the VersionBackup configuration in a file**. Then, all you have to do is: transfer this configuration file onto the new computer and **load it again** (see page 90).

If there is no saved configuration, you can reinstall the access to the primary backups by entering the Backup Jobs again. Set the Destination Paths to the directories, where the old backups can be found now.

After this, the Backup-Browser will display these backups and they can be used for automatic recovery.

The **external media** (CDs or DVDs e.g.) have to be scanned anew, if necessary.

If you like, you can access the backups totally without VersionBackup. If the backups are not compressed, this is possible directly with the Explorer®. If the backups are ZIP-compressed, you can use some standard software like WINZIP®.

6 Hints for Experts

6.1 Shut Down After Backup Creation

After **finishing the backup copy run**, VersionBackup Server can send a command to the operating system to **shut down the computer** or to **log off the user** who currently is logged in.

Furthermore, the **backup copy run can be started, when a shut down has been initiated**. After the copy run, VersionBackup will restart the shut down process.

The shut down related operations require a concerted action between VersionBackup and other components of the computer. Some computer configurations will prevent the shut down related operations. It would be wrong to indicate this as a fault of VersionBackup.

When a shut down operation after the backup creation is planned, VersionBackup displays the shut down dialog before starting the copy run. In the shut down dialog, please select the desired operation (log out, shut down or shut down with reboot).

If the copy run is started at a Windows® start-up, no shut down will be done afterwards, even if it is configured.

If you are using the operating system **Windows Vista®**, please note also the chapter **>Shut Down with Backup Creation on Windows Vista®<**.

If a copy run with adjacent shut down or logout will be aborted manually or if it should not be finished, then it will be automatically repeated at the next Windows® start-up to catch it up. This function can be switched off with the Registry-Parameter **>NoRepeatShutdownCopy<** (see page 141).

Trouble Shooting:

- Some computers are **not able to process** the shut down or logout command. This is no fault of VersionBackup but a characteristic of the hardware or the BIOS.
- **If you want to forbid all shut down operations** (which may be useful on a server) or if there are disturbances in context with these functions, please deactivate the shut down functions completely. Then, VersionBackup will do no shut down operation at all, independently from the settings at the user interface.

To do this, please start the registry editor.

Open the path **>HKEY_LOCAL_MACHINE \ Software \ SB-AW \ VersionBackup \ Settings<**.

Double-click on the value **>ShutdownForbidden<** and enter 1 as value.

Confirm the input and close the registry editor.

- In general, it is desirable, that the computer **switches off** after shut down. This works with the standard settings on most of the computers.

If your computer does not switch off with the standard settings, then you should do the following modification in the registry:

Please start the registry editor.

Open the path **>HKEY_LOCAL_MACHINE \ Software \ SB-AW \ VersionBackup \ Settings<**.

Double-click on the value **>DoShutdownAsPowerOff<** and enter 1 as value.

Confirm the input and close the registry editor.

If the computer does not switch off even after this modification, it seems not to be able to respond to the shut down commands.

- Windows© can be configured to carry out the **shut down commands immediately** without waiting for the action of the running applications. This would prevent a complete backup creation at shut down because the computer shuts down regardless of the copy process.

If the backup creation at shut down does not work, you should check some registry parameters: Please start the registry editor and ensure that the value **>HKEY_CURRENT_USER \ Control Panel \ Desktop \ AutoEndTasks<** is set to 0.

>HKEY_LOCAL_MACHINE \ System \ CurrentControlSet \ Control \ WaitToKillServiceTimeout< should not be less than 5000.

>HKEY_CURRENT_USER \ Control Panel \ Desktop \ WaitToKillAppTimeout< should not be less than 20000.

Please note: You may do changes in the registry only if you be aware of the consequences of your action. In any case, you should save this range of the registry before you change it.

6.1.1 Additional Information: >Shut Down with Backup Creation on Windows Vista©<

Windows Vista© does a lot to increase the shut down process. One step is to prevent the shut down from hanging if one application blocks it for a longer time.

When VersionBackup shall create its backups on shut down, it can no more do this after the shut down process is initiated in the regular way (with the **>Shut Down<** function in the Start Menu, e.g.). Because then, Vista© will bring the computer down in a short time. VersionBackup will not be able to detain this. Therefore, VersionBackup has no time to create the backups before the computer will stop operating (consider that the backup creation may last a long time).

The solution is that shut down must be initiated in a different way, not by one of the usual commands. When VersionBackup Server is installed on a Vista© system, an **additional icon >VB Shut Down<** is created **on the desktop**. With a double click on this icon, the user can launch the process **>Shut Down with backup creation<**.

If backup creation on shut down is desired, you should shut down the computer generally by a double click on the icon >VB Shut Down<.

If the backup creation **>At shut down or next start<** is configured, then VersionBackup will check on each start up whether the last shut down has been done using the icon **>VB Shut Down<**, creating the backups. If this was not done (maybe because the computer has been shut down with a regular shut down command), then the missing backup creation will be caught up at start up.

Therefore, the setting **>Backup creation at shut down or next start<** means:
Make up for the backup creation if it has not been done on last shut down using the icon >VB Shut Down<.

6.2 Using Several Parameter Sets

It is possible to **create and manage several sets of backups with different sets of parameters on the same system.**

If you start the configuration application VersionBackup.exe with command line parameter /2, then you will work with a second set of parameters, which is independent from the first one.

It makes sense creating a **second start icon** on your desktop. Copy the VersionBackup icon, which is on your desktop (drag with pressed Ctrl key). Click on the icon with the right mouse key, choose >Properties< and select the page >Shortcut<. In the edit line >Target< you find the start path >...VersionBackup\VersionBackup.exe<. Please add a blank and the parameter /2 to this path.

Clicking on this new icon, you start the configuration of the second parameter set. For instance, you can configure a weekly copy run **to a different copy destination.**

You are not limited to 2 parameter sets. Parameters until /9 are possible.

If you plan to run several Backup Jobs at different times, then **VersionBackup Server** provides an easier solution. **In VersionBackup Server, it is possible selecting the Backup Jobs which shall be processed at every scheduling record.**

Please note also the hint at the end of chapter >Registry Settings for Special Configuration< (see page 141).

6.3 How to Start the Copy Run with a Desktop Icon or from a Script

In special situations, it may be useful not to start the backup creation automatically but do this always with a manual command. Or you want to launch it automatically from a script.

Usually, the manual start of a copy run is done on the dialog page >Backup Creation< - >Scheduling/Start< with the button >Start<.

If you want to start the backup creation rather often, this is more easy if you create a **start icon on the desktop**. A double click on this icon will start the backup creation with no need to open the VersionBackup user interface.

Steps to **create a Copy Start Icon**:

- Right click on the desktop, choose >New< - >Shortcut<.
- Open the path of your VersionBackup installation directory (usually >C:\Program Files\VersionBackup<).
- Choose the file >CopyStarter.exe< as application to be started.

To launch the copy run from your **Script**, please add the line >C:\Program Files\VersionBackup\CopyStarter.exe< to the script.

Command line parameters:

For special operation, call CopyStarter.exe with the command line parameter /2 (see page 138). Then, the copy run will be done for Parameter Set 2 (possible up to /9)

You can enter the command line parameter into the icon definition after a right mouse click on the icon. Then, choose >Properties< and select the page >Shortcut<. In the edit line >Target< behind >CopyStarter.exe<, enter a blank character and then the desired parameter (starting with character /).

6.4 Saving Some Specified Files or Subdirectories Only

Do you like to save not everything within a Source Path, but only some specified files?

Or do you want to save some subdirectories of the Source Path to a common Destination Path?

This you can arrange with a little trick, using the **>Exclusion List<** and the **>Force List<**.

- Open the dialog page **>Exclude<** for this Backup Job (Dialog **>Jobs<**, select the Source Path, click on **>Exclude<** on top)
- Click **on the upper >New< button**. Enter an asterisk * as exclusion condition and confirm with **>OK<**.
This excludes everything for this Source Path, except for those files or paths, which are specified in the **>Force List<** below.
- Now click **on the lower >New< button**. Enter the file or the path, which shall be saved, and confirm with **>OK<**.
- Repeat this, until all the files or paths, you want to save, are entered into the **>Force List<**.

Of course, you can use the wild-card character * even in the Force List to specify groups of files. With the wildcard character, it is possible to specify a **subdirectory path only by a component of it** (e.g.: *\Subdirectory*).

If it is possible, you should enter absolute **specifications for the paths** to be saved (not beginning with * but with the drive char e.g.). This will increase the speed of the file search. Because only then, VersionBackup will not search the files, which have to be saved, on all subdirectories but it can confine the search to the directories, which are specified in the **>Force List<**.

