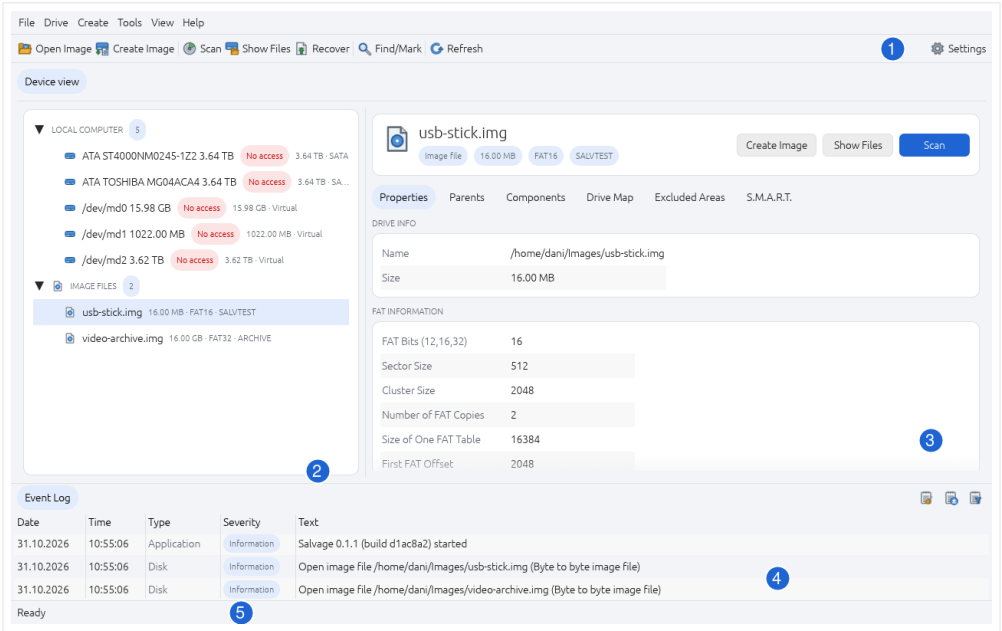
uncomplex.

salvage.

The User Guide

Get your files back.
From drives, partitions and images that lost them.



Salvage finds deleted files, lost partitions and formatted drives, and copies what it finds to somewhere safe. It reads; it does not write to the drive you are rescuing. **Read in any order:** every chapter opens with a **TL;DR** and ends with a **Done when** check, so you always know when you can stop.

How to use this guide

TL;DR

You do not need to read this in order. Every chapter starts with a box like this one that says what the chapter is for. Read the box; if it is what you need, carry on; if not, skip the chapter.

Something is missing. A photo, a folder, a whole drive that suddenly wants formatting. This guide gets you from there to your files by the shortest route that is safe. In a hurry? The cheat sheet on the next page has the fastest route, and chapter 1 is seven steps.

The key, so you can scan

Marker	Means
`Ctrl+F`	A key to press.
Drive > Scan	A menu path, or a button to click.
`*.jpg`	Something to type, or a file name.
TL;DR	The chapter in a few lines. Read only this if you are in a hurry.
	Roughly how long the chapter takes.
Quick win	A small thing you can do right now that makes the job easier.
Watch out	The things that catch people out.
Your data	What can cost you the very files you are trying to save. Read every one.
How it works	Why Salvage behaves as it does, for the curious.
Skip this if	When a section is not for you, and you lose nothing by moving on.
Done when	How you know you have finished the chapter.

Words like **Show Files** are labels you will see in Salvage. Shortcuts are written as `Ctrl+O`; the menus show each one next to its command.

The one-page cheat sheet

You want to	Do this
Get a deleted file back	Click the partition > **Show Files** > tick it > **Recover** > a folder on another drive
Find files when the partition is gone or the drive was formatted	Click the *drive* > **Scan** with the defaults > a green volume > **Show Files**
Finish a scan you stopped	**Resume scan** on its tab, or **Drive > Resume Scan**
Mend photos and videos that come back broken	**Tools > Reassemble Fragmented Photos and Videos** after the scan
Open an encrypted drive	**Show Files**, then the passphrase or the BitLocker recovery key
Get an earlier version from Windows	Expand the NTFS volume > **Shadow copy** > **Show Files**
Look after a drive that is dying	**Drive > Start Runtime Image** first, or **Create Image** and work from the file
Recover from another computer	`salvage-agent` there, **Tools > Connect To Remote** here
Find many files at once	**Find/Mark** (`Ctrl+F`), a pattern such as `*.docx`, **Mark**

Never

- ✗ Save recovered files to the disk you are recovering from.
- ✗ Install anything on that disk.
- ✗ Leave **Enable write** on when you are not writing on purpose.

Colours

- A red file name with a cross: deleted.
- The dot next to a file: its recovery chance, ■ good, ■ partial, ■ poor.
- A green line in the event log: done. A red one: failed; read it.

Contents

How to use this guide 1

The one-page cheat sheet 2

1 Quick start: get a deleted file back 5

Seven steps 5

2 A tour of the main window 7

The five areas 7

Tabs and themes 8

3 Opening what you want to recover from 9

A drive or USB stick 9

An image file 9

Linux Btrfs volumes 10

Encrypted volumes: LUKS and BitLocker 10

What the colours and tags mean 10

4 Finding files 12

Reading the list 12

Sorting and searching 13

Mark many files at once 13

Earlier versions: shadow copies 13

Preview before you recover 13

5 Scanning when the files are not there 14

Start a scan 14

While it runs 15

Stopping and carrying on later 16

The finishing stage 16

When it is done . . . 17
Photos and videos that come back broken . . . 17

6 Recovering 19
If a file already exists . . . 20

7 Protecting a failing drive: images 21
Create an image . . . 21
Runtime imaging: for drives that are dying . . . 22

8 Advanced tools 23
Text/hexadecimal editor . . . 23
RAID and virtual volumes . . . 24
Regions . . . 24
Wipe and Drive Copy . . . 24
Saving your work . . . 25

