



DOCUMENTATION

PROXESS STORAGE MANAGER EXPLORER

Status: PROXESS 10

Release 2022 R1

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Online help and PDF documentation

- The **PDF documentation** can be found in the local Windows help directory of the computer on which the module is installed.
- You access the **online help** using the Help function in the program.

Both can also be found at our customer center at customer.proxess.de (*German*).

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Conventions in this documentation

A note for female users:


For better legibility, we are omitting the explicitly separate mention of male and female users in this documentation. However, we want to expressly point out that we always refer to both women and men.

Highlights in the text


Highlights are used in this documentation as follows:

Bold	Refers to menu commands, buttons, field names, options and program groups. Examples: the New command, in the Name field
"Quotation marks"	Refer to menu titles, folder names and dialog fields. Examples: the "User" menu, the "Smartcards" folder, the "Set Password" dialog box
UPPERCASE LETTERS	Are reserved for the representation of keys. Examples: RETURN key, ALT key
(Brackets)	Show that a placeholder symbol is meant. Examples: (%) () during the PROXESS search

Tip

	A tip shows you particularly convenient options for operation or useful additional information. Tips are always represented as they are in this paragraph.
---	--

Warning information

	A warning is displayed for actions which could result in significantly more work or might even lead to data loss or other material damages. Warnings are shown by this symbol: You should read the warnings very carefully before you continue working.
---	---

About the PROXESS Storage Manager Explorer

The PROXESS Storage Manager Explorer (SMX) has the following functions:

- Control and monitoring of the PROXESS Storage Manager
- Mounting and configuration of new storage hardware for PROXESS
- Control of the connected PROXESS storage hardware
- Creation and verification of the optical storage media for PROXESS, such as DVD and WORM

With the SMX, the administrator can add and burn CD/DVD blanks and easily swap out and resume CDs/DVDs etc. The Storage Manager Explorer presents all management information of the Storage Manager so that the processes are transparent to you. With the Storage Manager Explorer, you can see and control the current state of the Storage Manager.

The Storage Manager Explorer is a client of the Storage Manager. This is why state changes of the Storage Manager are only visible when the display in the Storage Manager Explorer is updated. For executed functions in the SMX which change the state of the Storage Manager, the display is updated automatically. Only one Storage Manager Explorer can be active at a time.

See also:

[The screen layout of the Storage Manager Explorer](#)

Connect command

After program startup, you first have to connect to the PROXESS Storage Manager.

To do so, select the **Connect** command in the "File" menu.

The following dialog box opens:

Verbinden mit Storage Manager

Server:

QA-PRXDOKU

Protokoll:

Lokaler Server

Paßwort:

OK

Abbrechen

Figure: "Connect to Storage Manager" dialog box

Server	Here you can see the name of the local computer on which the Storage Manager is running as the default setting. Enter the name of the computer on which the Storage Manager to be administered is installed here. This is generally the computer to which the storage hardware, e.g. a DVD jukebox, is also connected.
Protocol	Select the protocol for internal communication with the Storage Manager here.
Password	<p>Login as a user:</p> <p>If you leave the "Password" field empty and click the OK command, you will automatically be logged in to the Storage Manager Explorer as a user. This also occurs if you enter an incorrect password. Not all functions of the SMX are available to you as a user. Functions for configuration in particular, e.g. the creation of a new device, are not active in this case.</p> <p>Logging in as an administrator:</p> <p>Enter the administrator password. Contact PROXESS support for this if necessary. Then click OK to connect to the Storage Manager. All functions of the SMX are available to you as an administrator.</p>

See also:
[Disconnect command](#)

The screen layout of the Storage Manager Explorer

Following installation, the Storage Manager Explorer can be found in the PROXESS/Configuration program group.

After starting up, the title line indicates the name of the server where you are located. In the example below, this is "LBFSRV01". First, you have to [connect to the Storage Manger](#). Following this, you can configure the [basic properties of the Storage Manager](#) using the context menu of this node.

The screen of the Storage Manager Explorer is similar to that of the Windows Explorer. The section on the left-hand side displays the [devices](#) managed by the Storage Manager.

In the right-hand section of the screen, you can see a [list of the elements belonging to the device](#) which you have selected on the left-hand side. The elements are represented by image symbols. You can choose between various different display modes of the lists using the "View" menu.

Devices and list elements feature context menus which you can access with the right mouse button. The context menu shows the actions which can be executed with the device/element. Each device/element features [device properties](#) which you can view and set using the Properties command in the context menu.

The size of the window area can be changed. When you move the mouse pointer to the separator, it changes into a double arrow with which you can move the separator.

If you have opened the Storage Manager Explorer and connected it to the Storage Manager, the following view is available, for example:

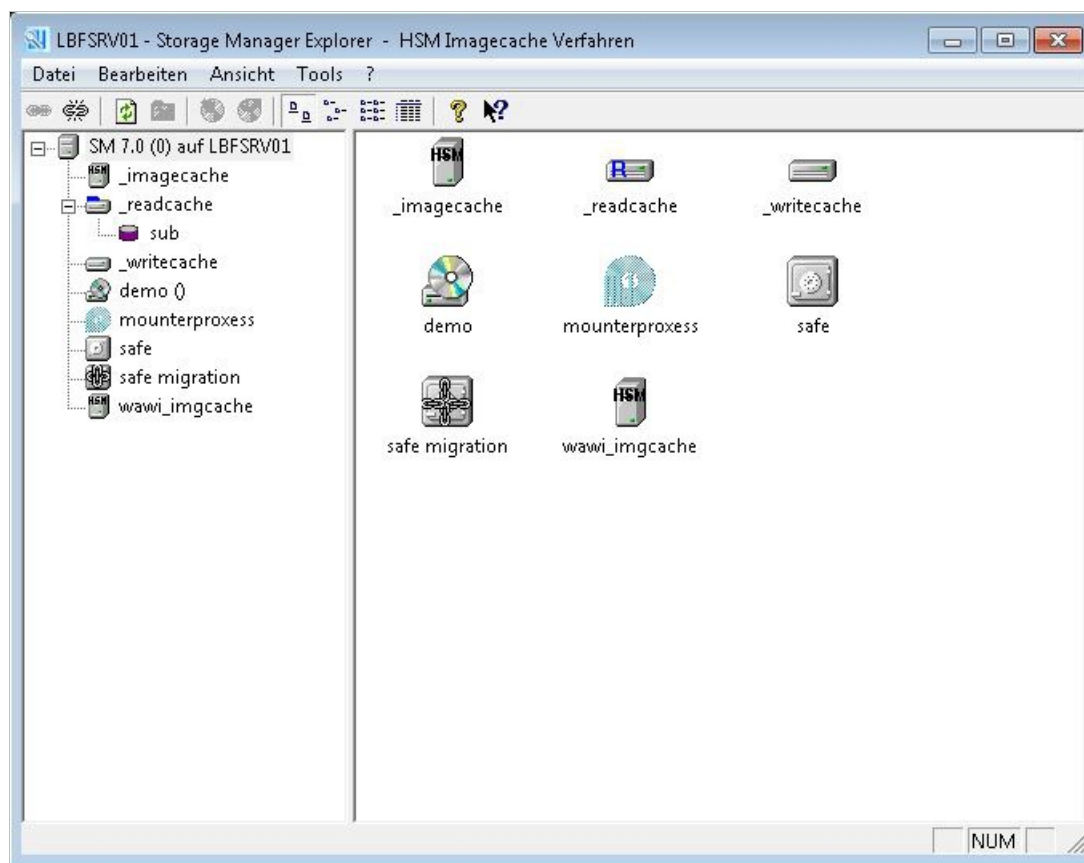












Figure: Screen layout of the Storage Manager Explorer

Left-hand side	Here you can see the devices managed by the Storage Manager.
Right-hand side	Here you can see the device lists available for the devices on the left-hand side.

The toolbar	
	This symbol connects to the Storage Manager.
	This symbol disconnects from the Storage Manager.
	This symbol updates the display manually.
	This symbol jumps up one level in the view.
	This symbol adds a new volume.
	This symbol removes an existing volume.
	This symbol displays the elements with large symbols.
	This symbol displays the elements with small symbols.
	This symbol displays the list of elements.
	This symbol displays information on individual elements in the window.

Storage Manager Properties dialog box

Here, you can:

- configure the connection to the PROXESS Database Manager module
- define hierarchical storage management
- incorporate the PROXESS license file
- specify protocols for the Storage Manager.

Once you have [connected to the Storage Manager Explorer](#), call up this dialog using the **context menu of the root node** of your Storage Manager Explorer:

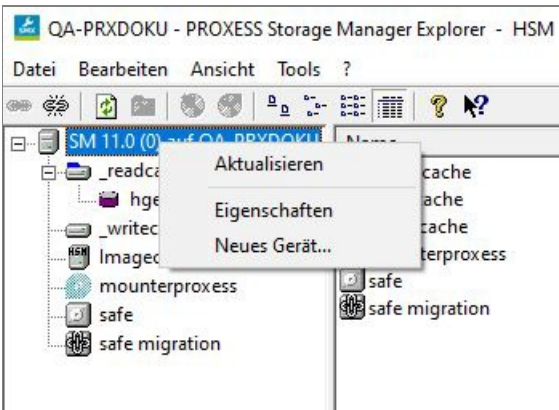


Fig.: Context menu of the root node

Select the **Properties** command.

