JUMBO BLOCK ENGINEERING SUITE

JUMBO BLOCK Project

User Manual · Version 1.1.2

Contents

1. Overview

JUMBO BLOCK Project is the project-management tool of the JUMBO BLOCK Engineering Suite. It organises engineering projects and feasibility studies into a three-level structure of project, sections and steps — each with clearly assigned responsibility, a due date and a status.

The application runs entirely locally in the browser. There is no cloud connection, no server and no automatic data transfer. All data stays on the device until it is deliberately exported as a file.

Several people can work independently on copies of the same project and later merge their versions back together through the additive import, without losing any changes (see chapters 12 and 13).

2. Getting Started

On first opening, the tool automatically creates an empty project and continuously saves the working state to the device's local browser storage (localStorage). Reloading the page does not lose any data.

In the top right there is a field labelled “Your name (for the log)”. The name entered here is recorded as the author of new status-log entries and whenever entries are created, changed, or resolved in a conflict. It is recommended to enter your name right at the start, since it immediately feeds into the logging.

3. Project Master Data

The top section captures the project's basic data:

- Project name
- Client
- Location
- Phase: Acquisition, Planning, Permitting, Execution, Acceptance
- Overall responsible and overall executor for the project as a whole

This information appears in the print report and the export, and is — like all changes — reconciled against an incoming project file on import (see chapter 12).

4. Project Sections and Steps

A project is divided into sections (e.g. “Planning”, “Permitting procedure”, “Earthworks execution”). Within a section, any number of steps can be created (e.g. “Submit soil survey”, “Deliver module”).

The “+ Section” button creates a new section, and “+ Step” within a section creates a step belonging to it. A section's or step's title can be edited directly in the title field.

The small triangle (▼/▶) to the left of the title collapses or expands a section or step, which helps keep an overview on larger projects.

A section or step can be deleted with the “Remove” button. This only makes sense as long as the entry hasn't been shared with anyone yet — for projects that have already been shared, an entry should instead be discarded as part of conflict resolution (see chapter 13), so that nothing disappears unnoticed.

5. Responsible and Executor

Every section and every step has two mandatory roles:

- Responsible — bears responsibility for the entry, without necessarily doing the work
- Executor — carries out the actual work

Both roles can be filled by the same person (common on small projects) or assigned to different people or partners (common on larger projects with several parties involved).

If either field is left empty, the entry is conspicuously marked “⚠ unassigned”. This marker only disappears once both fields are filled in, so that open responsibilities don't get lost in day-to-day project work.

6. Status and Dates

Every section and every step has a status: Open, In progress, or Done.

A due date is not required at the start of a project — the informal sequence note (e.g. “after soil survey”) can carry the planning through the early, exploratory phase. However, a due date becomes mandatory as soon as an entry is set to “Done”. If it is missing, a message appears and the status is not changed.

If an entry with status “Done” ends up without a due date (for example after an import), the marker “⚠ no date – completion incomplete” appears.

The “Sequence” field is purely informal and documentary. It is not automatically checked or enforced once a firm date is set — the binding element is the date, not the sequence note.

In addition to the due date, an optional start date can be set on every section and step. If left empty, the timeline view (see chapter 7) automatically uses the entry’s creation timestamp as its start — existing projects without a start date set therefore keep working unchanged.

7. Dates Overview

The “Dates” panel lists every section and step that has a due date set, in chronological order — regardless of which section they belong to. It shows the date, title, type (section/step), status, responsible party and executor.

Dates that are overdue (date in the past, status not yet “Done”) are highlighted in red. The overview updates immediately whenever a date changes.

Below the date list, the “Timeline (auto-generated)” panel shows the same dates as a bar chart (Gantt view), grouped by section: a section appears as a bold header row, with its steps that have a due date indented underneath.

Each bar runs from the start date (see chapter 6) to the due date; sections or steps without a due date do not appear as a bar. Bar colour reflects status: yellow = open, blue = in progress, green = done, red = overdue. A dashed vertical line marks today’s date.

The chart updates automatically whenever a date changes.

8. Partners and Roles

The “Partners & roles” panel records the external partners involved in the project — for example landscape-ecology consultancies, structural engineers or contractors. For each partner, a name, a role and a free-text note are recorded.

This list serves as an overview and can be used as a reference when assigning responsible parties and executors within sections and steps.

9. Document Register and File Attachments

The document register records project-related paperwork — with a label, a note and, optionally, an actual attached file.