9 Working on another computer 26
On the other computer . . . 26
In Salvage . . . 26

10 Settings 28

11 When things go sideways 30
Keyboard . . . 31

A Glossary 32

CHAPTER 1

Quick start: get a deleted file back

TL;DR

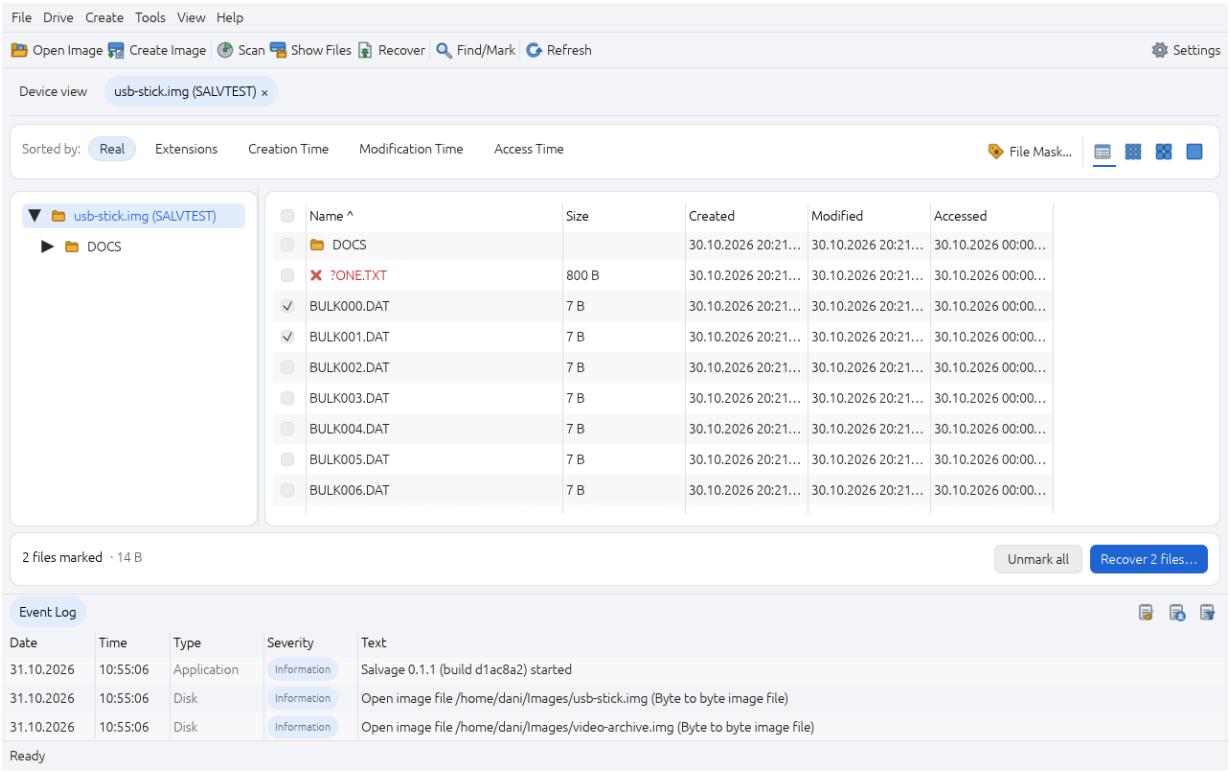
Open Salvage, pick the drive, press **Show Files**. Tick the file, press **Recover**, choose a folder on a *different* drive. If the file is not listed, go to chapter 5.

Five minutes

Your data. Stop using the drive the file was on. Every new file written there can overwrite what you want back. Do not install Salvage on that drive, and do not save recovered files to it.

1.1 Seven steps

1. Start Salvage. On Linux and macOS it asks for your password so it can read drives directly.
2. In the **Device view** on the left, click the drive or partition the file was on.
3. Press **Show Files** in the toolbar (or double-click the partition).
4. Find the file. Deleted files are shown in red with a small cross. Use the mask box if the list is long.
5. Tick the box next to the file. The bar at the bottom tells you how many files are marked.
6. Press **Recover N files...**.
7. Choose an **Output folder** on another drive or a USB stick, then press **Recover**.



The file list with two files ticked. The bottom bar is where you press Recover.

Quick win

If the file is not there, the folder it was in may have been deleted too. Look under **Extra Found Files** at the bottom of the folder tree before you reach for a scan.

Done when the file is back in a folder on another drive, and it opens.

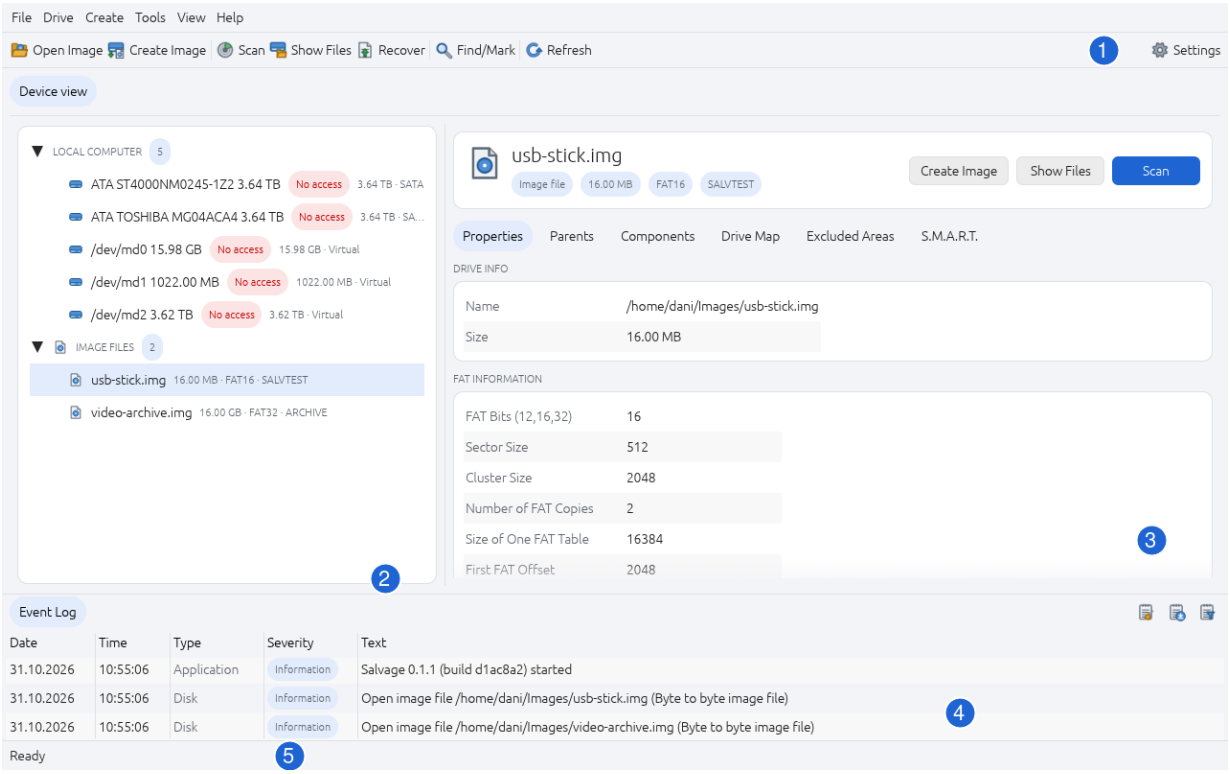
CHAPTER 2

A tour of the main window

TL;DR

Left: what you can recover from (drives, images, remote computers). Right: details and the next actions for whatever you clicked. Bottom: the event log. Green means it worked, amber means look, red means it failed.

Five minutes



The main window in the light theme.

2.1 The five areas

1. Toolbar

The big actions: **Open Image**, **Create Image**, **Scan**, **Show Files**, **Recover**, **Find/Mark**, **Refresh**, **Settings**. Everything here is also in the menus.

2. Device tree

Your computer's drives, their partitions, any image files you opened, and remote computers. A red NO ACCESS tag means Salvage cannot read that device; hover to see why.