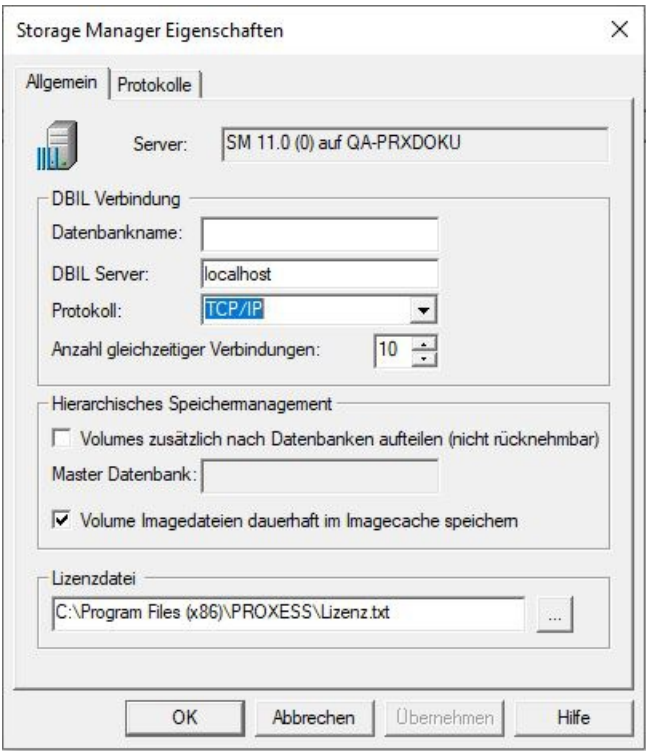


Fig.: "Properties" dialog box

"General" tab	
---------------	--

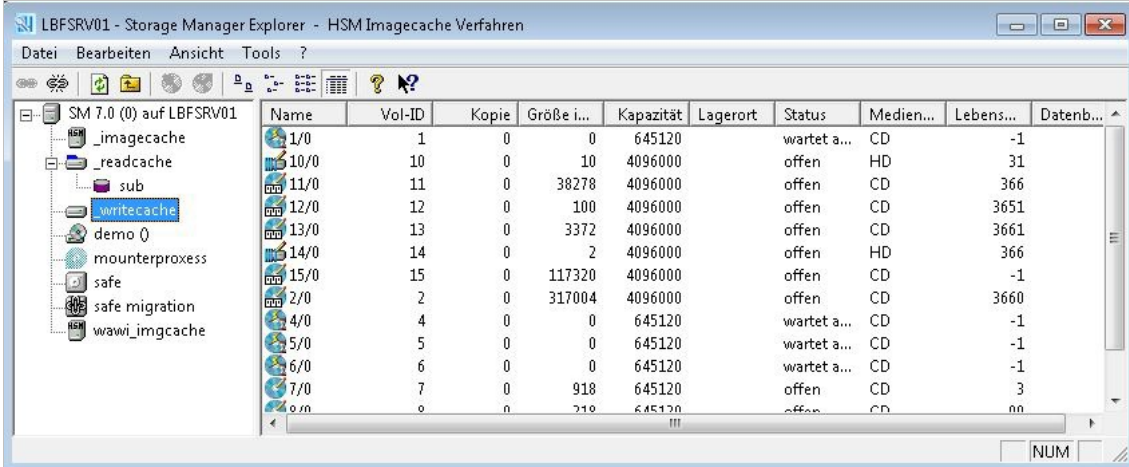
Server	Version specification of the SMX and server name of the PROXESS server. In the case of distributed systems, the name of the server on which the PROXESS Storage Manager is installed.
DBIL connection	DBIL stands for database interface layer .
Database name	Name of the SQL database which uses the Storage Manager for saving its settings. If the field remains empty, the default database provided by the system, SMDB , is used.
DBIL server	Name of the server on which the PROXESS Database Manager is installed.
Protocol	Network protocol between the Storage Manager and Database manager (e.g. TCP/IP). If both modules are on one computer, specify the "Local server" setting.
Number of simultaneous connections	Number of SQL connections or SQL queries between the Storage Manager and the SQL database of the Storage Manager (e.g. the SMDB). Recommendation: 10 for large systems with approx. 30 users, and five for smaller systems
Hierarchical storage management	
Also split volumes by database (cannot be undone)	With this setting, volumes are created separately according to PROXESS database. This setting may make sense if you are operating a personnel archive in addition to a general archive or are running multiple clients in a system and would also like to separate the associated archive files from one another.
Permanently save volume image files in image cache	With this option, you activate the HSM image cache process . This is required in order to create a virtual "image cache" as a new device in the next step. An image cache is reserved disk space on Blu-ray media, for example.
License file	Path to the valid PROXESS license file
"Protocols" tab	
Selection between: - TCP/IP - Local server - Named Pipes	<p>A purely local installation works efficiently with the "Local server" or "Named Pipes" setting.</p> <p>For a distributed installation of the PROXESS modules on the network, TCP/IP generally makes sense.</p> <p>Only select those protocols supported by the underlying server.</p>

What is a volume?

Volumes are the underlying management unit of the Storage Manager. Files are split up into different volumes due to their longevity and type.

The capacity limit for a volume when using ISO 9660 CDs is approx. 630 MB, or about 4 GB when using DVDs. This limit also applies for HD volumes for enabling subsequent changing of the volume type and to be able to burn or write volumes previously opened as an HD as a CD/DVD.

Volumes pass through different states here. If a volume has reached its specified capacity of approx. 630 MB or 4 GB, for example, it is closed. If it is a CD/DVD volume, it is prepared for burning and then burned. The respective **volume states** are represented by symbols in the Storage Manager Explorer:



Name	Vol-ID	Kopie	Größe i...	Kapazität	Lagerort	Status	Medien...	Lebens...	Datenb...
1/0	1	0	0	645120		wartet a...	CD	-1	
10/0	10	0	10	4096000		offen	HD	31	
11/0	11	0	38278	4096000		offen	CD	366	
12/0	12	0	100	4096000		offen	CD	3651	
13/0	13	0	3372	4096000		offen	CD	3661	
14/0	14	0	2	4096000		offen	HD	366	
15/0	15	0	117320	4096000		offen	CD	-1	
2/0	2	0	317004	4096000		offen	CD	3660	
4/0	4	0	0	645120		wartet a...	CD	-1	
5/0	5	0	0	645120		wartet a...	CD	-1	
6/0	6	0	0	645120		wartet a...	CD	-1	
7/0	7	0	918	645120		offen	CD	3	
8/0	8	0	218	645120		offen	CD	00	

Fig.: List of volumes in write cache of the Storage Manager

Volume properties

In addition to the display of the finished volumes placed in the jukebox, the Storage Manager Explorer also enables the display of blanks and their processing steps up to finished volume. Every volume has a Properties dialog box, regardless of whether it is in the cache, the safe or a jukebox. By selecting the menu command **Properties** in the context menu of the volume, you can display it. The Properties dialog box provides information on attributes assigned to the volume, such as media type, storage location in the jukebox, current status, current fill level etc.

The properties of a volume can only be read.

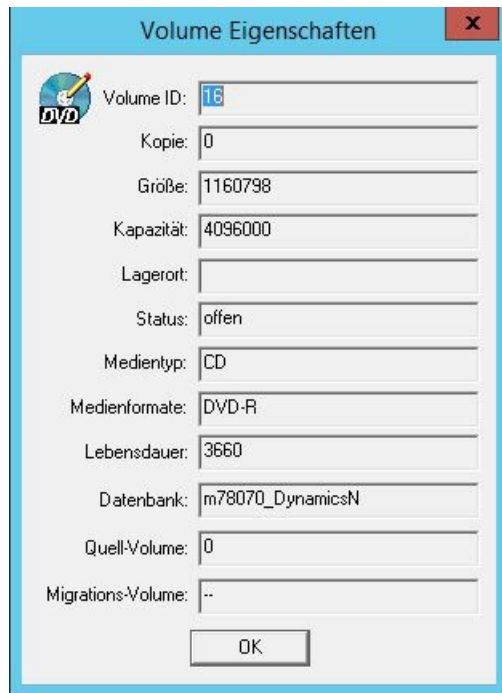








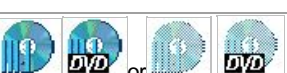


Figure: "Volume Properties" dialog box

VolumeID	In the VolID field, you can see the continuously incremented name of the volume.
Copy	For volumes of type DVD, the set number of copies are burned during DVD creation. The Copy field indicates which copy of a DVD currently being burned in the system is involved.
Size	In the Size field, you can see how much data has currently been accumulated on the volume.
Capacity	In the Capacity field, you can see the maximum capacity of a volume. With a volume of type HD, the capacity limit is also 4 GB so that the volume can also be burned to a DVD if necessary.
Storage location	In the Storage location field, you can see the drive or jukebox slot on/in which a burned DVD in the system can be found.
Status	In the Status field, you can see the current status of the medium, e.g. whether it is an open volume or a CD/DVD which has already been burned.

Media type	<p>In the Media type field, you can see whether the volume is</p> <ul style="list-style-type: none">- archived on the hard disk or as a DVD <p>or</p> <ul style="list-style-type: none">- saved as an image file in the image cache ("image file").
Lifespan	<p>In the Lifespan field, you can see the documents which are archived on this medium.</p> <p>The Storage Manager assigns the documents to certain volumes according to the various different combination possibilities of lifespan and media type.</p>
Source volume	<p>Relevant for blanks with the "Waiting to verify" status. Specifies the volume which is burned to the blank.</p>

Volume states

Volumes pass through different states. The states are represented by symbols in the Storage Manager Explorer.

 Open	<p>This is the state of a volume as long as it is writable, meaning that its capacity has not been reached. Open volumes can generally be found in the write cache.</p>
 Closed	<p>If the capacity limit of a volume is reached, it is closed to prevent additional writing to this volume. Closed volumes are put in a queue for creating an image file.</p>
 Waiting for image	<p>Volumes in this state are in the queue for the burning/image process.</p>
 Creating the image (imaging)	<p>For volumes in this state, an image is currently being created. Only one volume can be in this state at a time.</p>
 Waiting to burn/Copying	<p>Volumes in this state are waiting for blanks in a CD/DVD jukebox, initiation of a manual burning process or copying to the defined image cache.</p>
 Creating	<p>The creation of CDs/DVDs (original and copies) or image files is in progress.</p>
 Burned/Archived	<p>The creation of CDs/DVDs is complete. The  symbol shows you that you can remove the copies. If a jukebox is not available for burning, the burned medium can be inserted into one of the individual drives from the safe. The  symbol is displayed when the CD/DVD is placed in a drive.</p> <p>When <u>using image caches</u>, the symbol indicates that the volume was successfully copied and verified.</p> <p>The optional creation of Blu-ray media occurs using the connected Blu-ray hardware.</p>

Cache properties

If you call up the **Properties** command in the context menu of the **write cache** and click the "General Cache" tab, you will see the following dialog box:

Cache-Eigenschaften

Writecache

cache allgemein

Medienformate

Kopierzeiten

Backup Zeitfenster

☒ Backup zulassen ... (Beide Hintergrundprozesse pausieren)

von:

1

 Uhr

0

 Min bis:

3

 Uhr

0

 Min

Write / Readcache Überwachung

Unterbrechung nach jeder verschobenen Datei ... in (ms):

250

BitShifts

BitShift (Cache):

8

BitShift (Media):

5

Modus

☒ Sicherheit ☐ Kompatibilität

Migrationpfad (Verzeichnisname)

...

OK


Abbrechen

Übernehmen

Hilfe

Figure: "Cache Properties" dialog box, "General Cache" tab (example)

General Cache tab	
Backup time window	Check the Allow backup field and enter the times during which the SM processes are paused so that backups can be made during this time.
Write/read cache monitoring	To improve the performance of the overall system, you can set a mandatory pause for the continual background processes. The minimum entry is 7 ms.

BitShifts	<p>BitShifts option group:</p> <p>With the BitShift (cache) value, you can set the number of subdirectories with which the Storage Manager works in the cache. The default setting of "5" causes the Storage Manager to work with (25) x (25) directories (i.e. 1,024). The number of files stored in each directory determines the speed at which the operating system can access the file structure.</p> <p>With the BitShift (media) value, you can set the number of subdirectories with which the Storage Manager works on media. The parameter should be identical to that of the cache.</p> <div data-bbox="544 566 1326 719">  <p>The BitShift parameters may no longer be changed after the system is set up.</p> </div>
Mode	<p>This dialog box is not evaluated.</p> <p>Files which have already been archived on a medium can no longer be edited. Files located on a closed volume which has not yet been burned also can no longer be edited. If a user makes changes or additions to archived files, a new file version – and therefore a new file – is always created and archived. It is entirely possible for the various different file versions of an archived file to be located on different volumes and/or media.</p>
Migration path	<p>For the migration of data from CD to DVD, the data on the CD is compiled into virtual DVD volumes and copied to the hard drive so that it can be burned to DVD blanks from there. The path set here indicates the path to the data temporarily located on the hard disk which is awaiting migration.</p>

See also:

[Write cache properties](#)

[Media formats](#)

[Read cache properties](#)

Image cache properties

The image cache is a virtual storage location. It corresponds to a specific hard drive location, either local or in the cloud (UNC path specification) and is used for the connection of Blu-ray hardware.