Alternative:

You also can enter **a file as a separate Backup Job**.

To do this, please enter the complete file path into the Source Path edit field
>C:\Data\Account.xls< e.g.

This file will get its own Destination Path. Therefore, the configuration of its backups will be independent from all other Backup Jobs.

Storing additional files, however, into this Destination Path is not possible.

6.5 Access to the Backups without Using the Backup-Browser

There may be **two reasons** to access the stored backups without using the Backup-Browser:

1. You want to get a quick look into an old file version (from an application like Word e.g.).
2. The files are archived on an external archive media and you want to access them on a computer, which does not have VersionBackup Master installed.
This can be very important, if your computer does not work any more.

You find the backups in the **Destination Directory**. It is configured on the dialog page >Source Path / Dest Path< as >**Destination Path of the files to be saved**<.

In this directory, the date directories are located. Please open the directory with the change date of the desired file version.

A) Compressed Backups

If you choose the option >Compress the backup files< (see page 46), there is a file >**VersionBackupData_000.Zip**< in the date directory. If the volume of the backup files is bigger, then there are additional ZIP-files with higher numbers.

These ZIP-files contain the backup copies. In addition, the path, where the original files have been located below the Source Path, is stored in the ZIP-files. You can access the stored backups with the software PKZIP.

If you want to access a backup file directly and several ZIP-files have been created, for the first step it is not clear, which ZIP-file contains the backup file. You can get the number of the ZIP-file from the file >**VersionBackup.txt**<.

To do this, open the file >VersionBackup.txt<, which is stored in the file >VersionBackupData_000.Zip<, with a text editor program. Please search the line with the path and file name of the desired file. If the file has been stored in that backup using the compression, behind the clock time there is an entry >**Zxxx**<. There, xxx is the number of the ZIP-file, which contains the backup file.

B) Non-Compressed Backups

If the backups are not compressed, it is possible to access them directly. This can be done with the Windows Explorer® or with any other program.

The files are located in subdirectories below the date directory, corresponding to the location of the original files.

If you open a non-compressed backup file with an edit application, in principle the danger exists, that you change the backup version unintentionally. To prevent this, on the dialog page >General Settings< the parameter >**Write protect the backup files**< (see page 47) has been added. If it has been active during the backup generation, the write protection flag of the backup file is set. Then an unintentional change of the file is prohibited.

See also: >The Data Structures Created by VersionBackup<, page 150.

6.6 Registry Settings for Special Configuration

With the registry editor, it is possible to make modifications in the registry, which lead to special settings of VersionBackup. These are settings, which cannot be done from the user interface.

In brackets, you find the data type. If no data type is specified, the value has to be set to 1 to activate the property, which is described on the right side. To switch the property off, please set the value to 0.

Path: >HKEY_LOCAL_MACHINE \ Software \ SB-AW \ VersionBackup \ Settings<
(on the client computer: >HKEY_CURRENT_USER \ Software \ SB-AW \ VersionBackupC \ Settings<)

NoRunInterrupt	No >Break< button to interrupt the backup creation.
ShutdownForbidden	All VersionBackup shut down functions are switched off.
DoShutdownAsPowerOff	At shut down, the Power off signal will be sent (see: >Shut Down After Backup Creation<).
SemaphoreResetTime	[<i>Number value in seconds</i>] Timeout time, after which the Copy blocking will be removed. Default value is 240 seconds.

The following parameters usually are not present in the Registry. Please create them if you need the special system behavior.

If no data type is specified in brackets, then it is a DWORD parameter. Set it to 1 to activate the property.

NoManualBackupDelete	Backup-Browser function to delete backups is locked.
NoManualFileDelete	Backup-Browser function to delete files or directories is locked.
NoClientService	The Service to communicate with the client computers will not be started.
ForcedClose	The Progress Bar Display, which is visible during the copy process, will be closed by an extra mechanism. This may be necessary if the normal Window closing is blocked on this computer.

Path: >HKEY_CURRENT_USER \ Software \ SB-AW \ VersionBackup \ Settings<
(on the client computer: >HKEY_CURRENT_USER \ Software \ SB-AW \ VersionBackupC \ Settings<):

DisplayIntervall	[<i>Number value in days</i>] Initial value for the number of days, the Backup-Browser displays between <Show from:> und <until:> .
ShutdownWaitTime	[<i>Number value in milliseconds</i>] Time, the shut down dialog waits for an input, before the shut down is started.
CentralDataPath	[<i>File path</i>] Path, where the data base files will be stored for those backups, which cannot be assigned to a configured Destination Path.
ViewerPath	[<i>File path</i>] Path of the application, which is used to display the log files. As standard, the VersionBackup-Viewer is configured. It is optimized to the VersionBackup logs and provides some automatic control functions. If you like, you can set any other program here, which is suitable to display text files (>Notepad.exe< e.g.).
NoRepeatShutdownCopy	If a copy run with planned adjacent shut down or user logout is cancelled or is not able to finish completely, it usually will be caught up at next Windows(c) start up. If this Parameter is set to 1, this mechanism is switched off.

DialogAutoCloseTime	<i>[Number value in seconds]</i> The message boxes, which are displayed during or after a copy run, will be closed automatically after the time which is set here. This is done in the same way as if you clicked >Cancel<. Default value is 22 hours. If you enter 0 , then the AutoClose function is switched off.
DoRunLogging	The scheduler logs its actions into a file. The path of this logfile is >C:\VB_Scheduler.log<.
ScriptTimeout	<i>[Number value in seconds]</i> If executing a script operation does not terminate, then VersionBackup will continue with the next step after this timeout time. Default value is 60 seconds.
ClientTrace	The client computer logs the communication to the server. The log file path is "C:\VBConfig_FTP_YYYY-mm-dd.log" with the date in the file name. (To activate this function, set this parameter to 1 in the registry of the client computer .)

The following parameters usually are not present in the Registry. Please create them if you need the special system behavior.

NoBubbleHelp	The short hint texts, appearing at the mouse position, are switched off.
CopyLogFilePath	<i>[File path]</i> Complete path and name for the Copy Log file
RecoveryLogFilePath	<i>[File path]</i> Complete path and name for the Recovery Log file
ArchLogFilePath	<i>[File path]</i> Complete path and name for the Archiving Result Info file
PathRepeatResetTime	<i>[DWORD Value, Number value in seconds]</i> If a copy run is scheduled at a time when the last copy run with the same copy tasks did not finish yet, then the second copy run will be suppressed. This is valid if the time interval between the two starts is not too big. But if the time between the two starts is longer than the time, which is set here, then the second copy run will be done as soon as the first will have terminated. Default value is one hour.

Please note: You may do changes in the registry only if you be aware of the consequences of your action. In any case, you should save this range of the registry before you change it.

6.7 Transferring the VersionBackup Configuration to another computer or to another user account

There are **two reasons** why the VersionBackup configuration must be transferred:

1. If you used VersionBackup on one computer in the past and want to **change to another computer** (maybe a new one).
2. If VersionBackup has been run in the account of **another user** in the past.

In both cases, it should be easy to **continue using the existing backup archive**.

To do this, the original VersionBackup configuration must be transferred to the new computer or to the Registry of the other user.

This is most easy done **storing** the configuration **to a file**, maybe on a USB stick. The file can be imported on the new computer or in the other user range.

Open the dialog page >Settings/Logs< - >**General Settings**< and click on >**Save**< to store the configuration. The button >**Load**< will import the configuration to the new environment.

Only if it is no more possible saving the configuration (maybe because the old computer is defect), you must **enter at least the definition of the Backup Jobs**. This is done on the page >Jobs< - >Source Path / Dest Path<.

If you only want to continue using the existing backup archive for recovery, the input for the Source Path does not matter.

But it is important entering the correct >**Destination Path**<, which is the path where the backups now can be fetched for the recovery.

If the old directory paths do no more exist on the new computer, then you can delete the path definition later. VersionBackup will remember in spite of this, that existing backups can be found there.

6.8 Open the Firewall

If you are using a Firewall System on the server, it will at first **prevent VersionBackup Server from being accessible for the client computers**. To let the clients contact VersionBackup Server, you must define an exception in the Firewall configuration.

The way how to do this depends strongly on the Firewall system which is used.

Some Firewalls display a dialog window when the program tries to act as a server for the first time. For example, the message "VersionBackup Scheduler tries to act as a server (Application VBackRun.exe)" could be displayed. You should give a permanent permission for this.

If you are using the **Windows®-Firewall**, you must set the permission to use the Communication Port explicitly.

To do this, please start the item >Windows-Firewall< in the Control Panel and open the page >Exceptions<. If there is no entry >VersionBackup< yet, then please click on the >Port< button. Enter >VersionBackup< in the Name line and enter the Port Number which is set on the VersionBackup dialog page Clients (standard value: 5001).