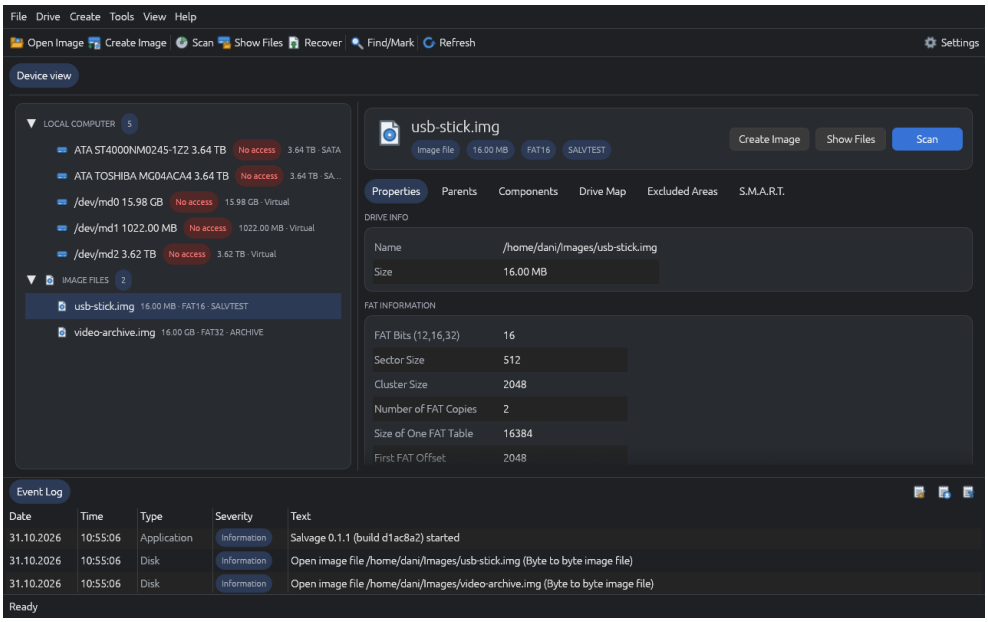
3. **Details**
   Click anything in the tree and this side shows what it is and the sensible next steps. Tabs: **Properties**, **Parents**, **Components**, **Drive Map**, **Excluded Areas**, **S.M.A.R.T.**
4. **Event log**
   A line for everything Salvage did. Keep an eye on amber and red lines.
5. **Status bar**
   The running task and its progress. A `WRITE ENABLED` tag appears when you have switched on writing in Settings (chapter 8); that is your reminder to switch it off again.

> ⚠ **Watch out.** An amber bar saying *You do not have Administrator privileges* means Salvage was started without the rights it needs to read drives directly; image files still work. Close it and start it again from the launcher (Linux and macOS ask for your password; Windows shows the elevation prompt).

2.2 Tabs and themes

Each drive you open with **Show Files** gets its own tab next to **Device view**; so does each scan. Close a tab with its cross. Closing a tab never loses recovered files.

View > Dark Theme switches instantly (or `Ctrl+Shift+D`). **View > Follow System Theme** makes Salvage match your desktop.



The same window in the dark theme.

✅ **Done when** you can point at the device tree, the details pane and the event log, and switch the theme.

CHAPTER 3

Opening what you want to recover from

TL;DR

Drives in your computer appear by themselves; press **Refresh** after plugging one in. Image files (a copy of a drive) open with **Open Image**. Another computer's drives: **Tools > Connect To Remote** (chapter 9).

Ten minutes

3.1 A drive or USB stick

Plug it in, press **Refresh**, and it appears under **Local Computer**. Click a partition under it to see its file system and size on the right. If the drive shows but its partitions do not, the partition table is damaged: scan the whole drive (chapter 5).

3.2 An image file

1. Press **Open Image**.
2. Pick the file. It appears under **Image Files**. Treat it exactly like a drive.

You have	Extensions
Raw copy of a drive	`.img` `.dd` `.raw` `.bin` `.iso`
Virtual machine disk	`.vhd` `.vhdx` `.vmdk` `.vdi`
Forensic image	`.E01` (EWF), `.aff`
Salvage image	`.rdr` `.rdi`
Apple disk image	`.dmg`, `.sparsebundle`

Watch out. On Linux and Windows a `.sparsebundle` is a folder: open the `Info.plist` inside it. Encrypted Apple images cannot be opened.

Quick win

Working from an image is always safer than working from a failing drive. Chapter 7 shows how to make one.

3.3 Linux Btrfs volumes

Salvage opens Btrfs volumes read-only, compressed files included. The default subvolume is the volume's root; other subvolumes and snapshots appear as folders where they are linked, as on a running system.

> ▶ **Quick win**
>
> Btrfs never overwrites its bookkeeping in place, so older versions of its folders survive for a while after files are deleted. **Extra Found Files** looks through them and puts deleted files back under their old folder with their old names where it can. The sooner you look after deleting, the more of them survive.

⚠ **Watch out.** A Btrfs volume spread over several drives can be read from one drive only where its data is mirrored (RAID1, DUP) or kept whole on that drive. Striped data (RAID0, RAID10, RAID5, RAID6) cannot be recovered from a single drive; the volume's **Properties** say so.

3.4 Encrypted volumes: LUKS and BitLocker

Partitions encrypted with LUKS (Linux) or BitLocker (Windows, including BitLocker To Go on USB sticks) show **LUKS**, **LUKS2** or **BitLocker** in the file-system column. Their **Properties** list the cipher, the volume's ID and its keyslots or protectors.

1. Select the encrypted partition and press **Show Files** (or **Scan**).
2. Enter the secret: the LUKS passphrase, or the BitLocker password or 48-digit recovery key (with or without the dashes). Checking it takes a second or two.
3. An **Unlocked** volume appears under the partition and opens. Use it exactly like any other partition: show files, scan, recover, image.

⚠ **Watch out.** A wrong secret simply asks again. A BitLocker volume whose protection is suspended opens without asking. A BitLocker drive that only ever unlocked with the computer's TPM chip needs its recovery key here: find it in the Microsoft account the PC was signed in to, or wherever it was printed or saved.

💡 **How it works.** The unlocked volume lives only for this session, and passwords are never saved or written to the log. **Remove** on the **Unlocked** node locks it again. **Create Image** on the encrypted partition itself copies the encrypted bytes, which is what you want for a backup of the container.

3.5 What the colours and tags mean

- **Red name** or `NO ACCESS`: Salvage could not open the device. Usually it is not running as administrator; restart it and accept the password prompt.

- **LUKS** or **BitLocker** in the file-system column: an encrypted volume. See above.
- Grey italics: a region or RAID you created yourself (chapter 8).

✅ **Done when** the drive, image or volume you need is in the device tree, and its partitions show a file system.