Warning information



The requirement for use of image caches is activation of the **"Save volume image files permanently in image cache"** setting in the [Storage Manager properties](#).

This setting is made in the **Storage Manager Properties** dialog box, which you can access using the context menu of the root node of the SMX.

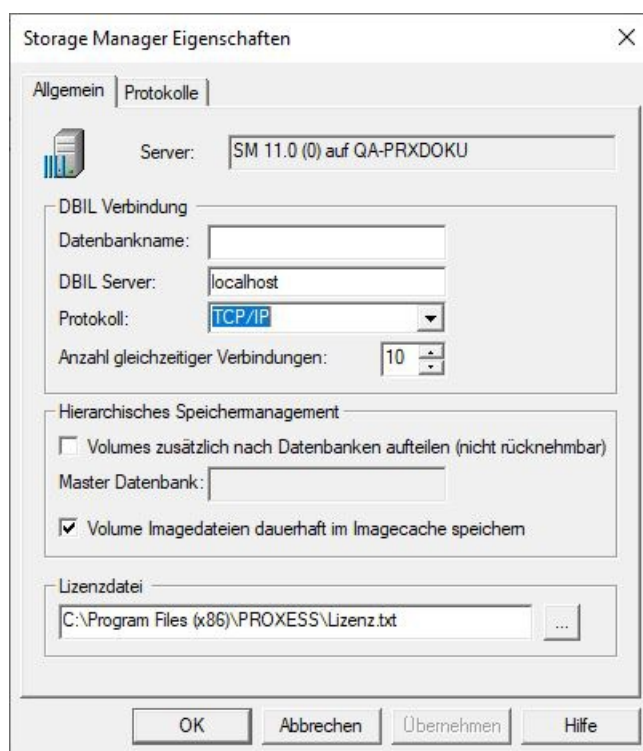


Fig.: Storage Manager Properties dialog box

Creating a new image cache

When this setting is set, you can create a new image cache as a virtual device.

You can always create a new device:

- using the context menu of the root node with the command **New Device...** or
- in the "Tools" menu using the command **Create New Device**.

The following dialog box opens:



Figure: "Create New Device" dialog box

Under	The Under field shows the Storage Manager and server name for which the device is created.
Device type	In this field, you select the desired device type. In this case, image cache (HSM).
Device name	In this field, you enter a name of your choice for the device.

Once you have confirmed your input with **OK**, another dialog opens. This dialog can be called up for editing again later on using the context menu of the respective device.

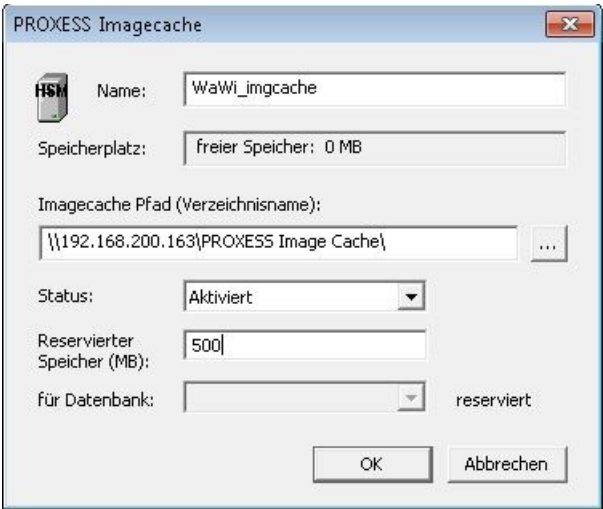


Fig.: Dialog box for the properties of a device of type "image cache"

Name	Enter the name of the image cache here.
Storage space	Here you can see how much storage space is available on the device after you have entered the UNC path below.
Image cache path	Enter a UNC path to the device or the hard disk for the Storage Manager here.

Status	<p>Deactivated: This is an exceptional state, e.g. if a device is physically no longer accessible.</p> <p>Activated: (normal state) The device is used by the Storage Manager for the storage of files for retrieval access to files.</p> <p>Activated for database: This setting is currently not active.</p> <p>Closed: This status is set automatically if the volume limit is reached. The status can also be set manually to close a volume ahead of time.</p>
Reserved memory	Disk space for purposes other than PROXESS can be reserved here.
Reserved for database	This function is currently not active.

Copy Times

Call up the properties of the write cache using the context menu. You will see the dialog box shown below. On the "Copy Times" tab, you can specify the days and times during which data is not copied to the image cache. One reason for this could be to control the general network load.

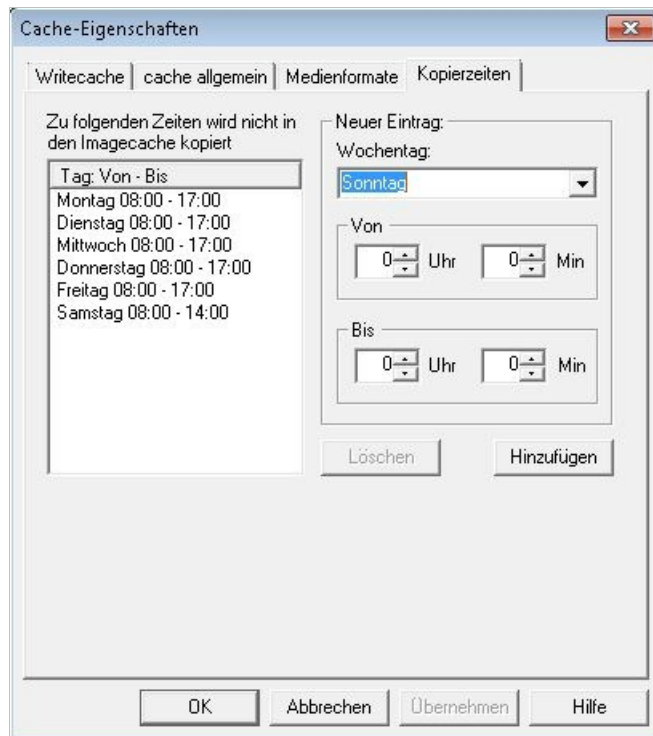


Fig.: "Non-copying times" for the image cache

Write cache properties

The write cache describes a hard drive in the Storage Manager server on which volumes have been collected for burning.

Open the properties dialog using the context menu of the write cache:

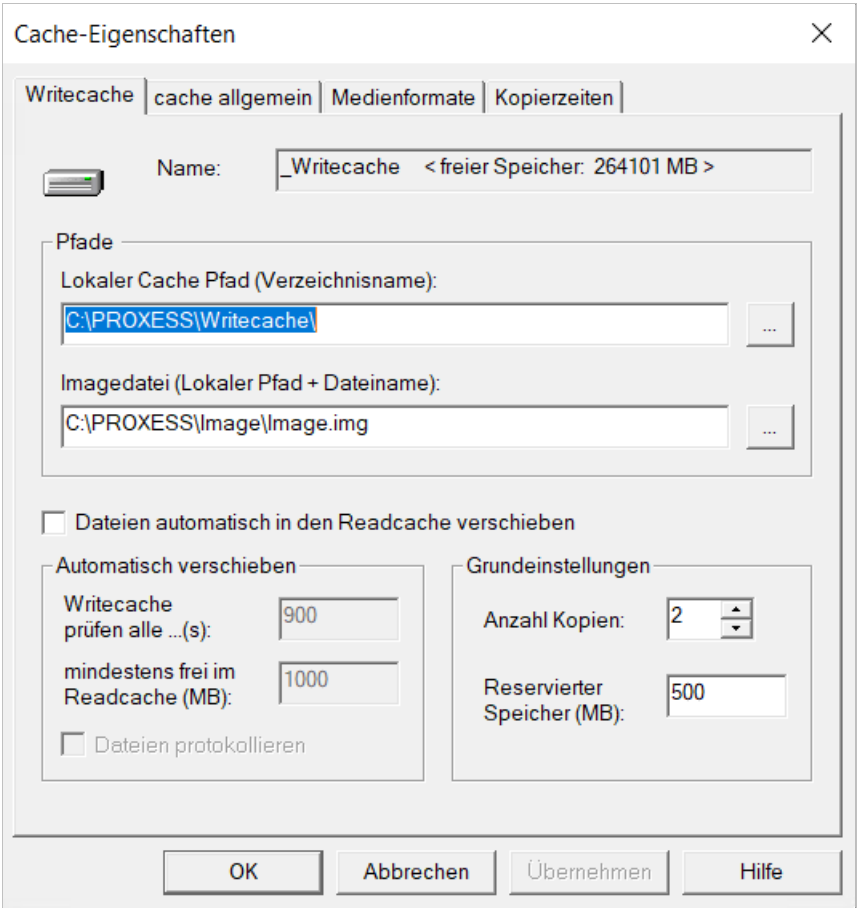



Figure: Cache Properties/Write Cache dialog

Write Cache tab	
Name	In the Name field, you can see the free memory.

Paths	<p>Paths option group:</p> <p>In the Local cache path field, you enter the path for storing the archived data on the hard disk. The directory name must already have been created.</p> <p>In the Image file field, you enter the local path and file name. The entered (sub-)directories must already have been created.</p> <div>  <p>You cannot use UNC paths for the image file and write cache! This can lead to problems with data transfer and data access, depending on the individual network performance.</p> </div>
Automatically move files to the read cache	<p>If this field is checked, the Move automatically option field opens. There, you can set how often the write cache is to be checked for data to be moved and the minimum number of MB which have to be free in the read cache. Another check gives you the option to log files in the current SM log file as well. You specify the SM log path under Tools/Log settings on the "File" tab.</p>
Basic settings	
Number of copies	<p>In this field, you can see the number of copies of a volume to be created when burning to CD/DVD. The minimum entry here is 2.</p>
Reserved memory (MB)	<p>In this field, you enter the minimum size of the hard disk memory to be reserved on the hard disk of the local computer.</p> <p>Example:</p> <p>If you set 9,000 MB for a RAID system with a 16 MB capacity in the Reserved memory field, the Storage Manager works with 7 GB for the cache from that point on.</p>

See also:[Read cache properties](#)[General cache](#)[Media formats](#)

Read cache properties

Files are moved from the write cache to the read cache if:

- the files were compiled into a volume
- this volume has been verified
- and a backup copy of the volume has been created.

The goal of the read cache is to collect files online which are as up to date as possible to reduce access times. Every file only still found on a medium (CD or DVD) is automatically copied to the read cache during retrieval access.