If you do not need the Client-Server functionality, it is possible **deactivating VersionBackup's Server-Function**. This is done with the Registry Parameter >NoClientService< (see >Registry Settings for Special Configuration<, page 141).

6.9 Backup Creation Without Login

In contrast to VersionBackup Master, it is possible with VersionBackup Server to create backups even when nobody is logged-in at that time.

Processes

The scheduler process VBackRun.exe, which is responsible for the backup creation, launches already when the computer starts up. This is in contrast to VersionBackup Master, where the copy process starts not before the user logs in. A process starting independently from the user is called "**NT Service**".

If you activate the icon >Services< in the Control Panel, all installed NT Services will be displayed. After installation VersionBackup Server, you will find also a service >VersionBackup<, there. Its start mode is set to >automatic<, therefore, it runs permanently. If the automatic backup creation should be missing, then you should first check whether **the service >VersionBackup<** (with program file VBackRun.exe<) actually is running.

When the backups shall be created, the NT Service VBackRun.exe will start the copy program VBackCopy.exe. It will run under similar conditions like the service itself. After finishing the copy process, VBackCopy.exe will terminate, while VBackRun.exe will remain active.

Please note that only the **Primary Backups** can be created when nobody is logged in. These are the backups at the Destination Path, which is set on the page >SourcePath/DestPath<. For the **External Archiving**, it is necessary even with VersionBackup Server, that the user is logged in.

Installation and Password

During the installation of VersionBackup Server, VBackRun.exe must be installed as Service >VersionBackup<. This is only possible if the user who does the installation has the **right to install services**.

The service can only access the network drive for the backup creation operations, it runs with the access rights of an authorized user. Therefore, it must be created as user specific service. This is a little bit unusual. Most services runs with the pseudo user >Local System< or >Local Service<. But those services and the programs started by them cannot access any network drive.

Access to network drives must be done with the account of a user, who is entitled to use the share, directories and files. Windows© demands the **input of the User Password** when a user service is installed. This is very reasonable. Else, the security policy would be undermined. The same password must be entered which is necessary for the user log in into Windows©.

User and Rights

On one computer, it is not possible installing several services called >VersionBackup<. Therefore, VersionBackup Server can be run **only by one user**. Because VersionBackup Server copies without any user action, it is not necessary running different configurations by different users.

Please install and configure VersionBackup Server with the user account who has all necessary access rights for the Source and Destination Directories. An Administrator will be a proper user. If you prefer more security, you should create a special Backup Operator who has all access rights to the drives but no rights to modify the system. For the installation of VersionBackup Server, **you must enable this user temporarily to install the NT Service**.

If VersionBackup Server has been installed by one user in the first step, but then shall be run by a different user, it will try (after confirmation request) to uninstall the service belonging to the first user. After this, VersionBackup will install the service for the new user. Maybe, it will be necessary shutting down the computer to uninstall the service.

Screen display

A user dependent service and the applications started by it are not able to create any output on the computer monitor because they are running on a virtual desktop. But when the user, who configured VersionBackup, is logged in, he wants to see the status of the copy process. And he should be able to control the copy process giving commands to it. Therefore, the **new application VBackDisplay.exe** has been added. VBackDisplay.exe does only run when the user is logged in. It communicates with the copy process running in the background and does the screen communication.

The copy process will not be disturbed if the user logs off during the backup creation. If VBackDisplay.exe does not run any more, the NT Service and the copy program will continue running without contact to the monitor.

Copy speed

Windows© allows the setting that the user specific top level process generally has a higher execution priority. VersionBackup Master usually has this extra priority because it is a user process. But the NT Service of VersionBackup Server is no user process. Therefore, VersionBackup Server might need more time than VersionBackup Master to copy a certain data volume. In most cases, this is no problem because no person should wait for the termination of the copy process on a server.

With VersionBackup Server, it may be reasonable to leave the **Performance Share** setting on the dialog page >Settings/Logs< - >**Copy Run Settings**< at **100%** and the Task Priority at >**normal**<.

Backup Creation at Start-up and Log Out

Because the VersionBackup Server copy run does not depend on a logged-in user, the **copy run behavior at start and end will be different** from VersionBackup Master:

Setting	VersionBackup Master	VersionBackup Server
Backup creation at computer start	Copies when the user logs in.	Copies when Windows® starts.
Backup creation at end of operation	Copies at logout or shut down.	Copies at shut down only.
Backup creation with logout	Logout will be done when the copy run is finished.	Logout will be done immediately. The backups will be created while the user is logged off.

Shutting down the computer after the copy run:

This function is present even in VersionBackup Server. But most systems refuse processing a shut down command, which is sent from a virtual desktop. This is the situation if the copy run terminates while the user is logged out.

If it is desired that VersionBackup Server shuts down the computer after the copy run, the user should stay logged in.

6.10 Recovery when the Data Server is Offline

The backups from the data server drives should be **created on an external disk station** (a NAS, for instance).

It may happen, that the data server is defect. Then the backup should be still functioning. **From the VersionBackup Client workstations**, the data can be made available without delay. This is done recovering the latest backup with the **Backup-Browser's recovery function**.

In this case, fetch the data directly to the disks of the workstation.

But do not forget to store the changed files back to the server's directories, when this will be possible again.

The recovery function of the Backup-Browser is easy to use. Therefore, everybody is able to fetch the data from the backup archive. There is no need to wait for the assistance of a system administrator.

But please note that on every client computer, **only those data** can be recovered which **had been offered to it** on the server (see dialog **>Client Computer Settings<**). Therefore, one user cannot recover everything but only those data which have been assigned to him.

For further information, please read **>Using VersionBackup Client<**, (page 24).

6.11 If There are Problems With the CD/DVD-Burner

It cannot be excluded that the burner software, which is incorporated in VersionBackup, might not be able to access your CD/DVD burner.

If you have another burning program, which is able to run your burner, you can create your archive media as described here.

The method is exporting your backups into a buffer directory on your hard disk. Then burn the content of the buffer directory to the disk using the foreign burner software.

All details you will find in the chapter **>If direct burning to the CD/DVD is not possible<** page 20.

6.12 Optimizing the Performance

If there are very much data to be checked and saved, then a backup copy run may last several hours.

What can be done to enable VersionBackup to create its backups as fast as possible?

1) Define Source Paths for the data directories

It is not useful to save all the program and system directories with VersionBackup. Instead, you should set your Source Path definitions to those paths, where the user data are actually stored. These are the data which have been created or modified by you or by the computer users. Only those data need structured backups, because they cannot be restored from any installation media. It is recommended defining several Source Paths.

2) Compress the backups

If the backups are transferred to the Destination Drive via a network connection, then the copy time will be decreased if the backup compression is activated (dialog >Jobs< - >Backup Job Settings<, item >Compress the backup files<). Then, only the compressed data must be transferred by the network.

Of course, this is most important if the network is rather slow (Wireless LAN or Online Backups, e.g.).

If the backup disk is a part of the computer where VersionBackup runs, then the copy time will be slightly decreased if you switch the compression off. But this is only a minor effect.

3) Smart definition of the Exclusion Conditions

If you exclude less important files from the backup process on the dialog page >Exclude<, you reduce the work, which must be done. But even the way, how the Exclusion Conditions are defined, is important for the processing speed.

a) Exclude directories

It is better excluding whole subdirectories (Exclusion Path: "E:\Data\Data1*", e.g.) than defining a big number of single file exclusions.

b) Exclusions without Force Conditions

The system runs faster when the >Force List< is empty. Then, VersionBackup may ignore all directories, which have been excluded, completely.

But if there is at least one entry in the Force List, then even the excluded subdirectories must be scanned, because there might be files matching the Force Conditions at any location.

c) No useless entries

The path of each original file must be compared with all Exclusion Entries to check whether any exclusion matches. Even this is a lot of work.

If there are many Exclusion Conditions, which are not really needed, then VersionBackup will work slower than necessary.

d) Absolute exclusion paths (not starting with "**")

Exclusion entries starting with the path root ("E:\Data\Data1*", e.g.) can be processed faster than path specifications starting with an asterisk ("*\Data1*", e.g.).

4) Modifying the "New Criterion"

Usually, VersionBackup considers a file as modified if its time stamp (date and clock time of the last change) differs from the last saved value. Only then, the file will be copied again in an incremental backup.

But there are some applications updating the timestamp even if they only read a file but do not change it. In the standard configuration, this results in the creation of many unnecessary backups.

If you identified such files, frequently getting a changed time stamp without a changed content, you should set an alternative "New Criterion" for them. On the dialog page >Jobs< - >Backup Job Settings<, you can activate the item >**A-Flag**< or >**Content check**<. Then, the time stamp will no longer be taken into account for some files.