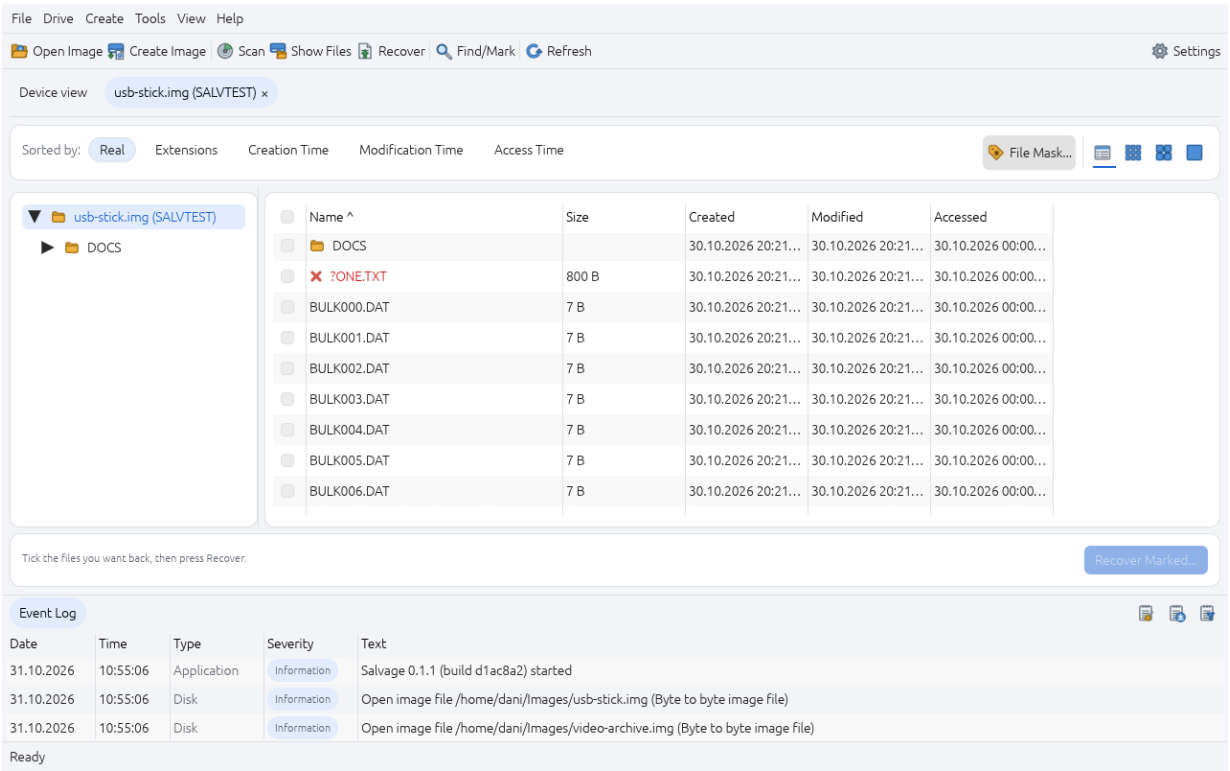
CHAPTER 4

Finding files

TL;DR

Show Files lists everything Salvage can see, deleted files included. Sort by extension or date with the pills at the top; filter with the mask box. **Find/Mark** ticks every file that matches a pattern in one go.

Ten minutes



The file view: folder tree on the left, files on the right, sort pills at the top, the Recover bar at the bottom.

4.1 Reading the list

- **Red with a cross**: deleted. The file's data may still be intact.
- **Recovery chances**: a coloured dot. ■ good, ■ partial (some data may be overwritten), ■ poor. Hover for details.
- **Extra Found Files** at the bottom of the tree: files whose folders are gone, grouped by type. On a big drive they arrive a little later: a task named *Extra Found Files* runs in the status bar and the folders appear when it finishes.
- **Metafiles**: the file system's own bookkeeping. You almost never need these.

4.2 Sorting and searching

The pills at the top change how the tree is organised: **Real** (folders as they were), **Extensions** (all JPGs together, and so on), or by **Creation**, **Modification** or **Access** time. Type in the mask box to show only matching names: `*.jpg`, `holiday*`, or `report.docx`.

4.3 Mark many files at once

1. Press **Find/Mark**.
2. Enter a name or pattern (`*.docx`), optionally a size range or dates.
3. Press **Mark**. Every match is ticked. **Find** alone just jumps to the next match.

4.4 Earlier versions: shadow copies

When Windows made shadow copies of a volume (System Restore, *Previous Versions*), Salvage lists them under that volume in the device tree as **Shadow copy 1 (date UTC)**, **Shadow copy 2**..., oldest first. Each is the whole volume as it was at that moment.

1. Expand the NTFS volume in the device tree.
2. Select the shadow copy from before the file was changed or deleted.
3. Press **Show Files** and recover as usual. **Scan** and **Create Image** work on it too.

> **How it works.** A shadow copy keeps only the blocks Windows saved before they changed; the rest is read from the live volume. That is why it costs Windows so little space, and why a shadow copy of a volume that was later damaged is only as good as the live volume around those blocks. Times are shown in UTC.

4.5 Preview before you recover

Double-click a file to open it in the viewer. Pictures, documents, audio and video all preview without recovering anything. If the preview looks right, the recovery will be right too.

Skip this if You only want one or two files: tick them and go straight to chapter 6.

Done when every file you want is ticked, and the ones you care about most preview correctly.

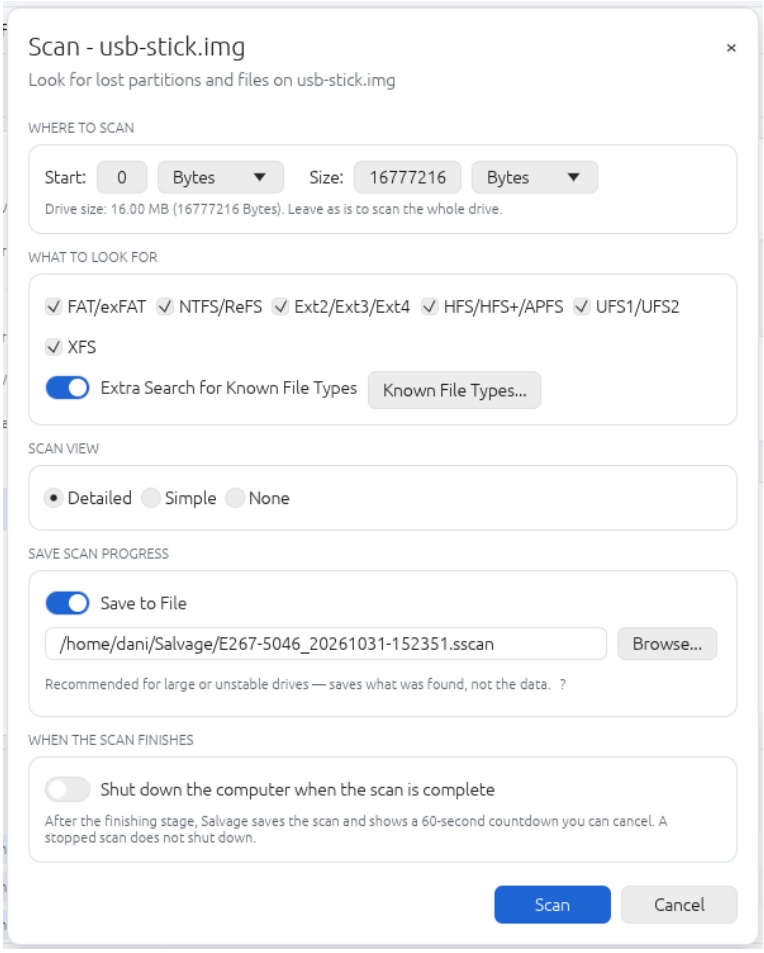
CHAPTER 5

Scanning when the files are not there

TL;DR

A scan reads every sector looking for lost partitions and file signatures. Press **Scan**, keep the defaults, press **Scan**. It saves itself as it goes and can be resumed. Afterwards, the volumes it found appear under the drive: open them with **Show Files** as usual.

Ten minutes to start, then the scan itself



The Scan dialog. The defaults scan the whole drive for every file system and save the result.