If you call up the properties of the read cache using the context menu, you will see the following dialog box:

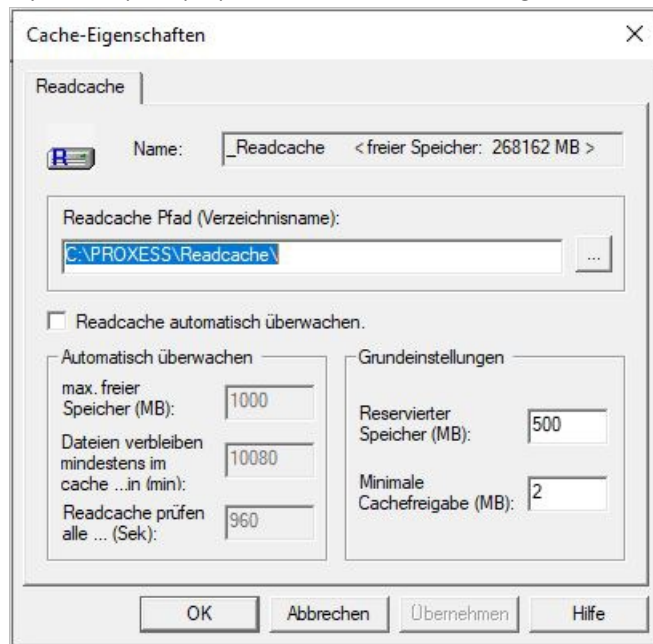


Figure: "Cache Properties" (read cache) dialog box

Read cache properties	
Name	In the Name field, you can enter the name of the device.
Read cache path	In the Read cache path field, you enter a path for temporary storage of the data which has already been archived on the hard disk. This path is different from the write cache. In this way, you ensure the physical separation between the read and write caches. The directory name must already have been created.
Monitor read cache automatically	By checking the Monitor read cache automatically check box, you can activate the following additional settings.
Max. free memory (MB):	The automatic function takes effect starting with this entered value.


Data remains in cache...in (min):	Time for which the files remain in the cache. The default value is 10080 (1 week).
Check read cache every...(sec):	The smallest possible entry is checking every 120 seconds.
Basic settings	
Reserved memory (MB)	<p>In this field, you enter the minimum size of the hard disk memory to be reserved on the hard disk of the local computer.</p> <p>Example:</p> <p>If you set 9,000 MB for a RAID system with a 16 MB capacity in the Reserved memory field, the Storage Manager works with 7 GB for the cache from that point on.</p>
Minimum cache enable (MB)	In this field, you enter the minimum number of files enabled for deletion. Deletion of the minimum number occurs when the available hard disk capacity minus the reserved memory minus the upper limit of free memory is reached.

See also:[Write cache properties](#)[General cache](#)[Media formats](#)[Image cache properties](#)

Expanded read cache (sub-read cache)


Sub-read caches, or expanded read caches, are then set up if a single read cache device is no longer sufficient due to the large volume of data.

Warning information



To set up an "expanded read cache," please contact PROXESS support.


Erweiterter Readcache



Name:

freier Speicher: 0 MB

Readcache-Pfad (Verzeichnisname):



DB Cached Status:

Reservierter Speicher (MB):

Weitere Einstellungen

☒ Statisch

Rangfolge in der Verwendung:

☐ Deaktiviert

OK

Abbrechen

Fig.: "Expanded Read Cache" properties dialog box

The following settings are possible:

Name	You enter the desired designation here (e.g. Sub1, Sub2 etc.).
Free memory	Specification of the free memory on the device path specified below
Read cache path (directory name)	In the Read cache path field, you enter a path for temporary storage of the data which has already been archived on the hard disk. This path is different from the write cache and the read cache. In this way, you ensure the physical separation between the read and write caches. The directory name must already have been created.
DB cached status	Internal reference for retrieving the cache for the Storage Manager Possible input: 3 - 102.
Reserved memory	<p>In this field, you enter the minimum size of the hard disk memory to be reserved on the hard disk of the specified device.</p> <p>Example: If you set 9,000 MB for a RAID system with a 16 GB capacity in the Reserved memory field, the Storage Manager works with 7 GB for the cache from that point on.</p>

Advanced properties	
Static	This option is set automatically and cannot be deactivated. The sub-cache is created by PROXESS support , e.g. by converting a read cache, and then has a fixed static size.
Deactivated	If this option is active, deactivate the sub-cache. This stops access by the Storage Manager to the files of this sub-cache. This makes sense if the hard disk on which the files are located is no longer being accessed, for example. Final clearing of the sub-cache in the Storage Manager Explorer is not possible.
External data source	An additional external data source can be included via a URL call here.
Priority in use	This option is not active.

See also:

[Read cache properties](#)

Media formats

On this page, you can select the media format which your Storage Manager is to use for the automatic creation of new volumes for optical data media.

Warning information



Conversion from DVD back to CD is not supported.



Figure: "Cache Properties" dialog box, "Media Formats" tab

See also:

[Migration](#)

[Write cache properties](#)

[General cache](#)

[Read cache properties](#)

Safe



The safe is a "virtual device." All volumes/CDs/DVDs not stored in a specific device of the Storage Manager are displayed as "sitting in the safe."

This means that these volumes were previously processed by the Storage Manager, but are not currently located in a device known to the Storage Manager. This applies in particular for copies of volumes determined only for replacement use due to the originals already being "online" in a device.

See also:

[Migration of volumes from CD to DVD](#)

Safe Migration



Volumes which were migrated from CD to DVD are shown in "Safe Migration".

See also:

[Migration of volumes from CD to DVD](#)

Create New Device

You can create a new device

- using the context menu of the root node with the command **New Device...** or
- in the "Tools" menu using the command **Create New Device** .

The following dialog box opens:

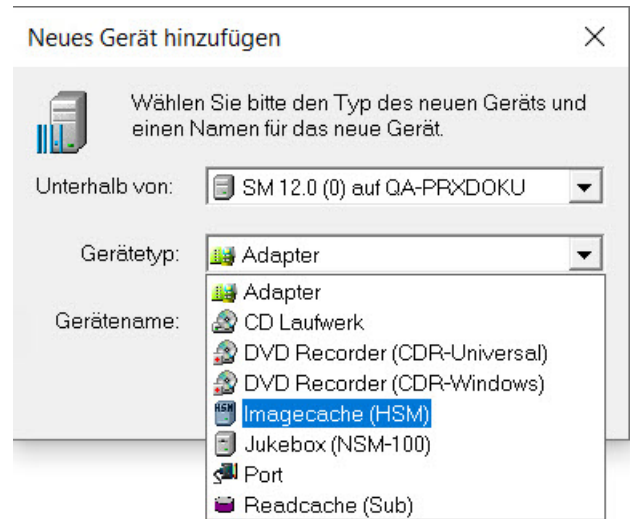


Figure: "Create New Device" dialog box

Under	The Under field indicates the version of the Storage Manager and the server name.
Device type	In this field, you select the desired device type.
Device name	In this field, you enter the name of the device.

Devices in the SMX

Devices in the SMX are shown in the left-hand section of the window.

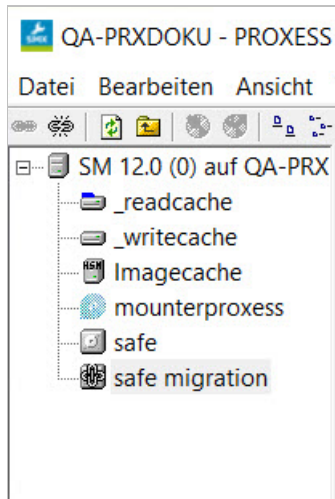







Fig.: Various devices in the SMX





Devices also have [device properties](#) which can be called up and changed in the "Properties" sub-menu from the context menu.

With certain properties, changes are immediately registered by the Storage Manager and taken into account for subsequent functions without your having to restart the system. This applies when changing the burn times of a CD/DVD burner, for example.

In contrast to this, you have to close and restart the Storage Manager in any case if you change the supported network protocol, for example. The system expressly informs you of this with a corresponding message. After being restarted, the Storage Manager then reads in the new changes.

The devices are as follows:

	Server: The server is not actually a device, but rather the reference point for all other devices of a Storage Manager. The name of the server generally consists of the version information of the Storage Manager and the name of the SM server.
 cd-rom_0	DVD drive: This is a disk drive for DVDs. It can be a standalone DVD drive or a drive assigned to a jukebox. DVD drives are identified by a drive letter through which the operating system localizes an inserted DVD. The position of DVD drives in jukeboxes is also determined by a number so that a DVD can automatically be placed in the right bay.
 cdr_0	DVD recorder: The DVD recorder is a DVD burner. It can be standalone or integrated into a jukebox. Before you create a DVD recorder, you have to ensure that a device of type adapter has already been set up.
 _writecache	Write cache: The write cache describes a hard drive in the Storage Manager server on which volumes have been collected for burning or passing on to another medium.
 _readcache	Read cache: The read cache contains files which have already been compiled into volumes in the write cache, verified and created from the backup copies. Only following a complete transfer are the files moved from the write cache to the read cache.

	<p>Expanded read cache (sub-read cache):</p> <p>Sub-read caches and expanded read caches are then set up if a single read cache device is no longer sufficient due to the large volume of data. To set up a sub-read cache, please contact PROXESS support.</p>
	<p>Image cache:</p> <p>The image cache is the main virtual storage location for archived files.</p> <p>It corresponds to a specific hard drive location, either local or in the cloud (UNC path specification) and is also used for the connection of Blu-ray hardware.</p>
	<p>Safe:</p> <p>The safe is a "virtual device." All volumes/DVDs not stored in a specific device of the Storage Manager are defined as "sitting in the safe." This means that CDs/DVDs are not currently located in a device known to the Storage Manager, but rather were already processed by the Storage Manager earlier on. This applies in particular for copies of volumes determined only for replacement use due to the originals already being "online" in a device.</p>
	<p>Safe migration:</p> <p>Volumes which were migrated from CD to DVD are shown here.</p>

Device properties

The properties are called up with the **Properties** command in the context menu of the device.

Some properties can be changed, e.g. the burn times of a DVD burner.

When the Storage Manager Explorer is started, all devices are initialized. If a device is configured incorrectly, you will be presented with a corresponding message for this device as soon as you select the **Properties** command.

If you log in with a password, you can create and delete new devices.

If you log in without a password, you can only make settings.

See also:

[Cache properties](#)

[CD/DVD drive properties](#)

[CD/DVD recorder properties](#)

[Image cache properties](#)

Device and volume lists

Volume lists

For the cache, safe and jukeboxes, as well as for standalone DVD read drives, there are volume lists which are displayed on the right-hand side by the Storage Manager Explorer. The list of a standalone DVD read drive always only shows the currently inserted DVD. In the list for the jukebox device, you can see all inserted DVDs known to the Storage Manager. In the cache list, you can see DVD volumes which are not yet finished and all HD volumes.

Device lists

In the device lists, you can control and change the device properties using the context menu. In this way, you can close a volume before its capacity limit is reached or convert an HD volume into a DVD volume to gain storage space for the cache using the context menu, for example. You can also initiate the burning of DVDs via a standalone burner using the context menu.

The following figure shows the list for the Storage Manager in the right half of the screen. You can see the symbols for the device adapter, cache, port, safe and for two different jukeboxes.