After clicking the >Select< button, you define which kinds of files shall be specially treated. You could enter "*" to choose all files. But it would be better specifying the files in detail (with entries like "*.drx" or "\\Special Data*").

Processing the "Content check criterion" takes some time, especially if the original data are stored on a different computer. For the content check, each file has to be loaded completely, to identify if there is any byte changed. VersionBackup must read all files even if it will not create any backup copy.

Therefore, the content check criterion should be used only where it is necessary.

It can reduce the processing time if copying the file needs much more time than reading them. This applies if the files have to be sent over a slower network connection.

6.13 Manual Backup Deletion

Generally, you should configure VersionBackup to delete the old backups **automatically**. (See: dialog page >Delete< (page 57).)

Furthermore, you can delete the backup files in the Backup-Browser **manually**:

- With the Backup-Browser function >**Delete Backup**< (see page 126), you can delete a date version for all Backup Jobs.
- With the Backup-Browser function >**Delete File**< (see page 127), you can delete specified files or directories completely from the primary backups.

Because the external archive media (CDs or DVDs) usually cannot be changed, the information about the **externally archived backups will not be changed** with these delete functions.

If you like to delete single date versions, it can also be useful to do this with the **Windows-Explorer**®. This is done by deleting the date directories in the Destination Path. (The date directories are located in the directory, which has been configured on the dialog page >Source Path/Dest Path< as >Destination Path of the files to be saved<.)

Caution: Please do not delete the newest backup in this way.

Because in the data base, the newest files would be marked as saved, they would not be saved again.

6.14 Deleting the Backups of one Backup Job Automatically Without Creation of New Backups

If you want to terminate creating backups from a Source Path, you usually will **delete** the Backup Job or **de-activate** it.

But note: in such a case, the **existing backups will no more be automatically deleted**. You should delete the old backups manually.

Perhaps you want to keep these old backups at first. You would like to have them deleted after some time. This should happen automatically.

Deleting backups after some time can be configured on the dialog page >**Delete**<, for instance, by setting the parameter >**Backups, older than xx days**< (see page 58).

However, to have the automatic deletion active for a Backup Job, you must not delete or de-activate the Backup Job.

Instead of this, you **prevent VersionBackup from creating new backups** by setting a 'complete Exception'. You enter * as entry in the >**Exclusion List**< (see page 40). The >**Force List**< has to be empty. Then everything is excluded, so nothing will be copied any more.

If you configure Exclusion List, Force List and the deletion parameters this way, then - after some time - all the backups to this Backup Job will be deleted.

6.15 Automatic Deleting Single Files from the Backup Archive

The easiest way how VersionBackup can delete its old backups is to remove complete Date Directories of a Backup Job. Then, from one day, the backup will be either complete or they will be completely removed. In this case, the delete operations are very simple for the computers.

With Release 5, two new delete blocking reasons have been added: **>keep the files to be able to recover at least x days<** and **>keep at least x copies from each file<** (see chapter 4.2.7). With these conditions, it is now necessary deleting single files from a backup while keeping the rest.

This means, the system must not only decide whether to keep a backup as a whole but this decision must be done for every file individually.

If the backups are compressed in ZIP files which are stored on a server, the deletion of single files will be very intricate, then. The reason is that a server is not able processing a command like **>remove data file x from ZIP file y<**. Instead, the whole ZIP file must be fetched from the server (if Online Backup: Download). Then, the VersionBackup computer will locally create a new ZIP file from the original one, which does no more include the file which shall be deleted. Finally, the new ZIP file must be transferred to the server again (if Online Backup: Upload).

Therefore, deleting a few files may need more data movement than creating a Full Backup.

To avoid blowing up the time for backup creation by these operations, the new application **>VBMaintenance.exe<** has been added to the VersionBackup software package. It will be started after the end of the copy run and will do the deletion activities in the background with low priority. If the computer will be shut down while VBMaintenance is running, then it will continue its job after the next start.

In spite of this, it will not be sensible deleting a small file from a very big ZIP file by downloading the ZIP file and the uploading the modified ZIP file with marginally reduced size. If the size reduction is small, then VersionBackup should do without the deletion at first. This will waste only a little amount of storage space.

On The dialog page **>Settings/Logs<** - **>Copy Run Settings<**, there is a slide element to control this behavior:



It enables you to define the amount of storage space saving which is precondition for the deletion from a ZIP file.

All at once, different limits will be defined for files on local drives, files in the LAN and files in the Internet.

If the slide is at the **left side at Zero**, then the download upload process will be done any time, even if the storage saving is insignificant.

If the slide is set to the **middle of the scale**, then a ZIP file on the local hard disk will be revised for deletion if this will result in a size reduction of at least 24%. Simultaneously, the limit for the LAN is set to 50%. And files stored by FTP (in the Internet) will be fetched for deletion only if it can be expected to reduce them by 70%.

If you set the slide to the **right limit**, then the deleting procedure will run only if the space reduction will be very high.

Of course, not only one file will be considered, but all files together which shall be deleted from one ZIP file.

If the data will not be deleted at first, then they will remain visible in the Backup-Browser and they still will be used for the automatic recovery. When the next backup creation has been done, they will be counted again as files which shall be deleted. This way, sooner or later enough files will be ready to delete them in one run.

6.16 The Data Structures Created by VersionBackup

When you configure VersionBackup, you define which parts of your hard disk shall be saved. This is done by **defining** one or several **Backup Jobs** (see dialog page >Source Path / Dest Path<). The backups will include the files in the Source Path and its subdirectories.

For each Backup Job, a **Destination Path** has to be defined. The Destination Path is the location, where the backups from this Source Path are copied.

During the backup run, VersionBackup checks the files in each Source Path and its subdirectories. If at least one file has been changed, VersionBackup creates a new data storing area in the Destination Path directory.

This storing area is a subdirectory, called **Date Directory**. Its name is the date of the last file change (format: yyyy-mm-dd). Then the changed files will be copied into the date directory or corresponding subdirectories.

If you switched the parameter >**Compress the backup files**< on, in the date directory a file with name VersionBackupData_000.Zip is created and maybe **more ZIP-files** with higher numbers. These files contain the compressed backup files.

The separation into several ZIP-files is necessary, when the size or number of the backup files is big. Operations with ZIP-files with a high volume are slow. So VersionBackup keeps its high speed, by using several ZIP-files, which are smaller each.

If you want to access a backup file directly and several ZIP-files have been created, for the first step it is not clear, which ZIP-file contains the backup file. You can get the number of the ZIP-file from the Control File (See >Access to the Backups without Using the Backup-Browser<, page 140).

In each Incremental Backup run, only those files are copied, which have been changed since the last backup operation. To decide the question, whether a file has been changed, the **change timestamp of the file**, created by the operating system, is used. VersionBackup creates a list of all files in the Source Paths (The control file, see below). This list includes the latest change time of any file. If a file with a newer change time is found, a new backup version of this file will be created. Furthermore, each file will be saved, if there is no entry with its path and name in the control file, so it probably is new.

Alternatively, you can determine that it will be checked **byte by byte**, whether something has been changed in a file. Of course, this usually lasts much longer than the simple time stamp test. It can be configured, which files shall be content checked. This is done separately for each backup job (see >Copy decision for specified files by Content Check<, page 49).

Or else, you can choose the file's **Archiving Attribute** (>A-Flag<) as >New Criteria<. Even this can be set for special files (see >Copy decision for specified files by A-Flag<, page 49.).

You can look into the date directories with the Explorer© and you can directly access the files, which are stored there (see >Access to the Backups without Using the Backup-Browser<, page 140). The ZIP-Files can be opened with the software PKZIP for instance.

But in the most cases, it is easier to use the **Backup-Browser**. It picks out all the file versions from the different date directories and displays them in the rightmost list. You can select the desired version day with one mouse click. And with the >**Recover**<-button, you can recover the file versions to the original or any other location on the disk.

In standard operation, VersionBackup is designed to provide **any day's final state** of the files for later recovery. This means that for each day one backup version must be kept separately.

Of course, it is possible performing several backup copy run during a day. If the ZIP compression is switched off, then a backup file will be overwritten when the same file is saved again during the same day. If the compression is activated, then initially several issues of the same file remain available. When you do a recovery run, you will be asked which clock time's issue you like to restore.

On the dialog page >Jobs< - >Backup Job Settings<, you find the input field >Remove multiple versions after x days< (see page 46). It defines how long multiple issues of the same day shall be stored. After this period, the backup copies will be automatically deleted except each day's last one.

The backups, which are automatically created on the permanently accessible disk (usually daily) are called >**Primary Backups**<.