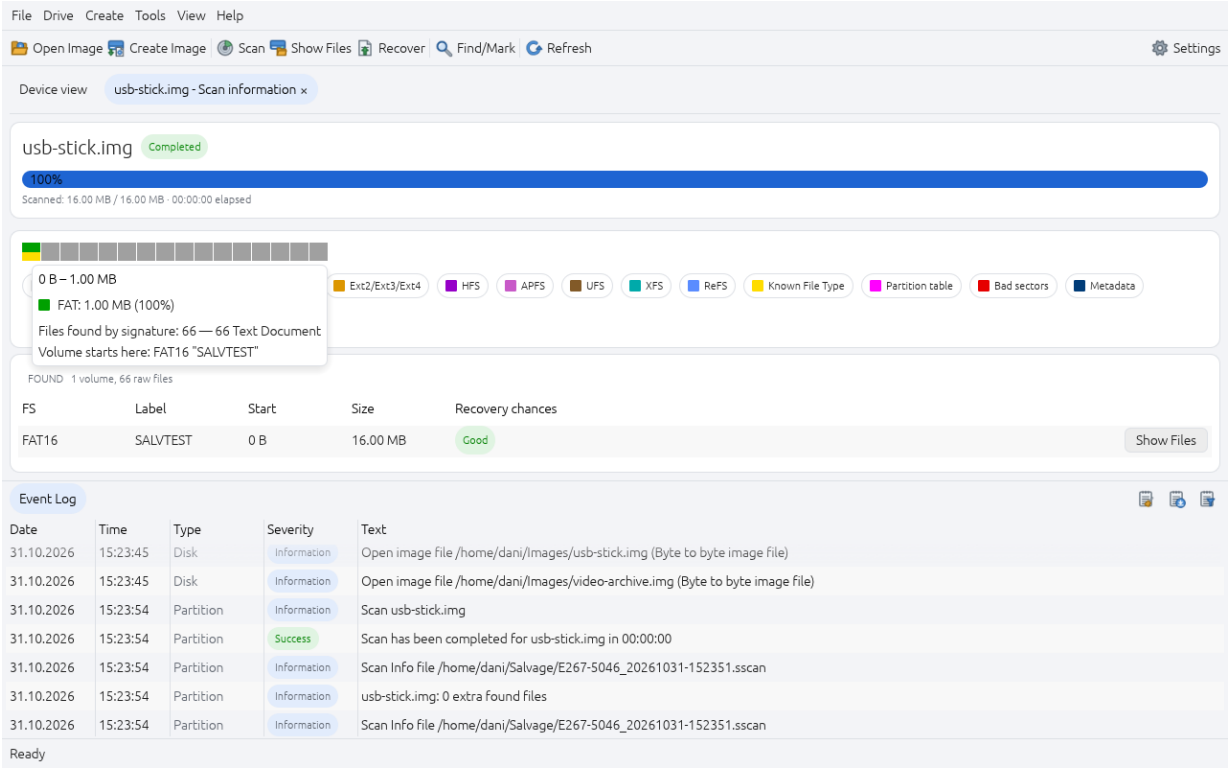
5.1 Start a scan

1. Select the drive (not a partition, unless you know the partition is fine) and press **Scan**.

2. **Where to scan**: leave as is to scan everything.
3. **What to look for**: untick file systems you know were never on the drive to speed things up. Keep **Extra Search for Known File Types** on; it finds files even when the file system is gone.
4. **Scan View**: **Detailed** (the default) colours the map as the scan goes; **None** is fastest.
5. **Save scan progress** is on already. It saves what was found (not the data) to a file named after the drive's ID and the time, so you never have to scan twice.
6. **When the scan finishes**: tick **Shut down the computer when the scan is complete** for a scan that runs overnight.
7. Press **Scan**.

5.2 While it runs

The scan tab shows a progress bar, how much has been read, and a map of the drive. Each square covers a stretch of the drive and is striped with everything found there, so a few files in mostly empty space still show. Hover over a square to see what it holds: how much is empty or still unscanned, the files found by type, and any volume that starts there.



A finished scan, with the pointer over a square: the FAT volume that starts there and the 66 files found in it.

Colour	Means
Grey	unused space, or not scanned yet (lighter)
Other colours	a file system: the legend under the map names each one
Yellow	files found by their signature (Known File Type)
Pink	a partition table
Red	bad sectors: the drive could not read them

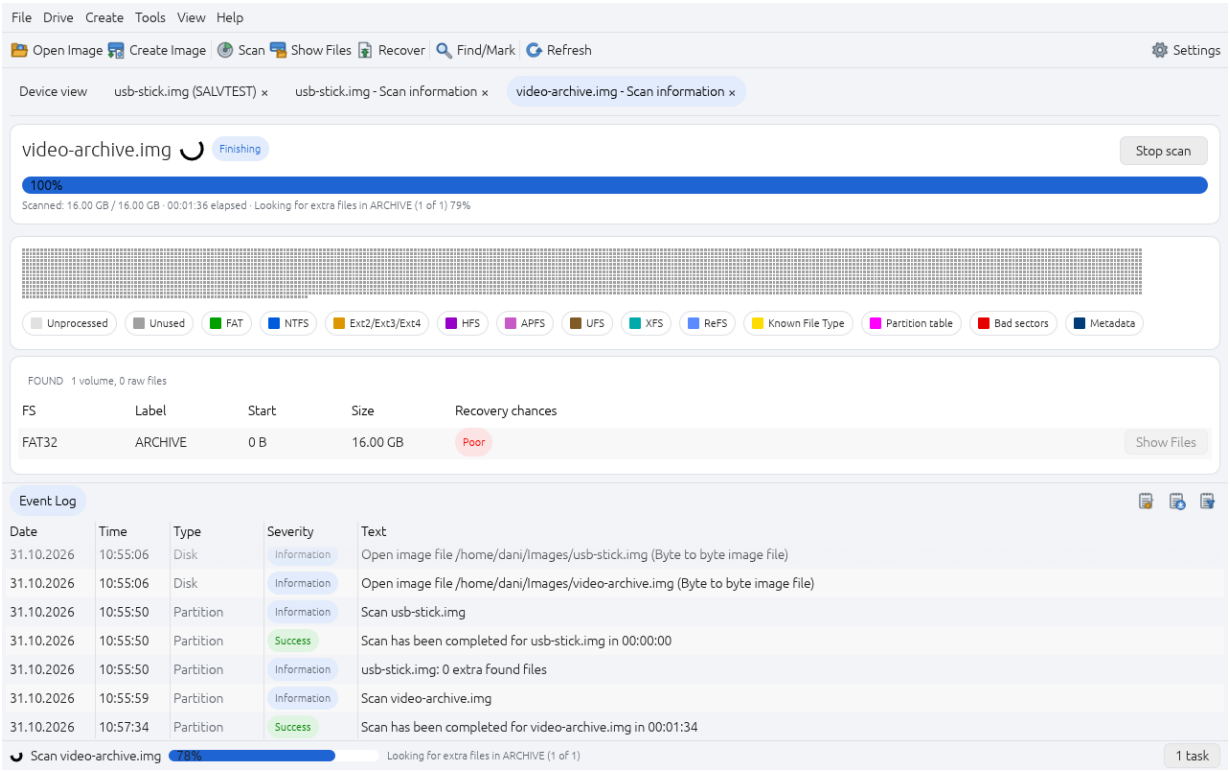
5.3 Stopping and carrying on later

Stop scan keeps everything found so far, and a stopped scan is not wasted. Its tab shows **Resume scan**, and **Drive > Resume Scan** does the same for the selected drive: Salvage reads the rest with the same settings and adds what it finds, so you end up with the same result as one long scan. The stopped scan is also in its saved `.sscan` file: open it with **File > Open Scan Information** (even after restarting Salvage) and choose **Resume Scan**.