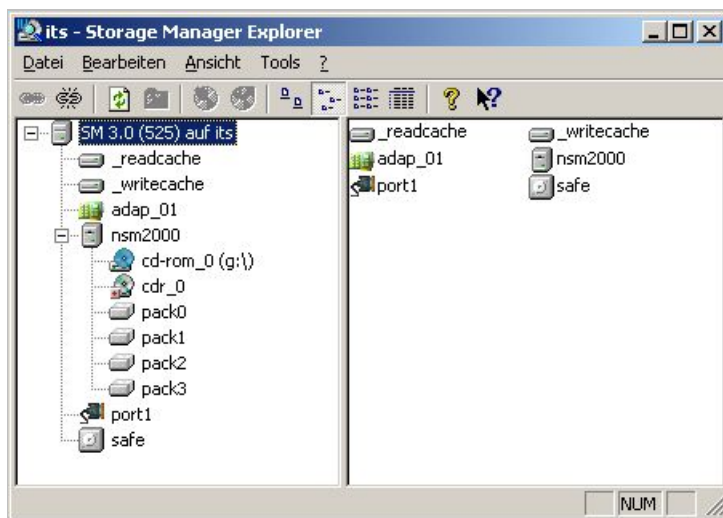


Figure: Device list of the Storage Manager in the Storage Manager Explorer (example)

DVD Drive Properties

If you click the right mouse button and select the Properties command in the context menu of the CD/DVD drive device, the following dialog box opens:



Figure: CD/DVD Drive Properties dialog box

Name	In this field, you can see the name of the DVD medium.
Path	In this field, you can see the drive letter with which the DVD drive is to be addressed.
Position in jukebox	<p>This field shows the specification of the internal physical position of the DVD drive in the jukebox.</p> <p>A jukebox contains four installation bays, for example. The Storage Manager instructs the jukebox to place the volumes in one of the four drives. The various different drive letters are assigned numbers for internal communication between the Storage Manager and jukebox which each correspond to a drive. You have to enter these numbers into the Position in jukebox field.</p>
Spin up....seconds	This field indicates the number of seconds after which a DVD which has just been created is read, at the latest. If the time specified in this field is overshot, the Storage Manager reports an error.
Cool-down time...seconds	This field contains the time, in seconds, which elapses after a read error occurs until a new read attempt is started.

DVD Recorder Properties

If you click the right mouse button and select the Properties command in the context menu of the CD/DVD recorder device, the following dialog field opens:




Figure: "CD/DVD Recorder Properties" dialog box

General tab	
Name	You enter the name of the CD/DVD recorder in this field.
Device type	You enter the device type of the CD/DVD recorder in this field. Possible entries include CD/DVDR 100, CD/DVDR 400 and CD/DVDR MMC. You can determine the device type in the SCSI Explorer, which is included in the delivery package from Adaptec SCSI adapters.
SCSI adapter	In the SCSI adapter field, you set the adapter to which the CD/DVD recorder is connected.
SCSI ID	You enter the SCSI ID of the CD/DVD recorder in this field. You can also determine this ID using the SCSI Explorer.
SCSI LUN	In this field, you set the SCSI LUN number (logical unit number), over which the recorder is controlled. The default value is 0.
Position	This field indicates the position of the CD/DVD recorder in the jukebox. This only applies if the burner is installed in a jukebox.
Burn speed	In this option group, you set whether the data transfer to the CD/DVD recorder is to occur at 150, 300, 600, 900 or 1,200 KB per second. The setting depends on the respective set CD/DVD recorder type and the configuration and speed of your server.

Priority	In this option group, you set the operating system priority with which the burning process is to be carried out. The default setting is normal. Changes to this setting should only be made after consulting with your PROXESS service contact.
Simulate writing	With this check box, you set whether or not the laser is to be deactivated during CD/DVD creation. This function should only be activated for testing purposes.

Tip

	Set the Storage Manager in such a way that it does not start a burning process during data backup or database indexing. Otherwise, there is a risk that the burning process could be interrupted.
---	---

If you click the "Burn Times" tab, the following dialog box opens:



Figure: "CD/DVD Recorder Properties" dialog box ("Burn Times" tab)

Burn Times	
Do not burn at the following times	In the list, you can see the days and times during which burning is not to occur.
New Entry option group	
Day of the week	In this field, you enter the day of the week on which burning is not to occur.
From Hour Min	In the Hour and Min fields, you define the time from which burning is not to occur on the specified day of the week.

Until Hour Min	In the Hour and Min fields, you define the time until which burning is not to occur on the specified day of the week.
----------------	---

If you click the "Special" tab, the following dialog box opens:



Figure: "CD/DVD Recorder Properties" dialog box ("Special" tab)

In the Device Information menu, you can see the device name and possible media formats. Under Settings, you can enter a drive letter for your CD/DVD burner which has not yet been issued.

File logging

You access this menu item via the "Tools" menu and the **Log Settings** entry.

The output of the error logs into a file can be specified here.

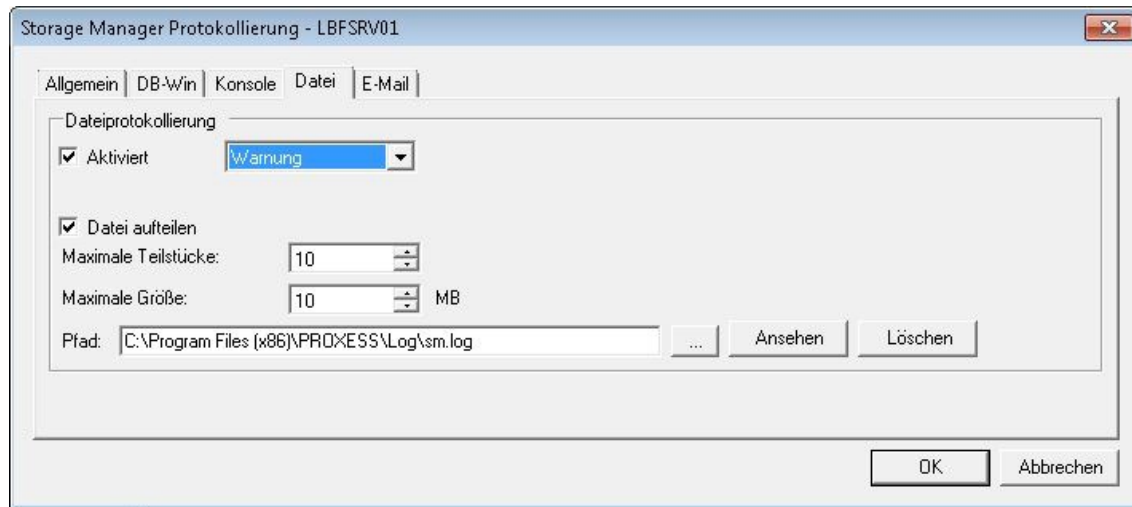


Fig.: Setting dialog for the log file

Different **levels** of logging can be set here.

Debug	This setting results in very detailed logging. Please only activate this level when consulting with PROXESS support, e.g. as part of a service call.
Information (default)	In addition to all errors and warnings, outputs information messages which don't require access. Example: "PROXESS server has been started"
Warning	Warnings are messages which are output during operation and which require action on the part of the administrator as soon as possible. Example: The disk capacity for saving files and data is nearly used up.
Error	These are error messages which do not lead to a server interruption, but absolutely require action on the part of the administrator. Example: DVD medium burning has failed, as the medium is defective.
Critical	The server module is stopped if a critical event occurs. Example: No disk space available for saving, or SQL database not started/available.

Advanced properties for file logging:

Split file	To prevent the log file from becoming too large, it can be split into parts.
Maximum parts	After reaching the maximum parts, the oldest files are overwritten.

Maximum size	After reaching the maximum file size in MB, a new file (part) is created. Together with the limitation of the number of parts, you can prevent logging from taking up too much disk space.
Path	You can determine the storage location of the log file here.
View	The log file specified in the path is called up.
Delete	The log file (with all parts) is deleted.

DB-Win Logging

You access this menu item via the "Tools" menu and the **Log Settings** entry.

The output of the error logs in the Windows debugger DBWin can be specified here. This generally only occurs temporarily as part of troubleshooting.

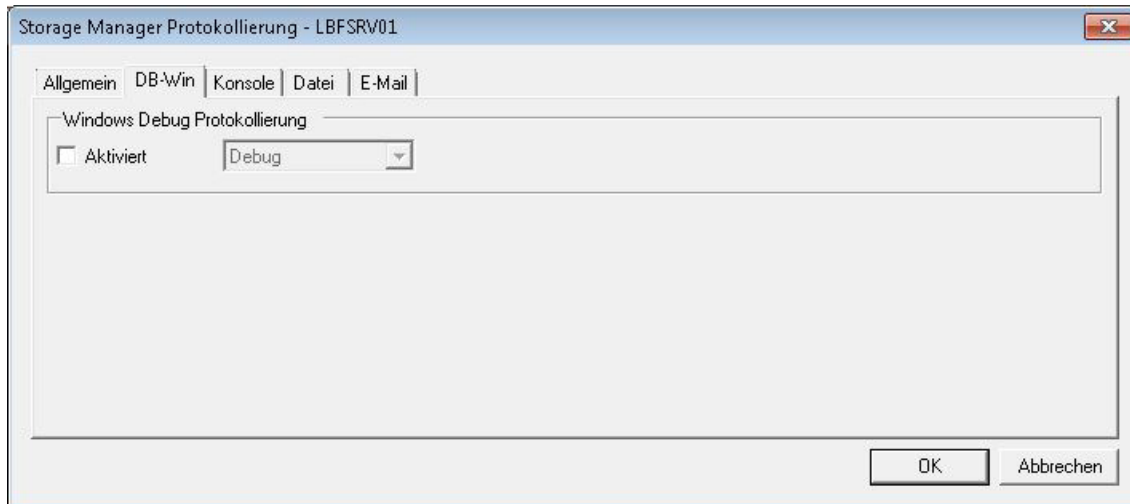


Figure: "Storage Manager Logging, DB-Win "

Different **levels** of logging can be set here:

Debug	This setting results in very detailed logging. Please only activate this level when consulting with PROXESS support, e.g. as part of a service call.
Information (default)	In addition to all errors and warnings, outputs information messages which don't require access. Example: "PROXESS server has been started"
Warning	Warnings are messages which are output during operation and which require action on the part of the administrator as soon as possible. Example: The disk capacity for saving files and data is nearly used up.
Error	These are error messages which do not lead to a server interruption, but absolutely require action on the part of the administrator. Example: DVD medium burning has failed, as the medium is defective.
Critical	The server module is stopped if a critical event occurs. Example: No disk space available for saving, or SQL database not started/available.

Notification of error logs via e-mail

You access this menu item via the "Tools" menu and the **Log Settings** entry.

As an administrator, you can have log files sent via e-mail. The sending of emails occurs solely via SMTP, not MAPI.

Fig.: Dialog box for SMTP settings for sending log files

SMTP settings for the sending of log files via e-mail:

Server	Name or IP address of the server on which the SMTP server service is running.
Port	The port setting is always 25.
Authentication	Please use the default "Basic" setting here.
Name	Windows user name with authorization to use the SMTP service.
Password	Password of the Windows user account used above.
Sender	Appears as sender of the sent e-mail.
Recipient	Recipient of the e-mails sent by SMTP (e.g. the PROXESS administrator)
Messaging	You can activate the e-mail messaging service here.
Test	Here you can test the SMTP settings which have been made.