If you start the function for the **External Archiving**, the date directories will be copied to the location, which has been entered by you as >Destination Path for the External Archive Copy<.

This means, that the backups will be duplicated once more. VersionBackup Server assumes, that the files, which have been copied with the external archiving function, will be located on an external archive media, and that these external copies will be stored permanently.

The externally archived backups can be displayed and recovered with the backup-browser - just the same way like the primary backups. Because you assign an individual name to each media, VersionBackup can specify any needed media if it is required for the recovery.

To display and edit the list of existing archive media, please choose the item >Data Base< - >**Managing the External Archive Media**< in the title bar of the Backup-Browser (see page 128).

If the information about an archive media is missing in the Data Base, then you can import it using the >**Scan**< button in the Backup-Browser.

More Information:

- >External Media Path for the Recovery<, page 120
- >Using the ZIP-Password Protection<, page 26
- >Automatic Deleting Single Files from the Backup Archive <, page 149

The automatic backup **deletion** by VersionBackup is done by deleting complete date directories. It is configured on the dialog page >**Delete**< (see page 57). The time, when the deletion happens, is after a new backup run.

Furthermore, it is possible deleting the backup data **manually**:

- With the Backup-Browser function >**Delete Backup**<, you can remove specified backup versions (date channels) for all or specified backup jobs.
- With the Backup-Browser function >**Delete Files**<, you can remove specified files or directories from the backup archive.
- If you want that these **functions may not be available to the user**, you can disable them by a **Registry modification** (see page 141).
- You can delete the backups even **without VersionBackup** (with the Windows Explorer®, e.g.). For this, please note the remarks in chapter >Manual Backup Deletion<, page 148.

The Control File >VersionBackup.txt<

If you are searching for the information, which files were present on the dist at the time of the last copy run and which files have been saved, you will find this in the file >VersionBackup.txt<. This file with the **result of the last copy run** is created in **any Destination Path** (see also >Storage location of the Data Base Files<).

Furthermore, these files are saved each day in the date directory (if the compression is switched on, it is in the file >VersionBackupData_000.Zip<). Here you can view the **information from copy runs in the past**.

You can open VersionBackup.txt with a text editor (Notepad e.g.). This way, you are able to analyze special situations, if there are any questions about the backup data.

See also >**Information in the Control File VersionBackup.txt**<, next chapter.

The files VersionBackup.txt in the date directories are the information source for the data base repair function. Therefore, they should not be changed or removed.

Data Base Files >VBackupData-yy-q.dat<

VersionBackup stores its information about the primary and externally archived backups in the data base files. Each data base file takes the version data from one Backup Job and one quarter year. Their names are >VBackupData-yy-q.dat<, where yy is the year (two figures) and q the number of the quarter (1..4).

The data base files are written **to the Destination Path**, that is the same directory like the date directories and the files VersionBackup.txt (see also >Storage location of the Data Base Files<, page 156). Because on each change of the quarter year, a new data base file is created, after some time there are several data base files. Additionally, the actual data base file is saved within date directories daily (if the compression is switched on, then it is stored in >VersionBackupData_000.Zip<).

The content of the data base files is the base for the **decision**, which files **shall be copied into an Incremental Backup**. On the other hand, it is the **information, which is displayed in the Backup-Browser and used for the file recovery**. Only those quarters will be loaded into memory, which are currently needed.

Please note: When the Backup-Browser fills its file and version lists, it does not scan the disk for the currently available backups. But it displays the processed content of the data base files. Only this way, it is possible to create the list content, which may be based on some 100,000 versions in a short time.

See also >Format of the Data Base Files<, page 154

If the data base files should be lost or damaged, it is possible to reconstruct them.

The information about the **primary backups** is reconstructed with the function >Repair Data Base<, which can be started in the menu bar of the Backup-Browser ((item >Data Base<). This function searches for the files >VersionBackup.txt< in every date directory. From the information within these files, the data base entries can be generated again. The set of files >VersionBackup.txt< means a redundant data keeping, which increases the operation security of VersionBackup. Therefore, the files >VersionBackup.txt< should not be removed or changed.

The information about the **externally archived backups** is stored on the external archive media for the second time. If the data base has to be reconstructed completely, all the media should be scanned again. This is done using the >Scan< button in the Backup-Browser.

If the primary disk should fail completely, both the primary backups and the data base files are lost. Even in this case, the data base can be reconstructed with the content of the external archive media. This is possible even if there are only a few media present, because each media has its own data base fragment.

6.17 Information in the Control File VersionBackup.txt

The backup generation is logged in the **Control Files**, named **>VersionBackup.txt<**.

They are archived together with the backup data **in the date directories or in the file >VersionBackupData_000.Zip<**. The actual version additionally is located **in the Destination Path**. This is on the same level like the date directories (see also **>Storage location of the Data Base Files<**, page 156).

To display the files in the Backup-Browser, VersionBackup does not evaluate the **>VersionBackup.txt<** files but the **data base files >VBackupData- .. .dat<**. (For details see **>The Data Structures Created by VersionBackup<**, page 150.)

Even now, **>VersionBackup.txt<** will be created because in these files the **user can read, which files existed**, when the copy run was done and which files have been copied. Furthermore, **>VersionBackup.txt<** is used as **second data source** for the **>Database Repair function<** (see page 133).

You can open these files with a text editor (Notepad e.g.). This is useful to check the results of the copy process. The file **>VersionBackup.txt<** which is located directly in the Destination Path (on the same level like the Date Directories) describes the last copy run. Additionally, you can look into the files **>VersionBackup.txt<** in the date directories (if the compression is switched on, in the files **>VersionBackupData_000.Zip<**). They describe the copy runs on that day.

However, please take care not to delete the Control Files and not to change their content unintentionally.

Content of the Control File VersionBackup.txt:

First Section:

- Information about the time of the backup run
- Information about the next scheduled Full Backup
- Source Path
- possibly: Line(s) with the latest ZIP-file number (see below)

Second Section (after the first line, which starts with #):

- List of the currently saved backups
- Date (= Name of the date directory)
- Assignment character (I = Incremental Backup, F = Full Backup)
- Disk space occupied by this backup

Third Section (after the second line, which starts with #):

- List of the files (Source Path without Exception Paths)
- Assignment character (X = copied here, E = Copy error, Space = not copied, because not changed)
- Time of the last change of the original file
- possibly: Number of the ZIP-file, where the backup copy is stored
- Path of the original file

Line(s) with the latest ZIP-file number

If the compression feature has been switched on, there are one or more lines at the end of the first section, starting with **>Z<** and a number.

This is a list of the backup runs, performed for this day. On each day, several backup runs can be done. Each run with this date is listed in a separate line. **The number behind the >Z< is the number of the last ZIP-file used within the backup run.** After that, the date and time of the backup run is noted.

This shows that a repeated backup run during the same day uses different ZIP-files. Usually, the files versions in the earlier ZIP files will be deleted, when a new version of this file and for the same day is created.

But the deletion of the older versions from the same day can be switched off (see **>Storing Several Versions from One Day<**, page **Fehler! Textmarke nicht definiert.**).

6.18 Format of the Data Base Files

VersionBackup stores its information about the primary and externally archived backups in the data base files. Each data base file takes the **version data from one Backup Job and one quarter year**. Their names are **>VBackupData-yy-q.dat<**, where yy is the year (two figures) and q the number of the quarter (1..4).

The data base files are written **to the Destination Path**, that is the same directory like the date directories and the files VersionBackup.txt. Because on each change of the quarter year, a new data base file is created, after some time there are several data base files. **Additionally**, the actual data base file is saved within **date directories daily** (if the compression is switched on, then it is stored in >VersionBackupData_000.Zip<).

You can open the data base files with a text editor (Notepad© e.g.). But please take care not to change the files unintentionally. It is difficult to read their content, because they are designed for optimum computer performance. But if it is necessary, you will be able to find your way there.

If the content or the format if the data base files should be distorted, you can reconstruct them with the **>Data Base Repair function<**.

Content of the data base files:

(Each section begins with # in the first column)

First section:

Identifier line: >#0 VersionBackup Database<
(Maybe with >(DST)<, if during the last copy run the daylight saving time automatic has been active)
Source Path: (Last valid Source Path)
Time Stamp: (Latest backup day, format: yymmdd)
Processing Time: (Time of the latest backup run)
Latest File Change: (Date and time of the newest file, when the last backup copy run was done)

Second section>External Media<:

List of the subdirectories on the external archive media, where the data from this Destination Path can be found

Third section:

currently still unused

Forth section>Primary Backups<:

List of the backups, which are currently stored on the primary disk
Date (= Name of the date directory)
Identifier char (I = Incremental backup, F = Full Backup)
Disk space, used by the backup, in Kilobytes

Fifth section>Copy Runs<:

List of the copy runs for the last backup day
Date and time on start of the copy run
Maximum ZIP file number, which is used in this copy run

Sixth section>Files<:

List of all stored files

Line beginning with *: Source Path

(If you change the Source Path and do not change the Destination Path, the files from the different Source Paths will be saved in the same data base file. To make this possible, the data base file can consist of several blocks. Each block begins with a line with * and the next Source Path.)