> ⚠ **Watch out.** Resume only knows where a scan stopped if it was stopped: with **Stop**, or because the drive went away. If the computer crashes or loses power mid-scan, start the scan again.

5.4 The finishing stage

At 100 % the drive keeps working for a while. The pill changes to `FINISHING` and both the scan tab and the status bar say what Salvage is doing, such as *Looking for extra files in DATA (2 of 3) 41 %*. It is reading each found volume's bookkeeping for files whose folders are gone. The volumes it found are already in the device tree and open normally while that runs. **Stop scan** ends this part too.



The finishing stage: the pill, the stage text with its percentage, and the same progress in the status bar.

5.5 When it is done

The **Found** card lists recognised volumes with a recovery-chance pill. Start with the green ones. Select one and press **Show Files**, or expand the drive in the device tree where the same volumes now appear under **Recognized**.

If you asked for it, Salvage now saves the scan and counts down 60 seconds before shutting the computer down; press **Cancel** to stay on. A stopped scan never shuts down.

5.6 Photos and videos that come back broken

A file found by its signature (the **Known File Types** folders) is assumed to be stored in one piece. On a well-used drive, photos and videos are often scattered, and then they come back half grey or stop playing.

1. After the scan, choose **Tools > Reassemble Fragmented Photos and Videos**. (For a few files: select them in the file list, right-click, **Reassemble Fragmented File**.)
2. Wait for the task in the status bar. Files that check out are left alone; for the others Salvage finds the piece that continues them further on the drive, up to four pieces per file.
3. Preview and recover as usual. The event log says how many were reassembled, and why any could not be.

How it works. Salvage decodes each JPEG's image data and checks each video's frames against the video's own index, so it knows exactly where a file stops making sense and which candidate carries on from there. Photos come back exact. A video occasionally keeps a short glitch inside one frame where the break fell mid-frame.

Watch out. Not covered: progressive JPEGs, videos that are not H.264 or HEVC, and pieces more than 256 MB apart or out of order. Old FAT memory cards with very small clusters are not covered either.

Watch out. If the drive is switched off or unplugged during a scan, Salvage notices after a run of unreadable sectors, stops the scan and writes *stopped responding* to the event log. Plug it back in, press **Refresh**, and resume.

Your data. A scan reads the whole drive. On a drive that is failing (clicking, very slow, S.M.A.R.T. warnings), make an image first (chapter 7) and scan the image instead.

Done when the volumes the scan found are open in the device tree, and the scan is saved.

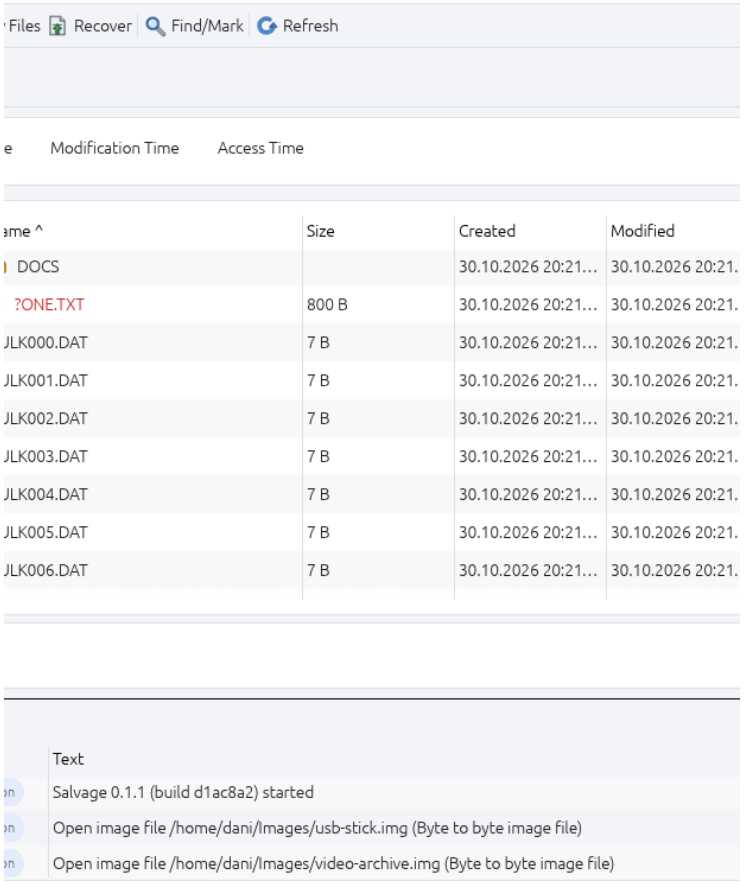
CHAPTER 6

Recovering

TL;DR

Tick files, press **Recover**, choose an output folder on another drive, press **Recover**. The defaults keep the folder structure and ask before overwriting. Check the event log: a green line per batch, a red line per file that failed.

Five minutes



The Recover dialog. Only the output folder is required.

1. With files ticked, press **Recover N files…** in the bottom bar (or the toolbar).
2. **Output folder**: pick a folder on a different drive. Salvage shows the free space.
3. **Restore folder structure** rebuilds the original folders; **Skip files with bad sectors** leaves out files it cannot read fully (they are logged so you can retry).
4. The advanced options cover alternate streams, extended attributes and security descriptors. Leave them unless you need an exact copy for a Windows server.

5. Press **Recover**.

How it works. A file with a few unreadable sectors still comes back, with only the unreadable 4 KB pieces left as zeros: Salvage narrows a failed read down instead of giving up on the whole megabyte around it.

6.1 If a file already exists

Salvage asks. Choose **Rename** to keep both (`photo_2.jpg`), or set a rule for the whole batch with the dialog's **If the file exists** option.

Your data. Never choose the drive you are recovering from as the output folder. Salvage refuses obvious cases, but a second partition on the same physical disk is still the same disk.

Done when the files are in the output folder on another drive, and the event log has no red lines, or you know which files to retry.

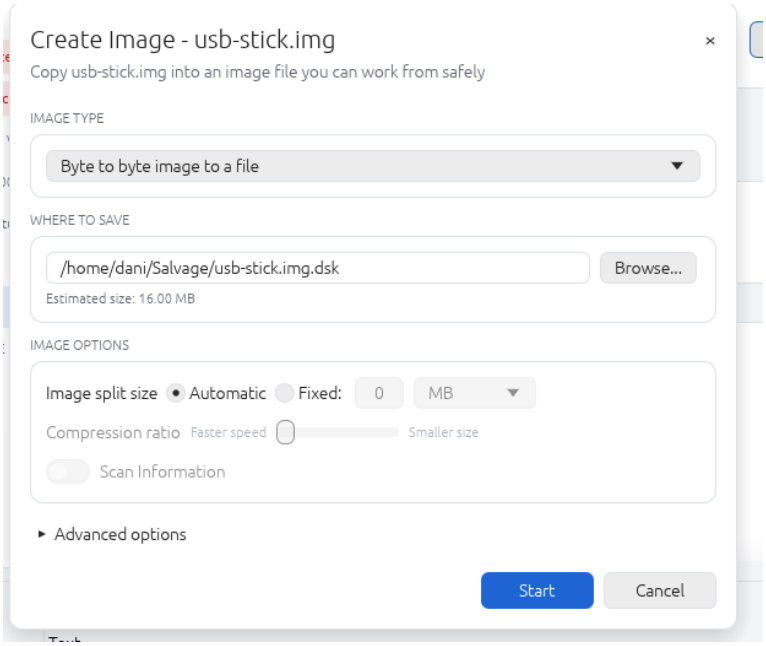
CHAPTER 7

Protecting a failing drive: images

TL;DR

An image is a byte-for-byte copy of a drive in a file. Recover from the image, not the drive. **Create Image** makes one; **Runtime imaging** copies as you work, for drives that are already failing. Both keep a sector map, so an interrupted copy can resume.