Console Logging

You access this menu item via the "Tools" menu and the **Log Settings** entry.

The output of the error logs in the console window can be specified here.



Figure: "Storage Manager Console"

Different **levels** of logging can be set here:

Debug	This setting results in very detailed logging. Please only activate this level when consulting with PROXESS support, e.g. as part of a service call.
Information (default)	In addition to all errors and warnings, outputs information messages which don't require access. Example: "PROXESS server has been started"
Warning	Warnings are messages which are output during operation and which require action on the part of the administrator as soon as possible. Example: The disk capacity for saving files and data is nearly used up.
Error	These are error messages which do not lead to a server interruption, but absolutely require action on the part of the administrator. Example: DVD medium burning has failed, as the medium is defective.
Critical	The server module is stopped if a critical event occurs. Example: No disk space available for saving, or SQL database not started/available.

Storage Manager E-mail Notification

You access this menu item via the "Tools" menu and the **Log Settings** entry.

Timetable

If you have selected the messaging function, you receive a notification on the status of the respective process at the following intervals.

PROXESS Storage Manager E-Mail Benachrichtigung

Brennvorgänge (Burner)

Meldung	Benachrichtigung	Zusatzinfo
Volume steht zum Brennen an	Alle 24 Stunden	Volume-ID
Volume gebrannt	Sofort	Volume-ID, Kopie
Volume Brennvorgang fehlgeschlagen	Sofort	Volume-ID
Kein leeres Medium	Alle 24 Stunden	

Verifizierung (Verifier)

Meldung	Benachrichtigung	
Volume verifiziert	Sofort	Volume-ID, Kopie
Volume Verifizierung fehlgeschlagen	Sofort	

Image Erstellung (ImageWriter)

Meldung	Benachrichtigung	
Image Erstellung erfolgreich	Sofort	Volume-ID
Image Erstellung fehlgeschlagen	Sofort	Volume-ID

Figure: "Storage Manager Messaging"

See also:

[E-mail logging](#)

Migration of volumes from CD to DVD

The migration of volumes from CD to DVD can occur in the safe or via the listed volumes of a jukebox. The **Migrate Volumes** function call can be found in the respective context menu of both devices.

The migration process is identical in both cases and is shown originating from the safe here as an example:

To migrate your CDs to the DVD format, call up the context menu of the safe and select **Migrate Volumes**.



Figure: Migrate Volumes

A dialog box opens, in which you can select desired write format. Then start the migration with **Start**.

With the following message, the Storage Manager Explorer prompts you to insert the CD to be migrated:

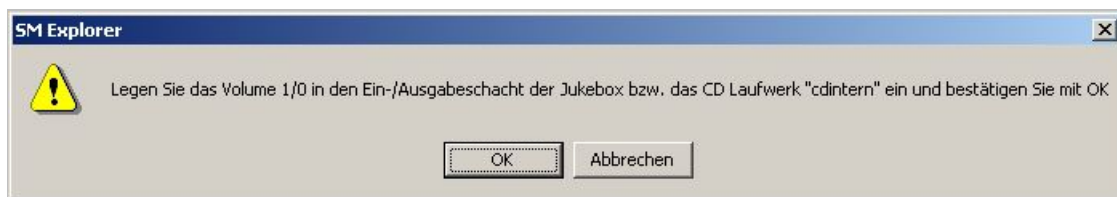


Figure: Prompt to insert the source CD

The messages to remove the CD and insert a DVD follow:



Figure: Prompt to remove the source CD

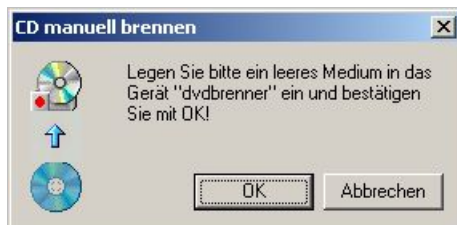


Figure: Prompt to insert an empty DVD medium.

The following window confirms that the migration process has been started (see status):

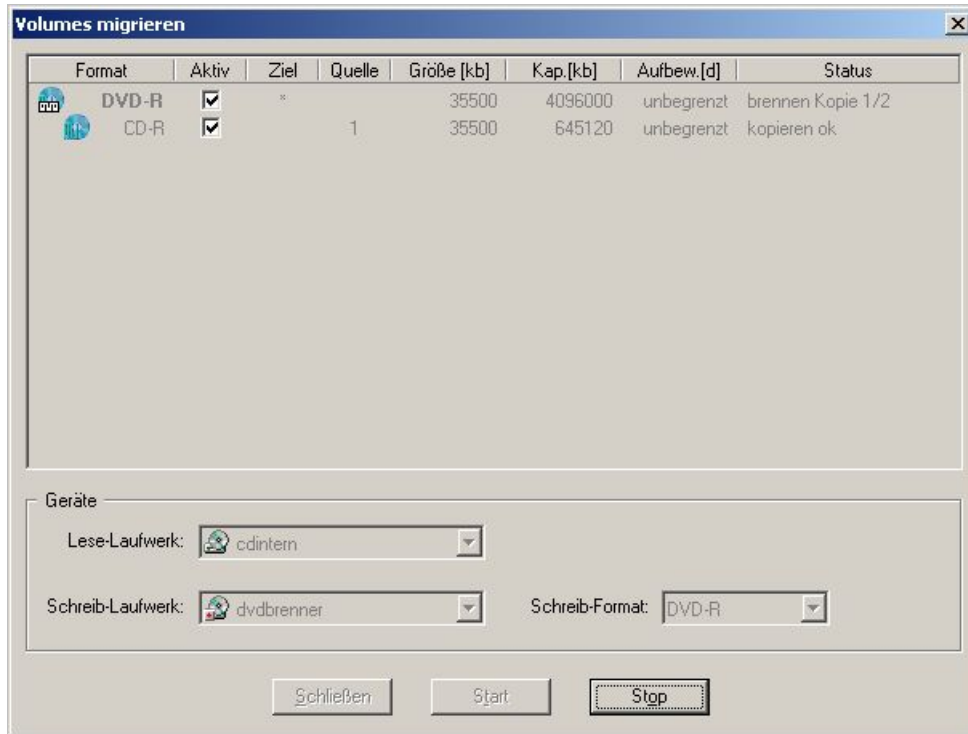


Figure: Migration

The following figure shows the successful conclusion of a migration. The dialog box is exited with **Close**.

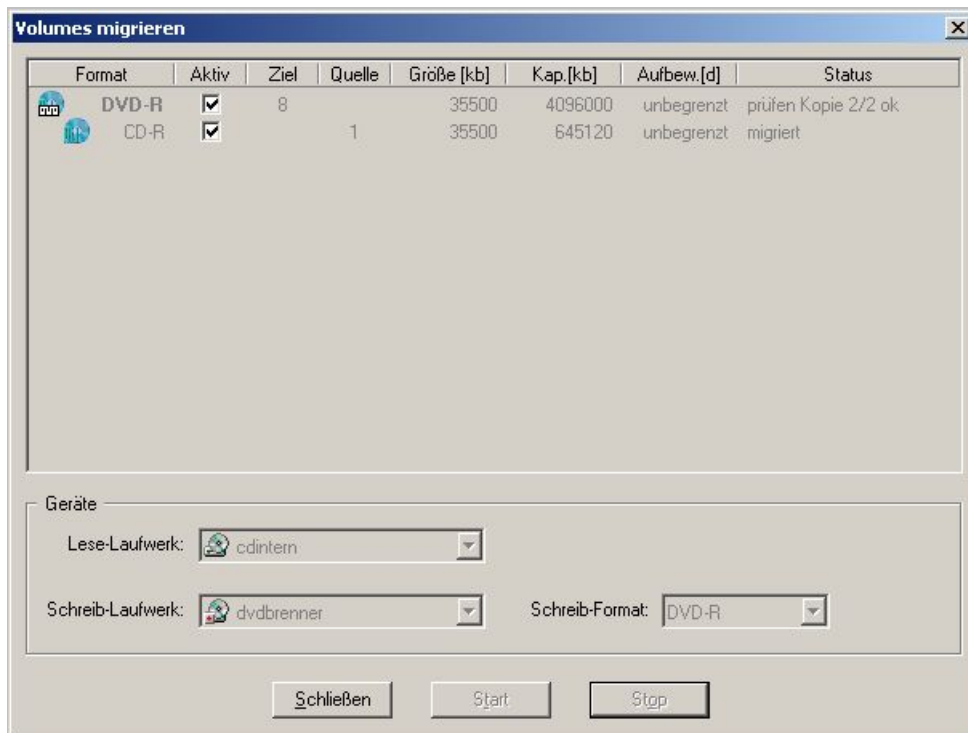


Figure: Completed migration

States of DVD blanks

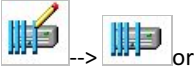


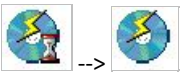

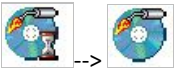

The various different states of CD/DVD blanks are identified in the Storage Manager Explorer with corresponding symbols.













 or  empty (blank)	<p>This is an empty blank. The volume ID of a blank is always 0. Additional blanks are uniquely identified by the copy number</p>
 or  Burning (recording)	<p>This blank was moved to the burner of a jukebox and is now being processed.</p>
 or  Waiting to verify	<p>The image file has been written with no errors, and verification against the contents of the cache (hard disk) will be carried out.</p>
 or  Verifying	<p>This medium is currently being verified against the contents of the cache.</p>
 or  Verified	<p>This medium has already been successfully verified against the hard disk cache. Additional copies of the volume have not been made yet, however.</p>
 Corrupt (junk)	<p>This medium is a most likely corrupted blank. An error occurred either during burning or during verification. The medium can be removed from the jukebox and, if applicable, verified for reusability.</p>

Media state changes

The Storage Manager Explorer only mirrors state changes upon request. It is therefore possible that not every transition is visible in the Storage Manager Explorer, as the span of time for which a volume/medium remained in the corresponding state is only very short.

