**TECHNICAL DOCUMENTATION / DSI ProSoft**

1. **Introducing EasySave**

EasySave is a console application developed in C# on the .NET Core platform for backing up files to different types of media (local, external and network drives).

The application can manage up to 5 backup jobs, which can be run individually or sequentially.

Thanks to its command-line interface, EasySave offers a fast, efficient solution for securing your files.

EasySave is aimed at users who need a simple and effective solution for making regular backups of their files.

This guide is aimed at:

* Professional users who want to back up critical files on servers or external disks.
* Home users who need an automated way to protect their personal data.
* System administrators are looking for a lightweight, high-performance backup management solution.

Before installing and using EasySave, make sure your system meets the following requirements:

* Operating system: Windows with .NET Core installed.
* Access rights: Sufficient permissions to read and write to the source and target directories.
* Additional tools: A text editor (e.g. Notepad, VS Code) to read log files in JSON/XML format.

**2. Installation and configuration**

1. Use the executable provided in the zip file ‘bin/Release/net8.0/Publisch.zip’.

2. Unzip the files in a directory of your choice.

3. Click on the EasySave.exe application to start using it.

The application works immediately after installation!

**3. Using EasySave**

Creating a backup job

A backup job is a task stored in the software that copies files from one location to another.

Each backup is defined by the following elements:

* Backup name: A unique identifier used to identify the backup.
* Source directory: Folder containing the files to be backed up.
* Target directory: Destination where the files will be copied.
* Backup type:
* **Complete**: Copies all the files each time it is run.
* **Differential**: Only copies of files modified since the last full backup.

Running a backup

EasySave runs via the command line and supports several execution modes:

* To run a single job:

Enter the index of the backup to run, e.g. 1-3’ to automatically run backups 1 to 3:

1

à Launches backup **no.1 only.**

* To run several backups in sequence:

Enter the index of the backup to run, e.g. 1-3’ to automatically run backups 1 to 3:

1-3

à Runs backups **1, 2 and 3 sequentially.**

* To run several backups in parallel:

Enter the index of the backup to run, e.g. 1-3’ to automatically run backups 1 to 3:

1;3

à Simultaneously launches **backups 1 and 3.**

**4. Types of Backups**

* Full Backup

🔹 **Description**: Copies all files from the source directory to the target directory.  
🔹 **Advantage**: Easy to restore, ensures complete copy.  
🔹 **Disadvantage**: Longer and more disk space intensive.

* Differential Backup

🔹 **Description**: Copies only files modified since the last full backup.  
🔹 **Advantage**: Saves time and disk space.  
🔹**Disadvantage**: Requires a full backup to be restored correctly.

**5. Managing logs and reports**

Logs are managed according to the format selected just before execution!

Daily log file

EasySave records all its actions in a JSON/XML log file that is updated in real time.

Information contained:

* Timestamp of each action.
* Name of the backup concerned.
* Source and destination address of files.
* Transfer size and duration (in milliseconds).
* Any errors.

🔹 File format: JSON/XML   
🔹 Example file name: backup\_log\_2024-02-10. Json/xml

Real Time Status File

In addition to the logs, EasySave generates a real-time status file containing the progress of backups.

Recorded data:

* Name of backup
* Last action timestamp
* Status (Active, Not Active)
* Progress: % complete, files remaining, size of files remaining

- Address of the file being transferred

🔹 File format: JSON/XML  
🔹 Example file name: backup\_state. Json/xml

**6. Good Practices and Recommendations**

🔹 Avoid spaces in file paths to avoid errors.  
🔹 Daily log files are stored in: *C:\ProgramData\CESI\EasySave\Logs*

🔹 Real-time log files are stored in the project directory: *bin/Release/net8.0/Publish*

🔹 The file in which the various backups created are saved is stored in the ProjectV0.1 folder in the same directory as the project solution (.sln file). It is called RegisteredBackups.txt  
🔹 Check the available disk space in the target directory.  
🔹 Check the log files regularly to anticipate any errors.

**7. Troubleshooting and FAQs**

Common problems and solutions

| **Problem** | **Solution** |
| --- | --- |
| **Files are not saved** | The log file is empty or missing. |
| **The log file is empty or missing** | Make sure that EasySave has written permissions. |