Ten minutes to start, then the copy



Create Image. A compressed image with a sector map is the sensible default.

7.1 Create an image

1. Select the drive and press **Create Image**.
2. **Image type**: **Byte-to-byte** is readable by every tool; **Compressed** saves space.
3. **Where to save**: a file on a drive with enough free space (the dialog tells you).
4. Under the advanced options: how many times to retry bad sectors, and whether to copy unused space.
5. **When the image is complete**: tick **Shut down the computer when the image is complete** for a copy that runs overnight. Salvage counts down 60 seconds first; press **Cancel** to stay on.
6. Press **Start**. Progress appears in the status bar and the event log.

7.2 Runtime imaging: for drives that are dying

Drive > Start Runtime Image. From then on every sector Salvage reads is also written to the image, so nothing is read twice and a drive that fails halfway still leaves you with everything read so far. Start it *before* scanning or recovering. If Salvage was closed with runtime imaging on, it offers to resume next time.

> ▶ **Quick win**
>
> The **S.M.A.R.T.** tab on a physical drive shows its health. Amber or red there means: image first, work later.

✅ **Done when** the image is open under **Image Files**, and you are working from it instead of the drive.

CHAPTER 8

Advanced tools

TL;DR

The text/hexadecimal editor shows raw bytes, with templates that decode boot sectors and partition tables. RAID tools rebuild a broken array virtually. Wipe and Drive Copy write to disks; they ask twice. Mean it.

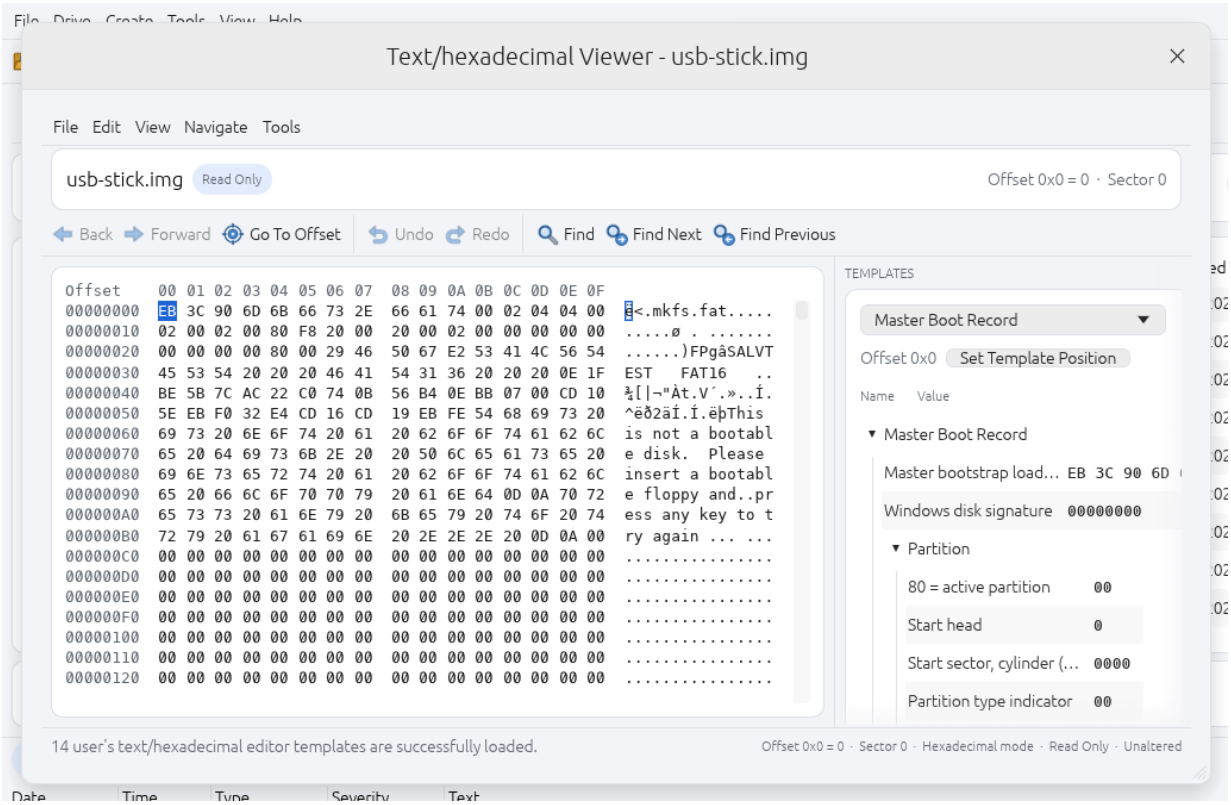
Read the part you need

Skip this if You are recovering ordinary files from an ordinary drive. Nothing here is needed for that.

8.1 Text/hexadecimal editor

Right-click a drive, partition or file and choose **Text/hexadecimal Editor**. The editor opens read-only.

- **Go To Offset** jumps anywhere; **Find** searches for text or hex.
- The **Templates** panel decodes what is under the cursor: boot sectors, MBR/GPT entries, file records.
- Writing needs two things: **Settings > Enable write** and the editor's own **Enable write** switch. Saving asks for confirmation and warns about irreversible data loss.



The editor with the Templates panel decoding a FAT boot sector.

8.2 RAID and virtual volumes

Create > Create Virtual Block RAID & Autodetect (or Virtual Mirror, Virtual Volume Set). Drag the member disks in, pick the level and block size, or press **Autodetect** to let Salvage work out the order and parity layout. The result appears as a new volume in the device tree; scan and recover from it like any other.

8.3 Regions

Create > Create Region limits work to a part of a drive (a lost partition you know the location of). **Create Exclusive Region** does the opposite: it tells Salvage to avoid an area with bad sectors.

8.4 Wipe and Drive Copy

Drive > Wipe overwrites a drive or its unused space. **Tools > Drive Copy Wizard** clones one drive to another sector by sector. Both show a red confirmation naming the target. Read the name.

> **Your data.** These are the only two places in Salvage that write to a whole disk. There is no undo.

8.5 Saving your work

File > Save Scan Information writes an `.sscan` file: everything a scan found, loadable later in seconds. **Tools > Export Recovery List** saves the file list as CSV, XML, JSON or an HTML page you can send to someone.

Done when you have what you came for, and **Enable write** is off again.

CHAPTER 9

Working on another computer

TL;DR

Run `salvage-agent` on the other machine. In Salvage, **Tools > Connect To Remote**: address, port, password. Its drives appear in the device tree; scan, browse and recover as usual.