The following state changes are possible:

  Open --> Closed	<p>Once a volume has reached its capacity (650 MB), it is closed by the Storage Manager. From this point forward, its content is write-protected.</p>
 Closed --> Waiting for image	<p>Closed volumes to be burned enter the Waiting for image state and remain there. Volumes in the Waiting for image state form a queue for creating an image and subsequent burning.</p>
 Waiting for image --> Creating the image	<p>As soon as all burn jobs for the last volume to be created are complete, an image file is created for the next volume in the Waiting for image state. The reason for this "delay" is the large space requirement of image files (630 MB). The image file of the previous creation job must be kept ready until the last copy of the job is verified if verification fails and additional CDs/DVDs are to be burned. If an image file were to be created for the next volume before the creation of the last volume is complete, $n \times 650$ MB would be continually blocked by image files on the hard drive if additional blanks were not available. In the Imaging state, the list of all files belonging to the volume is compiled and the data of these files is transferred to an image file which also contains the file system required for burning ISO9660-compatible CD-ROMs/DVD-ROMs.</p>
 Creating the image -> Waiting to burn	<p>When creation of the image file is complete, the volume can be burned to CDs/DVDs. To indicate this situation, the state changes to Waiting to burn.</p>
 Waiting to burn --> Creating	<p>As soon as a blank is found in a jukebox with a burner, a CD/DVD is produced from the image file. The production process in progress indicates the Creating status here.</p>
 Empty --> Burning	<p>An empty CD/DVD switches to the Burning state as soon as the creation process for this CD/DVD has been initiated. The CD/DVD is then located in a write drive and is burned with the image file of the last volume switched to the Creating state.</p>

 -->  Burning --> Waiting for verification	<p>Once the recording process is complete, the CD/DVD medium switches to the Waiting for verification state, which indicates that this medium can be verified against the data located in the cache.</p>
 -->  Burning --> Corrupt	<p>Should an error occur while burning the CD/DVD, the CD/DVD enters the Corrupt state, as it is extremely likely that a valid file system which could be verified was not created. Another possible cause is the use of a defective CD/DVD blank.</p>
 -->  Waiting to verify --> Verifying	<p>In the Verifying state, the medium which was just created is checked to determine whether all files are readable with the mechanism used by the Storage Manager. For this purpose, the medium is placed in a jukebox drive otherwise also used for reading. That is, it is not read by the burner which created the medium, but rather by any other desired read drive.</p>
 -->  Verifying --> Verified	<p>Every file is verified bit by bit against its original version in the cache. Only when all files of the CD/DVD are fully identical to their sources is verification successfully completed and the medium switched to the Verified state. In this state, it waits until all requested copies are in the Verified state.</p>
 -->  Verifying --> Corrupt	<p>If non-matching files or non-matching parts of files are identified during verification, the medium being created up to that point is identified as corrupt. Another possible cause is the use of a defective CD/DVD blank. The creation process is terminated unsuccessfully for this copy.</p>
 -->  Verified --> Burned	<p>If it was possible to successfully create the specified number of CDs/DVDs, the media switch the volume ID to the volume ID of their source and enter the Burned state. Also at this time, the volume in the Burning state located in the cache (which was the source volume) is deleted. As the volumes have now been created successfully (including copies), the image file may be deleted as well.</p> <p>At this point in time, the SM searches for and prepares the next volume in the Waiting for image state.</p>

The state changes described above allow the simultaneous execution of different processes. Though only one volume can be processed at a time, the various different steps can occur at the same time under certain conditions. For example, a recorded DVD can be verified immediately after being created while another copy of the volume is being created at the same time.

The time required for creating a volume is either $((\text{number of copies} * \text{burn time}) + \text{verification time})$ or $(\text{burn time} + (\text{number of copies} * \text{verification time}))$, whichever is greater.

Depending on the read drive speed, the verification of DVDs can take longer than burning, as access is

occurring through the file system. This means that a large quantity of smaller files results in longer search times in comparison to a small number of large files. During verification, approximately 1/4 of the transmission rate specified by the manufacturer can be achieved on average. This means that, with an 8-speed drive, a verification rate of 300 KB/s can be expected. This corresponds to approx. 650,000/300 seconds for the entire DVD, that is, approximately 2,200 seconds or approximately 35 minutes per CD/DVD.

Image file and burning

An image file is always created before a DVD is burned. The image file is used for a smooth burning process without unintentional interruption due to excessively long wait times.

All data and directories to be archived on a medium (e.g. a DVD) are copied to an image file together. This means that only a single file needs to be opened and read for the burning process. In this way, excessively long wait times caused by laborious searching and verification processes which could threaten the burning process are avoided. At the same time, the data from the image file is written to the DVD in the intended order. Another advantage of the image file is that the data compiled once is available for additional copies at any time. The image file is just as large as the DVD to be created. For the Storage Manager, this means approximately 630 MB.

Depending on the connected hardware, the burning process occurs fully automatically, semi-automatically or manually. If you are working with a jukebox, for example, you can load it with blanks. As long as blanks are present, the burning process occurs automatically.

In the case of DVD changers with individual drives, the burning process starts automatically as soon as a blank has been placed in the drive.

In addition, you can initiate the burning of completed volumes manually at any time should you wish to create additional media, for example.

Warning information



Successful burning of a DVD requires a constant, steady stream of data. If the data stream is interrupted, the blank to be burned is corrupted and the burning process fails.

To avoid interruptions to the data stream, DVD burners feature a "buffer" in which data is stored temporarily. This "buffer" is supplied with data by the program/application at regular intervals, which sends it to the drive. As soon as the "buffer" no longer has a sufficient amount of data, an error occurs: a so-called "buffer underrun." This can occur if the computer has to wait for the completion of other device functions until it can send data to the "buffer" again. To prevent this error, we try to minimize these wait times.

Wait times arise in particular when files are read one after another from one or more hard disks, for example. In this case, the computer has to wait for the files in the system to be found, access rights to be checked etc. every time. A list of all written files is also included at the same time, which is transferred to the created DVD as the table of contents following the burning process. All of these processes together can cause long wait times. In this case, the data volume most recently sent to the DVD burner is no longer sufficient for ensuring a steady data stream to the write head for these spans of time. As the wait times are independent of the file size, this risk is especially present when reading in a large number of very small files. Precisely this is the rule for COLD processing, however.

Tip



Settings which prevent the Storage Manager from consuming unnecessary storage space for the image file can be found as cache parameters for the configuration settings in the "Write cache" section of the Storage Manager Explorer.

See also:

[State changes](#)

Disconnect command

The **Disconnect** command in the File menu closes the connection to the Storage Manager. This is useful if you are logged in as a user, but would now like to log in as an administrator with a password, for example.

File menu

In the "File" menu, you control the connection to the Storage Manager and exit the application.

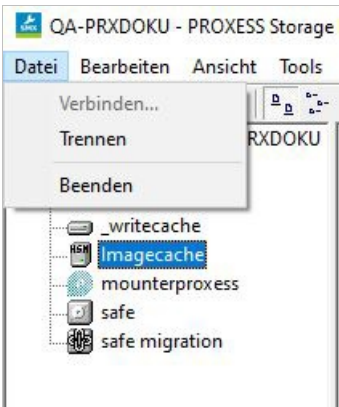


Figure: The "File" menu

Connect	The Connect command connects to the Storage Manager. You can log in as a user or administrator (see: Connect command).
Disconnect	The Disconnect command closes the connection to the Storage Manager.
Exit	The Exit command closes the program.

Load Empty Blank

This function is only active if a DVD jukebox is connected to the system.

Using the **Edit** menu, you can load empty blanks into the DVD jukebox. The jukebox automatically places a blank into the burn drive if a volume is ready for burning.

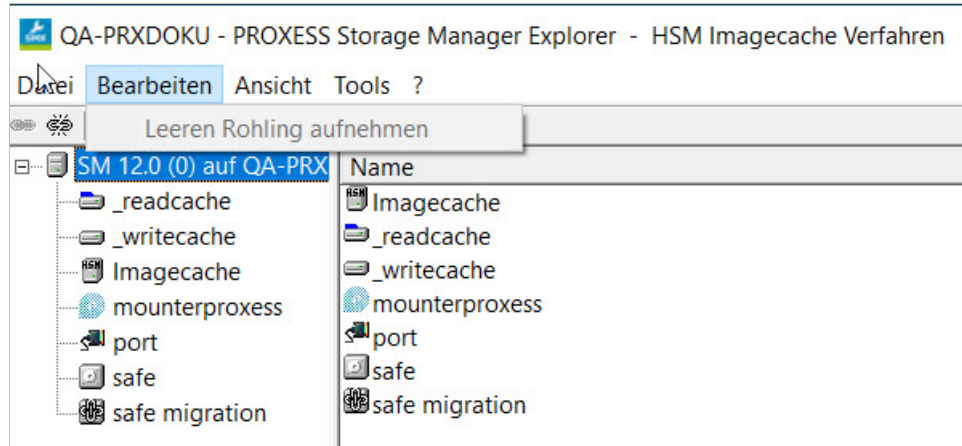


Fig.: "Load Empty Blank" function in the Edit menu

View menu

In the "View" menu, you can select the bars which you would like to be displayed and in which form the respective device bars are to be displayed.

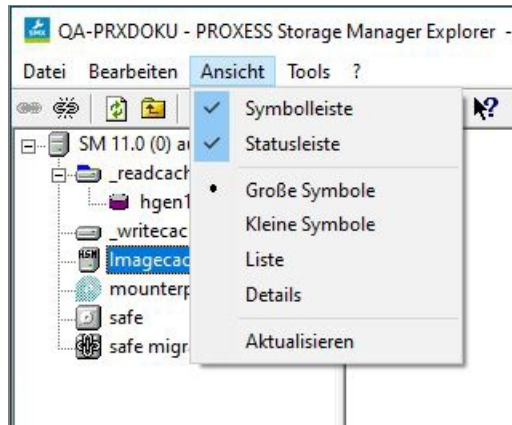


Figure: The "View" menu

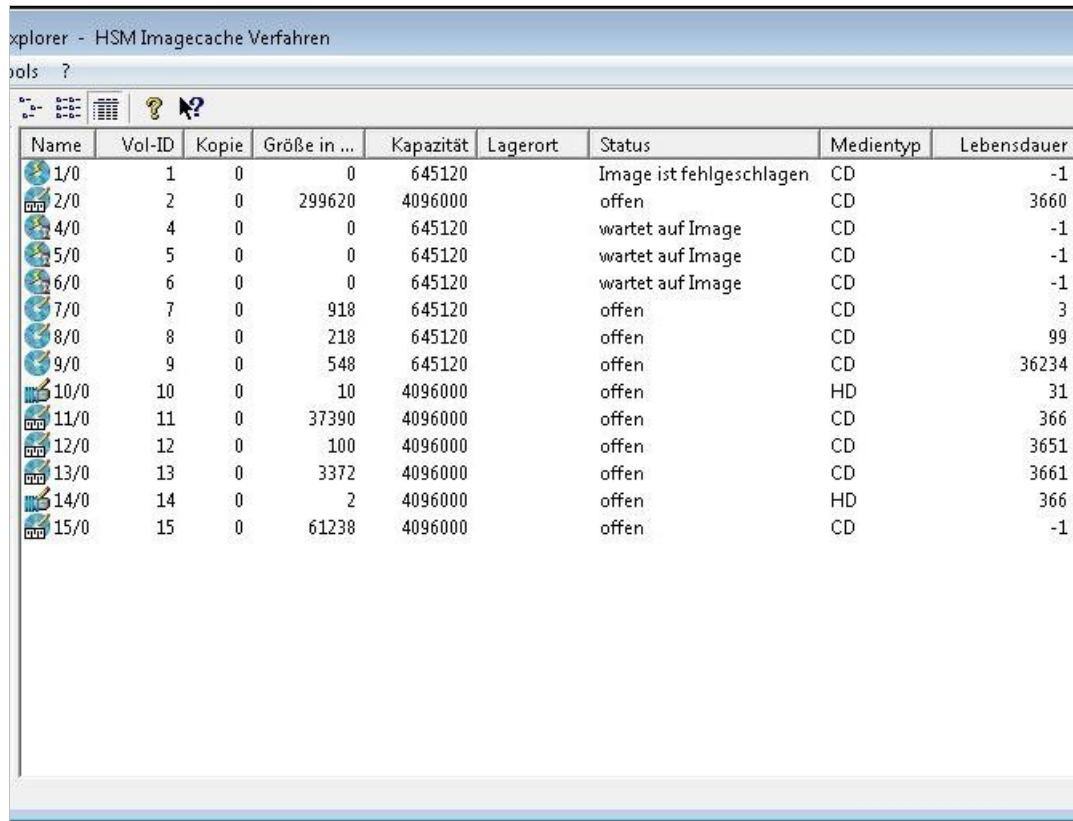
Toolbar	With this command, you decide whether or not you would like to see the toolbar on the screen. If you activate displaying of the toolbar, the Toolbar command is marked with a check.
Status Bar	With this command, you activate or deactivate the status bar. If you activate displaying of the status bar, the Status Bar command is marked with a check.
Large Symbols	With the Large Symbols command, you see the elements with large symbols in the right half of the screen.
Small Symbols	With the Small Symbols command, you see the elements with small symbols in the right half of the screen.
List	The List command shows you the elements in the right half of the screen one below the other as a list.
Details	Using the Details command, you can see all list elements of a device in tabular form. Lots of information on the respective element appears in the various different columns.
Update	With the Update command, you can update the view. State changes of the volume or CD/DVD blanks are then displayed using the current symbols.