File lines:

The first number indicates how many directory levels from the path in the last file are valid even for this line.

File path rest (The complete file path is the path from the *-line plus the number of directory levels from the last file plus the path written here.)

File name

|| followed by the CRC and the size of the newest version of the file

One or several version records, each one beginning with |

Identifier char: Blank: File was present, but it wasn't copied; *: Primary backup;

Number: Media number; E: Copy Error

Day and time of the latest file change (format yymmdd:hhmm) >

Time stamp of the backup (see first section)

Z and ZIP-File number (omitted if no compression)

One or several existence intervals, starting with ?

From date of the existence interval (format: yymmdd)

-

Until date of the existence interval (format: yymmdd)

In special cases, it can be reasonable to change the data base file. **But this should be done only by experienced users.**

If you change the data base file, please follow these **rules**:

- Use an ASCII editor, which ensures, that any undesired file change can be excluded.
- Create a backup copy of the data base file before you change it.
- Close VersionBackup before you edit the files.
- After the modification, check whether the files are still complete.
- If something goes wrong, use the **>Data Base Repair function<** (see page 133) and repeat scanning the external archive media.

Possible manipulations of the data base file

- If you remove the entry of a backup in the fourth section, this backup will not be deleted automatically.
- If you set the disk space entry of a backup to zero in the fourth section, this backup will not be deleted automatically due to the disk space occupied by it.
- If you remove a file version record in the sixth section, this file version will no longer be displayed by the Backup-Browser nor used for the recovery.

See also >The Data Structures Created by VersionBackup<, page 150.

6.19 Storage location of the Data Base Files

In the Data Base Files it is stored, **which backup versions exist in the backup archive.**

The name of the Data Base Files is **VBackupData-08-3.dat**, e.g. The figures may be different. -08-3 means: Data from the third quarter year in 2008.

Furthermore, files named **VersionBackup.txt** will be stored by VersionBackup.

The up-to-date issues of the Data Base Files usually are stored **directly in the Destination Path.**

But if the Destination Paths is located on a FTP server, this would be unfavorable, because in this case, they would be fetched very often from the Internet. With an FTP Destination Path, the Data Base Files are stored in a central directory on this computer.

The Data Base directory of backups **stored by FTP**, usually is:

C:\Documents and Settings\\Application Data\SB-AW\VersionBackup\
LocalData\\

Additionally, the Data Base Files are **daily saved in the Date Directories**. If the compression is switched on, then they are packed into the file VersionBackupData_000.Zip.

7 Appendix

7.1 Product Activation

You may use the VersionBackup Server software **30 days free** to test it. Within this time, you will be able to decide whether it is the right backup software for you.

After this, you have to do the **Product Activation**.

The Product Activation is necessary to ensure that one VersionBackup license will be used for one computer only. The Product Activation Wizard will assist you to avoid any problems during the activation process.

To activate VersionBackup Server, you have to purchase a software license for each computer, from which the data shall be saved. You can order your licenses for instance in the internet on www.versionbackup.eu

For each license, you will receive a **Register Number**.

The Register Number consists of **four groups**. Each group has **four figures or characters**.

Example: **HG58-22A0-BLE2-SY8M**

During the Activation procedure, you will enter your Register Number. On the dialog page **>Overview<**, please click on the item **>Product Activation<**. This launches the **Product Activation Wizard**.

It is recommended performing the Product Activation directly via Internet. This will be very easy for you.

During the Internet Activation, you have to enter your Register Number. It will be transferred to our Register Data Base. Each Register Number may be used for one computer only. To check this, the number of activation runs, done with one Register Number, will be counted.

If the Activation has been done successfully, the computer will receive a confirmation number. It is the certificate for the valid Product Activation.

It is not possible to do the Product Activation for a different computer. The activation must be done with the computer, for which the VersionBackup license shall be valid.

If the computer, where VersionBackup shall be activated, does not have Internet connection, you do the **activation manually**. To do this, you contact our **Activation Internet Page** <http://www.sb-aw.de/Activation> with another computer. Or else, you can perform the activation by **fax** or **post mail**. Please follow the instructions of the Activation Wizard even for this.

Caution: **The Activation Number is valid only for the server, where it has been displayed.** The Confirm Number would be invalid if you use an Activation Number, which has been displayed on another computer.

If there are any problems with the Product Activation, please contact us in one of the following ways:

e-mail: technik@versionbackup.de

fax: 0049 89 20325978

post: OMEGA S.E.E.
Dachauer Strasse 11c
85764 Oberschleissheim
Germany

7.1.1 Product Activation: Limit Error

Each Register Number is valid for one computer only.

If you want to use VersionBackupServer on several servers, you must purchase several licenses. Then, you will receive several Register Numbers and can use a different one for each of them.

To ensure that one license will not be used for several computers, our central activation counts how often a Register Number has been used. If this error message appears, the **limit** has been **exceeded**. Then, the Activation is no more possible on the regular way.

If you need to activate another computer, you may need to purchase more licenses. You can order them on the Internet page <http://www.versionbackup.eu>.

If you are interesting in special conditions (e.g.: bulk licenses), please send your question to the addresses below:

e-mail: vertrieb@versionbackup.de

fax: 0049 89 20325978

phone: 0049 89 20325983

post: OMEGA S.E.E.

Dachauer Straße 11c
85764 Oberschleissheim
Germany

But it is also possible that you exceeded the limit because you had to install and activate VersionBackup **repeatedly on the same computer**. Or else, you put your old computer out of action and want to continue using VersionBackup on its successor.

In this case, we ask you to contact our e-mail support@versionbackup.eu. If you tell us the reason why you need another activation run, we will enable the activation again.

7.2 Copy Errors

If there have been copy errors while generating the primary backups, the names of the files are listed in a window.

The reasons for the copy errors are reported in the copy log. To display them, please open the dialog page >**Settings/Logs**< - >**Logging**< and click on the left >**Show**< button.

There are several main reasons for a possible copy error:

1. Locked Files

A file may be locked, while VersionBackup tries to copy it. This might occur, if the file currently is processed by another program.

Sometimes a file, which usually can be copied, is locked by accident, just in that moment when the backup runs. Usually this is no major problem, because VersionBackup will copy this file on the next backup run.

Nevertheless, there are files, which are locked permanently (e.g. the Windows© swap file). These file can neither be saved on the usual way. Nor they can be recovered by copying a backup version over the actual file.

If the function >**Do copy retry runs**< on the dialog page >Backup Creation< - >Error Retry< is switched on, VersionBackup tries repeating to copy the files after some time.

If finally an error message is displayed in spite of this, the file seems to be blocked for a longer time.

Files, which never can be copied, should be entered into the **Exclusion List**.

If a checkbox is displayed on the left side of the list of files, which could not be copied, then you can transfer the filenames into the Exclusion List immediately. Click on the checkbox to set a checkmark next to the files and click on >OK<.

Later, you can edit the Exclusion List on the dialog page >**Jobs**< ->**Exclude**< (See page 40).

2. Internet or Server not available

If you access the copy destination by a FTP connection, there are many possible reasons for disturbed communication. It may be your connection to the Internet or the Server configuration. Or else, the Server might not be ready at the moment. Of course, even a Server in the LAN or any connected target computer might be not ready when the backup creation shall be done. In those cases, the automatic copy retry function will try to repeat the copy process later.

3. Insufficient access rights

VersionBackup has the same access rights like the user, who is logged in and who did the VersionBackup configuration. If these rights do not allow reading the Source Paths and writing and changing the Destination Path, errors must occur.

4. Directory Path is too long

VersionBackup itself has no path length limitation. But the used file systems NTFS© and FAT can handle only paths, which totally (path plus file name) are not longer than approx. 253 characters. The subdirectory paths without the file name may not be longer than approx. 155 characters. If VersionBackup gives the command to Windows© to copy files with very long paths, Windows© may be unable to execute this.

VersionBackup saves the backup files in subdirectory paths including the backup date. Therefore, the directory path length can slightly increase due to the backup creation. In some cases, this is enough to exceed the path length limit of the file system if the original paths already have been very long.

It strongly depends on your configuration, how long the original path length may be to save them with VersionBackup.