Fifteen minutes

9.1 On the other computer

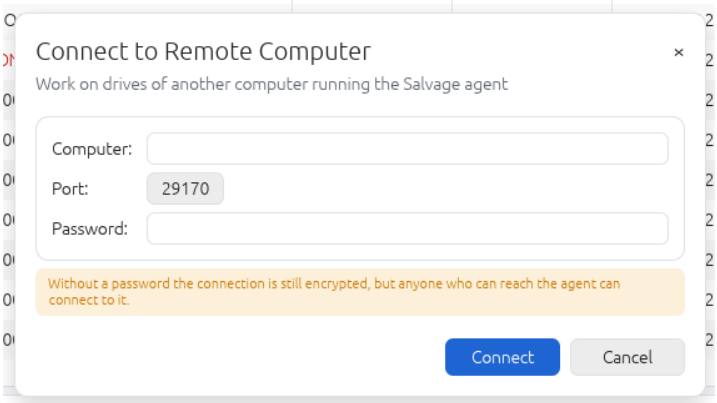
Linux (put the password in that file, mode 600; a systemd unit is in `docs/AGENT-PROTOCOL.md`):

```
$ sudo salvage-agent --password-file /etc/salvage-agent.pw
```

macOS: the same command with `sudo`; a launchd plist is in the same document. Windows, from an administrator prompt (installs and starts the **Salvage Agent** service; allow TCP 29170 in the firewall):

```
> salvage-agent.exe --install-service --password-file
    ↪ C:\ProgramData\Salvage\agent.pw
```

9.2 In Salvage



Connect to Remote Computer.

1. **Tools > Connect To Remote**.
2. Enter the computer's address, keep port 29170, enter the password.
3. Press **Connect**. A wrong password is reported straight away and the connection is refused.

> ⚠ **Watch out.** The agent refuses to start without a password. If you really want one without (a lab network), add `–allow-empty-password`; traffic is still encrypted, but anyone who can reach the port can read the drives.

✅ **Done when** the other computer's drives appear in your device tree.

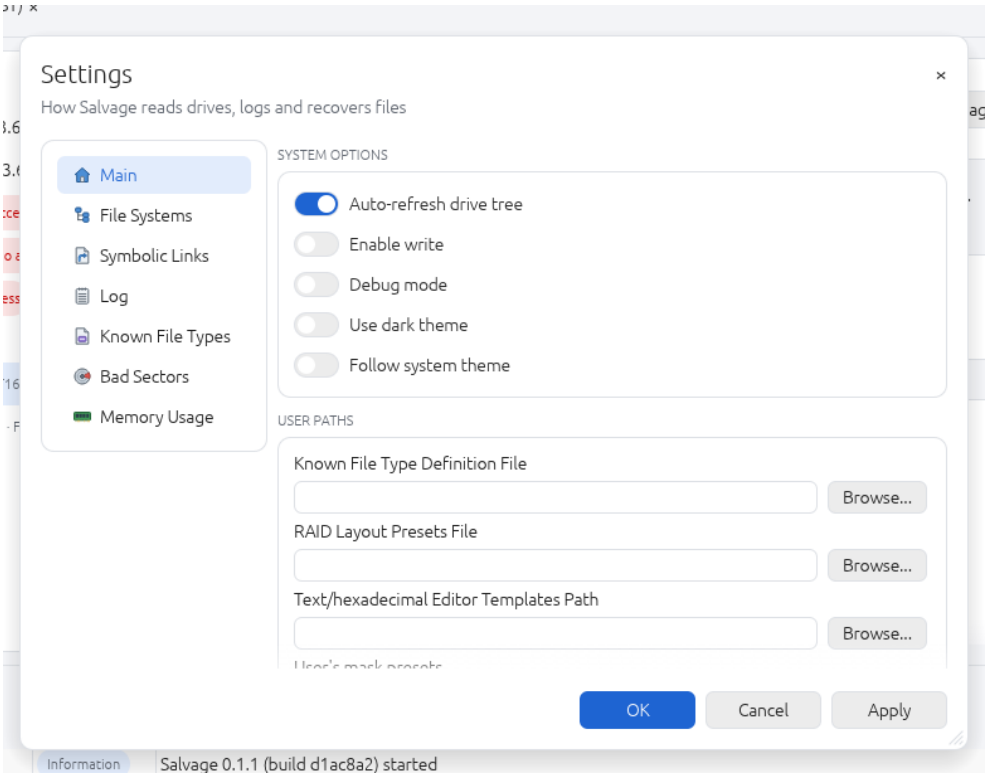
CHAPTER 10

Settings

TL;DR

Pages on the left, switches on the right, **Apply** saves straight away. **Enable write** is the one to treat with respect.

Five minutes



Settings.

Page	What it holds
Main	auto-refresh of the drive tree, **Enable write**, dark theme, follow the system theme
File Systems	which file systems Salvage looks for, and per-file-system options
Symbolic Links	whether links are recovered as links or as the files they point to
Log	how much to log and where to save it
Known File Types	the signatures used by scans; add your own
Bad Sectors	how many retries, and what to put in place of unreadable sectors
Memory Usage	a limit for very large scans on small machines

Done when your changes are applied, and the status bar shows no WRITE ENABLED tag.

CHAPTER 11

When things go sideways

TL;DR

Red drive: restart with administrator rights. Missing file: **Extra Found Files**, then a scan. Slow scan: the drive may be failing, so image it first. A file that will not open: check its recovery-chance dot.

As long as it takes

My drive is red, or says *No access*
: Salvage is not running with administrator rights. Close it and start it from the menu; accept the password prompt. On Linux without a desktop prompt, run `sudo salvage`.

The file is not in the list
: Its folder may be gone: look under **Extra Found Files**, or scan the drive (chapter 5).

The recovered file will not open
: Check its recovery-chance dot. Amber or red means part of it was overwritten. Preview it first next time (double-click); if a photo previews, it recovers.

The scan is very slow
: The drive may be failing. Stop, make an image (chapter 7), scan the image.

The scan says 100 % but the drive is still busy
: That is the finishing stage (chapter 5): the status bar names the volume being searched and its percentage. The found volumes can be opened meanwhile.

The scan stopped halfway
: Press **Resume scan** on its tab, or **Drive > Resume Scan**.

***Extra Found Files* took a while**
: Normal on volumes with millions of files: watch the *Extra Found Files* task in the status bar; the rest of the tree works straight away.

The agent speaks protocol version N
: Salvage and the agent are different versions. Update both.

I turned on Enable write and now I am nervous
: Good. Turn it off again in Settings; the status bar tag disappears.

11.1 Keyboard

Press	To
`Enter`	press the dialog's default button (never *Yes* on a question); in the file list, open the folder or preview the file
`Esc`	close the dialog, or cancel
`↑` `↓`	move the selection in the file list
`Space`	tick or untick the selected file
`Ctrl+O`	Open Image
`Ctrl+F`	Find/Mark
`Ctrl+,`	Settings
`Ctrl+Shift+D`	dark theme on and off
`F5`	refresh the device tree

Done when the thing works again. If it does not, the event log's red line says why: keep it for a bug report.

APPENDIX A

Glossary

Agent
: The small program that serves another computer's drives to Salvage.

Extra Found Files
: Files whose folders are lost, grouped by type.

Image
: A file holding a byte-for-byte copy of a drive.

Known file type
: A file found by its signature (`JFIF` for a JPEG) rather than by a folder entry.

Partition, volume
: A section of a drive with its own file system.

Recognised volume
: A partition a scan found that is no longer in the partition table.

Runtime image
: An image that grows as Salvage reads, so nothing is read twice.

S.M.A.R.T.
: A drive's own health report.

Scan
: Reading a whole drive to find lost partitions and files.

Sector
: The smallest unit a drive reads, usually 512 or 4096 bytes.

Find the file. Tick it. Recover it.
Somewhere else.

uncomplex. Complicated things. Thoughtfully simplified.