See also:

[Details command](#)

Details command

Using the Details command in the "View" menu, you can view all information on the individual elements in the window area.




The screenshot shows the 'Storage Manager Explorer' window with the title 'HSM Imagecache Verfahren'. The main area displays a table with the following columns: Name, Vol-ID, Kopie, Größe in ..., Kapazität, Lagerort, Status, Medientyp, and Lebensdauer. The table contains 15 rows of data, each representing a storage volume. The first row (1/0) has a status of 'Image ist fehlgeschlagen'. Rows 2/0 through 15/0 show various statuses like 'offen' or 'wartet auf Image'.

Name	Vol-ID	Kopie	Größe in ...	Kapazität	Lagerort	Status	Medientyp	Lebensdauer
1/0	1	0	0	645120		Image ist fehlgeschlagen	CD	-1
2/0	2	0	299620	4096000		offen	CD	3660
4/0	4	0	0	645120		wartet auf Image	CD	-1
5/0	5	0	0	645120		wartet auf Image	CD	-1
6/0	6	0	0	645120		wartet auf Image	CD	-1
7/0	7	0	918	645120		offen	CD	3
8/0	8	0	218	645120		offen	CD	99
9/0	9	0	548	645120		offen	CD	36234
10/0	10	0	10	4096000		offen	HD	31
11/0	11	0	37390	4096000		offen	CD	366
12/0	12	0	100	4096000		offen	CD	3651
13/0	13	0	3372	4096000		offen	CD	3661
14/0	14	0	2	4096000		offen	HD	366
15/0	15	0	61238	4096000		offen	CD	-1

Fig.: Detailed information of the elements in the right-hand area of the Storage Manager Explorer (in this example, "write cache")

Name	In the Name column, you can see the name of the volume. The displayed symbol shows you whether a volume is to be burned to a CD/DVD or whether the volume is to remain on the hard disk.
Vol-ID	In the Vol-ID column, you can see the continuously incremented name of the volume.
Copy	For volumes of type CD/DVD, the set number of copies are burned during CD/DVD creation. The Copy column indicates which copy of a CD/DVD currently being burned in the system is involved.
Size in KB	The Size in KB column indicates how much data has currently been accumulated on the volume.
Capacity	The Capacity column indicates the maximum capacity of a volume. With a volume of type HD, the capacity limit is also 630 MB so that the volume can also be burned to a CD/DVD if necessary.
Storage location	The Storage location column indicates the drive or jukebox bay on/in which a burned CD/DVD in the system can be found.

Status	The Status column indicates the current status of the medium, e.g. whether it is an open volume or a CD/DVD which has already been burned.
Media type	The Media type column indicates whether the volume is archived on the hard disk or as a CD/DVD.
Lifespan	The Lifespan column indicates the documents which are archived on this medium. The Storage Manager assigns the documents to certain volumes according to the various different combination possibilities of lifespan and media type.

	Additional information on the topic of lifespan can be found in the documentation on the PROXESS Administrator Console.
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Logging settings

Select the Logging Settings entry in the "Tools" menu.

Here you can make settings for the degree of logging and the output medium, as well as for potential notification via e-mail.

In this window, you can see an overview for the currently set status of logging. You can see the output medium for which logging is activated and the logging level which is set:

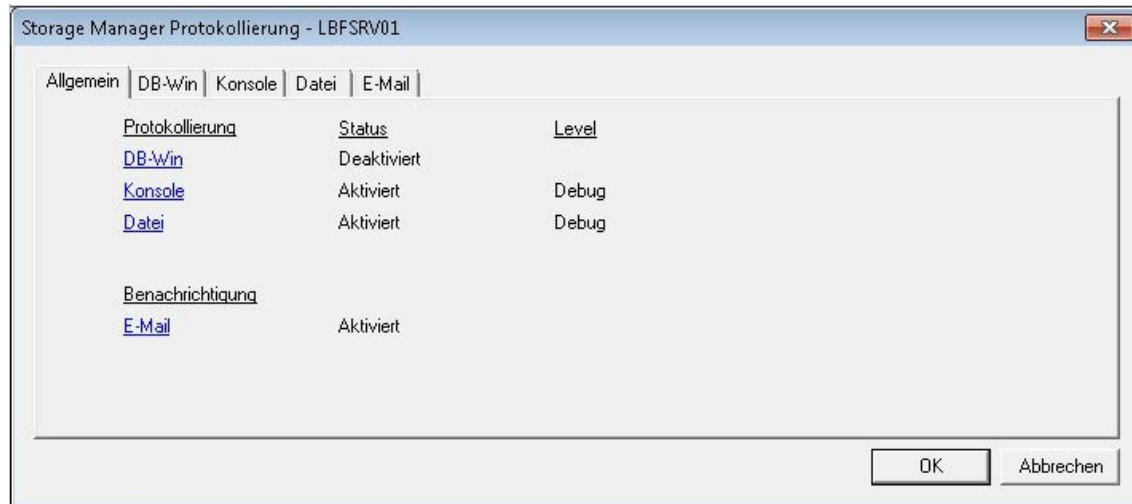


Figure: "Storage Manager Logging, Overview"

The following are potential output media:

DB-Win	If you would like to use the DB-Win program as the output tool for your log, you can configure it on this tab.
Console	If you would like the logging messages to be visible in the console window, configure the settings on this tab.
File	If you would like to enter all messages in a log file, use this tab.
E-mail	Log files can be sent automatically by e-mail. The following settings are available:

Several output media can be activated at the same time. You can also specify the magnitude of logging for each one.

The following logging levels can be set.

Debug	This setting results in very detailed logging. Please only activate this level when consulting with PROXESS support, e.g. as part of a service call.
Information (default)	In addition to all errors and warnings, outputs information messages which don't require access. Example: "PROXESS server has been started"

Warning	Warnings are messages which are output during operation and which require action on the part of the administrator as soon as possible. Example: The disk capacity for saving files and data is nearly used up.
Error	These are error messages which do not lead to a server interruption, but absolutely require action on the part of the administrator. Example: DVD medium burning has failed, as the medium is defective.
Critical	The server module is stopped if a critical event occurs. Example: No disk space available for saving, or SQL database not started/available.

Tools menu



Figure: The "Tools" menu

Find File	With this command, you can localize a specific file with volume and path (see Find File command).
Calculate File ID	With this command, you can determine the file ID of a file (see Calculate File ID command).
Create New Device	With this command, you can add a new device (see Create New Device command).
Jukebox Test	With this command, the functioning of a connected jukebox can be checked. This check includes the controller of the jukebox robotics and the read drive lock. This menu command is only active in Service mode.
Recorder Test	With this command, the functioning of a connected CD/DVD recorder can be checked. The values set for the properties of the recorder are tested here. This menu command is only active in Service mode.
Drive Test	With this command, the functioning of the selected CD/DVD drive can be checked. This test includes the reading of data, as well as the function of the drive lock. This menu command is only active in Service mode.
Error log	This dialog is no longer active.
Logging settings	Various different log output is controlled by the logging settings (error messages, information and function calls) (see Logging Settings command).
License file	This command is not active. You set up the license file using the Storage Manager Properties dialog box.
Timer	With this command, you can specify the time interval at which the view is automatically updated (see Timer command).

See also:

[Find File command](#)

[Calculate File ID command](#)

[Find File command](#)

[Timer command](#)

Find File command

If you click the **Find File** command in the "Tools" menu, the following dialog box opens. You generally only need this function in the context of troubleshooting.

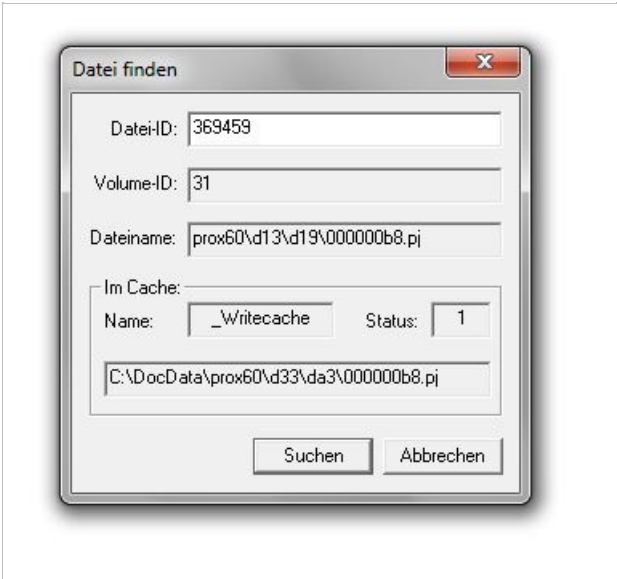


Figure: "Find File" dialog box

File ID	In this field, you enter the file ID in question. The file ID is generally output with error messages.
VolumeID	This field indicates the volume ID on which the Storage Manager has stored the file with the file ID being sought.
File name	In this field, you can see the converted 8.3 file name given to the file on the CD/DVD.
In cache	Should the file not yet be located on a completed volume, but rather is still or again found in the cache directory, you can see the cache name, the status of the sought file and the path specification for the file here.
Status	0 = not in cache 1 = in write cache 2 = in read cache 3 to 100 = in sub-read cache (expanded read cache) -1 = file ID does not exist
Search	Click this button if you have made the entry in the File ID field. Following a completed search, the desired specifications are displayed in the Volume ID and File name fields which previously had a gray background.

See also:

[Calculate File ID command](#)

Calculate File ID command

If you click the **Calculate File ID** command in the "Tools" menu, the following dialog box opens:



Figure: "Calculate File ID" dialog box

File name	In this field, you enter the file name. Then click the OK button. The Storage Manager Explorer then automatically calculates the file ID and displays it in the File ID field which previously had a gray background.
File ID	In this field, the determined file ID is displayed.

See also:

[Find File command](#)

Timer command

Using the Timer command, you define the frequency of automatic updates of the screen view.

<input type="radio"/>	1 Minute
<input type="radio"/>	30 Sekunden
<input checked="" type="radio"/>	kein Timer

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