If your paths are very long, you can improve the situation

- using short Destination Paths
- using long Source Path definitions including already a part of the long directory path (instead of "C:\")
- ZIP compression of the backups
- using a short path for the temporary directory (dialog page >Settings< - >**General Settings**<, see page 88) The short most possible path is "C:\tmp\".

If it is not possible to remove the problem, then you should enter the long file paths into the Exclusion List. Then, the files will no more be saved, but you avoid further error messages.

To do this, please proceed like it is written above in point >1. Locked Files<.

5. File is too big to be compressed in the ZIP format

ZIP files have a standard data structure which can store files up to the size of 4.294.967.296 Bytes (per single file).

Therefore, very big files can only be saved without ZIP compression.

If you do not want to deactivate the compression for the Backup Job, then you should enter file path into the Exclusion List. Then, the file will no more be saved in his Backup Job, but you avoid further error messages.

To do this, please proceed like it is written above in point >1. Locked Files<.

Later, you should create an additional Backup Job for the big file, where the compression is switched off. This can be done like it is written in chapter 6.4 >Saving Some Specified Files or Subdirectories Only < (Page 139).

6. Not enough disk space for the Temporary directory

On the dialog page >Settings/Logs< - >**General Settings**<, you find the input field for the directory path, where temporary files can be saved (see page 88). It is located in the C:\ drive or partition by default.

If there is only small free space on C:\, you should set the temporary path to another partition.

7. Verify Error

If the item >**Verify the backup files**< on the dialog page >Jobs< - >Backup Job Settings< is enabled (see page 45), then the backups will be checked immediately after they have been created. If this discovers an error, which can not be fixed by another copy attempt, the affected files will be listed in the error display view.

7.3 New Functionality in VersionBackup Server 5.0

The following list shows the main enhancements by the Software Release VersionBackup Server 5.0.

- 1 **Easy data storage configuration (Automatic Mode)**
- 2 **New reason to delete backups: >if there is less than X MB free space on the disk<**
- 3 **New reason to prohibit the deletion:
>keep the files to be able to recover at least X days<**
- 4 **New reason to prohibit the deletion:
>keep at least X copies from each file<**
- 5 **Creation of primary backups or archiving on the USB drive:
USB drives are recognized by their Serial Number or Identifier.**
- 6 **Creation of primary backups or archiving on the USB drive:
If the USB drive is not ready, the copy run will be restarted at next drive activation.**
- 7 **Creation of primary backups or archiving on the USB drive:
Activation of a USB drive can be configured as start reason.**
- 8 **”VersionBackup Gnome“: On a USB stick, a mobile recovery system can be created.**
- 9 **Storage of several file versions per day.
After a configurable number of days, the multiple copies will be removed..**

What are the details of the new functions?

What is my benefit of this?

What must I do to use the new functions?

You will find the answers on the following pages.

7.3.1 Easy data storage configuration (Automatic Mode)

In the past, 18 configuration parameters on 2 dialog pages had to be set for optimum Full Backup and Delete configuration. Now, 3 parameters more have been added. This is good for persons who have very special requirements or need exact control of the system behavior.

But many users do not like to go into the details so far. And any parameter, which is unfavorably set, may reduce VersionBackup's system behavior.

Therefore, instead of the dialog pages **>Full Backups<** and **>Delete<**, in the future the page **>Storage Duration<** is displayed by default. It shows no more than 3 parameters:

- Do you want to have old backups deleted?
- If yes, how long is the period which shall be recoverable?
- Do you plan to archive the backups? Shall they be kept until the archiving has been done?

Of course, the detailed configuration pages will remain available, if needed. This is called **>Expert Mode<**. On the right upper side of the dialog pages, there is a button **>Switch<** to change between the Automatic Mode and the Expert Mode.

If the Automatic Mode has been switched on, the detailed parameters will be evaluated automatically from the basic data from the page **>Storage Duration<**. You can view these parameters by switching temporarily into the Expert Mode.

What must you do to use this new function?

If your VersionBackup already has been configured exactly to your needs, you should leave everything as it is.

But if you want to **use the easy configuration mode**, you should

- Select the backup job on the page **>Jobs<** - **>Job Selection<**
- Click on **>Delete<** in the upper right corner
- Click on the button **>Switch<** to change to the new page **>Storage Duration<**
- Set the number of days, how long the backups shall be kept
- Do the setting whether you want to do additional external archiving
- Transfer the settings with the button **>Transfer<** to the other Backup Jobs or change to the other Jobs and do the optimum settings for them
- Finalize your input with **>OK<**

7.3.2 New reason to delete backups: >if there is less than X MB free space on the disk<

On some storage disks, it may be reasonable to control the backup deletion not by the amount of existing backups but by the left free space on the disk.

You can set this as a Delete Reason, now.

In this context, please note:

- Like all other delete setting, this new one will affect only the Primary Backups.
- Backups can be deleted if at least one Delete Reason applies. Therefore, if other Delete Reasons are active causing earlier backup deletion, adding the new Delete Reason will change nothing. Maybe, you should deactivate currently set Delete Reasons or diminish their limits.
- Backups will not be deleted if at least one Keep Reason will apply. If a condition in the lower part of the >Delete< dialog will block the deletion, then the backup disk may run full even if you activated the new Delete Reason.

What must you do to use this new function?

- Select the backup job on the page >Jobs< - >Job Selection<
- Click on >Delete< in the upper right corner
- Set a checkmark before >if there is less than x MB free space on the disk<
- Set the number of megabytes when the condition shall become active
- If necessary, adapt the other Delete Settings
- Finalize your input with >OK<

7.3.3 New reason to prohibit the deletion: >keep the files to be able to recover at least X days<

If this new reason to block the deleting of old backups is activated, VersionBackup will check every file version whether it will be needed for the recovery of a day in the configured period.

If the file will be needed for recovery, then it will not be deleted.

In this context, please note:

- Like all other delete setting, this new one will affect only the Primary Backups.
- If you additionally did the External Archiving, of course even older states will be kept ready for recovery. Then, you will be asked to make the needed media available (insert a CD or DVD, e.g.).

What must you do to use this new function?

- Select the backup job on the page >Jobs< - >Job Selection<
- Click on >Delete< in the upper right corner
- Set a checkmark before >keep the files to be able to recover at least x days<
- Enter the number of days which shall be kept available

or in the easy configuration mode:

- In the dialog >Delete<, click on >Switch< to change into the Automatic Mode
- Enter the number of days which shall be kept available

- Transfer the settings with the button >Transfer< to the other Backup Jobs or change to the other Jobs and do the optimum settings for them
- Finalize your input with >OK<

7.3.4 New reason to prohibit the deletion: >keep at least X copies from each file<

At first sight, you perhaps thought that the old setting >keep at least 20 backups< means that 20 versions **of any file** will be kept. This is wrong. “20 backups” means that the backups of 20 days will be kept in the Backup Archive. The most files will not be changed every day and therefore will not be kept in any Incremental Backup. Therefore, the number of stored versions from a file usually is much lower than 20.

But if it is important for you to keep a **certain number** of backups **of each file**, you can obtain this with this new Keep Parameter.

If it is activated, VersionBackup will count the number of backup copies of any file. Only if this number is bigger than the configured minimum value, deletion of versions of this file will be allowed.

But setting “keep 5 versions of any file“ may totally block any deletion of those files which are never changed or which are changed very seldom. Therefore, a **maximum age** of the protected file versions is defined. If you, for instance, set it to 183 days, then deleting file versions which are older than half a year will be allowed even if the number of the versions is lower than the limit.

In this context, please note:

- Like all other delete setting, this new one will affect only the **Primary Backups**. File versions on the external Archive Media will not be included into the counting.
- Multiple backup copies **of the same day** will be **counted as one backup**. If you set the parameter to 5, it means “backups of 5 different days”.

What must you do to use this new function?

- Select the backup job on the page >Jobs< - >Job Selection<
- Click on >Delete< in the upper right corner
- Set a checkmark before >keep at least x copies from each file<
- Enter the number of copies which shall be kept
- If necessary, adapt the other Delete Settings
- Transfer the settings with the button >Transfer< to the other Backup Jobs or change to the other Jobs and do the optimum settings for them
- Finalize your input with >OK<

7.3.5 Creation of primary backups or archiving on the USB drive: USB drives are recognized by their Serial Number or Identifier.

If you are using a **USB stick** or a **USB hard disk** as destination for the copy run, it maybe will not be plugged in or switched on all the time. If you connect it or switch the backup drive on, Windows© will assign a drive character to this new drive. But depending on the other configuration of the computer, the USB drive may receive a character which is different from the original one. Then, the drive could not be found according to the path which is configured in the directory path.

To make it possible to find the drive in spite of a changed drive character, it should not be identified by the character. VersionBackup can identify a USB drive by **its serial number or the drive identifier**, which is stored in any USB drive. Then, the current drive character does not matter anymore.

If the USB drive is identifies by the Serial Number or Identifier, then other USB drives will no more be used as copy destination. If you connect different USB sticks, VersionBackup will only use the one which is intended for the backups.

In this context, please note:

- The Drive Identifier is read automatically from the drive when it is plugged in and switched on (if necessary).
- You can **configure the Drive Identifier**. This is done after a right-click on the drive in the Windows-Explorer© on the page >Properties<.

What must you do to use this new function?

If you like to copy to a USB stick or to a USB hard disk:

- Connect the USB drive
- Select the backup job on the page >Jobs< - >Job Selection<
- Click on >Source Path / Dest Path<

If the USB drive currently has the drive character which is set in the directory path, then the Serial Number and Identifier will be displayed.

Else, please enter the current drive character at the beginning of the directory path.

- Click on the button near >Serial Number< or >Identifier<
- Finalize your input with >OK<

7.3.6 Creation of primary backups or archiving on the USB drive: If the USB drive is not ready, the copy run will be restarted at next drive activation.

If the USB stick is not plugged in or the USB hard disk is not switched on, the VersionBackup copy run cannot be done at the scheduled time.

You can define that such a situation will **not be handled as an error** to avoid bothersome error messages. Instead, the copy run will be **restarted** as soon as the stick will be plugged in next time or the USB hard disk will be switched on.

In this context, please note:

- **Warning:** On many computers, you must dismount the USB drive before unplugging it or switching it off. If you ignore this, **data might be missing on the disk!**
- VersionBackup will no more advert to the missing stick. It is your task to remember to plug it in. If you need an error message because the stick is missing, please deactivate this function. It is also possible scheduling an automatic copy start with the function which is described in the next section.
- The copy run will be only started if an USB drive is connected which is **configured as copy destination**. Other USB sticks will not cause any reaction.
- For the external archiving, this function is most valuable if the **Archiving Run is started automatically**.

What must you do to use this new function?

- Select the backup job on the page >Jobs< - >Job Selection<
- Click on >Source Path/ Dest Path<
- Set a checkmark before >Repeat if drive is not ready<
- Finalize your input with >OK<

7.3.7 Creation of primary backups or archiving on the USB drive: Activation of a USB drive can be configured as start reason.

If you choose this setting, the copy run will not be scheduled at Start Up, Shut Down or at a given clock time, it will be started when a USB drive will be connected.

This way, you can control VersionBackup plugging in a USB stick or switching on a USB hard disk. You can start a backup copy or an archiving run without touching the computer's keyboard or switching on the monitor.

Another application is to switch on the USB drive with a switch clock. When it has started and has been registered by Windows®, the copy run will begin.

In this context, please note:

- **Warning:** On many computers, you must dismount the USB drive before unplugging it or switching it off. If you ignore this, **data might be missing on the disk!**
- The copy run will be only started if an USB drive is connected which is **configured as copy destination**. Other USB sticks will not cause any reaction.
- You can enter the start at USB activation also in the Detailed Scheduling.
- For the external archiving, this function is most valuable if the **Archiving Run is started automatically**.

What must you do to use this new function?

- Open the dialog page **>Backup Creation< - >Scheduling/Start<**
- Activate the item **>When an USB Drive is activated<**

7.3.8 "VersionBackup Gnome": On a USB stick, a mobile recovery system can be created.

Concerning a Backup System, the most important thing is not the creation of backups. It is even more important that you will have **easy access to your backups even in critical situations**.

One possible critical situation may be that the computer, where VersionBackup is installed, does not operate any more. But if the backups are stored on a mobile drive or on a server, then it should be possible getting access to the backups immediately.

This is possible if you copy a Recovery System to the USB stick or the USB hard drive. It is called "VersionBackup Gnome".

Creating the Gnome is done with one mouse click.

Then, you will be able to go to any computer with the USB drive, start the Gnome and do the recovery with the Backup Browser.

For more information, see page 29.

What must you do to use this new function?

- Open the dialog page **>Settings/Logs< - >General Settings<**
- Connect an USB stick or a USB hard drive
- If there are several USB drives connected, select the right one
- Click on the **>Create<** button

To start the Gnome on a different computer

- Connect the USB drive with the Gnome
- Double Click on the start link **>Launch VB Gnome<**, which has been created on the USB drive

7.3.9 Storage of several file versions per day. After a configurable number of days, the multiple copies will be removed.

If you are working on a project continuously, it might be reasonable **creating backups more than once a day**.

Even then, it is important to keep **different versions separately stored**.

Example: at 11:30 you recognize that need a backup. It must be the copy from 9:00 because the copies from 10:00 and 11:00 are already spoiled.

VersionBackup Server is able to keep several backup copies per day separately. To recover a file version which is not the newest one from the day, please right click on the file in the middle list of the Backup-Browser. After clicking **>Properties<**, you can select **any existing version for recovery**.

But for the long-term data storage, it is better keeping only the final state of each day. Therefore, after a certain number of days, the **multiple copies will be removed**. Only the last copy of each day will be kept.

For more information, see chapter 4.2.4.5.

What must you do to use this new function?

- Open the dialog page **>Backup Creation<** - **>Scheduling/Start<**
- Activate the item **>Detailed scheduling<**
- Click on the **>Plan<** button
- Enter the clock time when the first copy run shall be done (e.g.: **>every day<** - **>at a fixed clock time<** - Clock time: 9:00)
- Enter further copy times (repeatedly click on **>New<** and set the next clock time)
- Finalize your input with **>OK<**
-
- Select the backup job on the page **>Jobs<** - **>Job Selection<**
- Click on **> Backup Job Settings <**
- Activate the item **>Compress the backup files<** (if not already active)
- In the line **> Remove multiple file versions after .. days <**, enter how many days you want to keep the multiple versions per day
- Finalize your input with **>OK<**

7.4 New Functionality in VersionBackup Server 5.1

Detailed Scheduling:

1. With the new configuration feature "every xx Minutes" or "every xx hours", it is possible defining repeated copy runs with one scheduling entry.
2. Scheduling Entries can be disabled.
Thus, it is no more necessary deleting a Scheduling Entry when it not required temporarily .

Many Backup Versions from the same day:

3. In the Backup-Browser, the files with several versions from the selected day will be marked by a special symbol .
4. Multi-Version Recovery
If several backup issues are existing from the day, which shall be recovered, then an additional dialog will be displayed. There, the desired clock time can be selected .

Backup-Browser (general):

5. The stored data volume is displayed even for subdirectories.
This value regards all files in the subdirectory tree.
6. The last change timestamp is displayed even for subdirectories.
This value regards all files in the subdirectory tree.
7. Even the subdirectory list can be sorted by the size or the last change time.
8. Hitting a character key char in the alphabetically sorted file list, you can move the selection to the first file name starting with that character.

Backup Management:

9. The Scan Button is not only used to import the data from external media, but also to get acces to the backups after a new installation.
10. In the "Media Insert Dialog", the directory path of the backup files is displayed for every media. In the input line, it can be modified.

Backup Creation:

11. The copy speed has been improved by optimization of the task priorities.

Specials for VersionBackup Server:

12. The immediate Copy Run can be launched even from the Client Computer.
13. If the Backup Stock has changed, the Client reloads the new data automatically.
14. The Server displays which Clients are currently online.

7.5 End User License Agreement - Software License “VersionBackup Server”

2009-08-24

Please read the following regulations carefully before you install the software.

This license agreement is valid for the usage of the SB-AW software product 'VersionBackup Server' and the combination of 'VersionBackup Server' and 'VersionBackup Client'. Furthermore, it is valid for the usage of 'VersionBackup Master' if it is run with a 'VersionBackup Server' license. In the following text, all different VersionBackup issues are shortly denoted as 'software'.

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If you disagree to one of the regulations, which are fixed here,

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In such a case, any operation of the software with your Register Number is prohibited. This is valid for any circumstance, any user and any computer, even for test purposes. Such an unauthorized operation with your Register Number will be a justification for legal actions by SB-AW.

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After this, a Product Activation is mandatory. During the Product Activation, the Register Number has to be entered into the system. The Product Activation has to be done on the computer, where 'VersionBackup Server' or 'VersionBackup Master' will be used. Running this software on a different computer with the same server license is not allowed.

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Any lawsuit from the usage of the software and this license agreement shall be done in the competence of the Landgericht Muenchen I, Germany.

To the current agreement, only German Law is applicable.

Severability Clause:

If one or more than one of these determinations should be inoperative or incomplete due to the applicable law, the other regulations will remain active in spite of this. In such a case, the inoperative or incomplete terms will be replaced by the regulation of the applicable law, which matches best most to the ineffective term.

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