The “📎 Attach file” button lets you attach any file (PDF, image, Office document, etc.) directly to a document entry. The file is exported together with the project (see chapter 11) and travels automatically with the .jbpr file when it is exchanged — everyone involved ends up with the same state of knowledge, including the original files.

The “📎 Add attachment” button in the top toolbar lets you upload several files at once; a new document entry is created automatically for each file.

An attached file's name is clickable and triggers a download, as does the “⬇ Download” button. Opening the file directly in the browser is deliberately not offered, because after importing via the ZIP file the file type can no longer be reliably detected, and the browser might otherwise display raw data instead of the actual content — downloading is the reliable path.

Two different buttons apply to attached files:

- “Remove file only (keep entry)” — removes only the attached file; the document entry with its label and note is kept.
- “Remove document entry” — deletes the entire entry, including the file, from the register.

10. Status Log

The status log is a continuous, additive record of all significant events in the project: creation of sections and steps, exports, imports, conflict resolutions, and freely entered notes of your own.

Your own entries are added via the input field at the bottom of the “Status log” panel. Log entries are never edited or deleted afterwards — they form the traceable history of the project, in chronological order with a timestamp and an author.

11. Saving, Export and File Format (.jbpr)

Within the browser, the working state is saved automatically and continuously to local storage. For permanent retention and for exchange with other people, however, a deliberate export is required.

The “ Export (.jbpr)” button downloads the entire project, including all attached files, as a ZIP container with the .jbpr extension. The filename follows this pattern:

```
YYYYMMDD_HHMMSS_projectname.jbpr
```

Example: 20260809_121429_regenwasserrueckhaltung_hille.jbpr

Internally, the .jbpr file consists of a manifest.json (all project data including a checksum) and an attachments/ folder containing the original attached files.

The file can be shared by any means — email, USB drive, shared storage. Since everything is processed locally, no online service is required.

12. Import and Merging (Additive Merge)

The “ Import / Merge” button reads in a .jbpr file (or a plain .json manifest file). Import does not overwrite the local project; instead, it additively merges both states:

- Entries that exist only in the incoming file are adopted.
- Entries that are identical on both sides remain unchanged.
- Entries that were changed differently on both sides are flagged as a conflict and presented to the user for a decision (see chapter 13). Nothing is overwritten automatically.

The status log is also merged additively: entries are matched by their unique ID, so no log line ever appears twice, and none is ever lost.

If the imported file contains attached files, they are adopted automatically and are then available for download just like locally attached files.

13. Resolving Conflicts

If the import detects contradictory changes to one and the same entry, a conflict panel appears above the project data. For each conflict, your own version and the incoming version are shown side by side with all relevant fields.

Three options are available:

- “Keep my version” — the local version stays active; the incoming version is discarded.
- “Adopt incoming version” — the incoming version is adopted; the previous local version is discarded.
- “Keep both (flag as possible duplicate)” — the incoming version is adopted as an additional, flagged entry; both versions remain side by side and can be tidied up manually afterwards.

Important: a discarded version is never deleted. It receives the status “discarded” and stays traceably in the project, together with the author, the timestamp and a note. A small label on a discarded entry always shows when and by whom it was discarded, and in favour of which version.

This conflict resolution is decided locally by the person performing the import. It is recorded transparently in the status log, so that on a later exchange everyone involved can see who made which decision and when. A genuine, two-sided confirmation step between two people is deliberately not automated — disputed cases are meant to be resolved in conversation, not decided by the tool.

14. Print / PDF Report

The “🖶 Print / PDF” button opens a fully formatted, print-ready report in a new window or tab, containing the project master data, all sections and steps, the chronological list of dates, partners, the document register, the status log, and a checksum (SHA-256) for traceability.

The report window has its own “Print / PDF” button at the top, which opens the browser's print dialog — from there the report can be printed or saved as a PDF file.

If the browser blocks the report window from opening (pop-up blocker), a corresponding notice appears; the pop-up blocker then needs to be allowed for this page once.

In addition to the text-based report, the “🖶 Print Gantt / PDF” button opens its own print window with the timeline (Gantt chart, see chapter 7) as a standalone, print-ready document in landscape orientation.

The paper size is chosen automatically based on the size of the project (DIN A4 up to DIN A0 landscape): small projects with few dates appear compactly on a single DIN A4 sheet, while larger projects with many sections and steps or long titles automatically move up to a bigger format. Bar labels are never truncated.

If the project has no dates yet, pressing the button shows a corresponding notice instead of an empty chart. This report window also has its own “Print / PDF” button at the top for the browser’s print dialog.

15. Resetting (Closing) a Project

To continue working on a new, empty project without losing the current state, use the “♻ Reset project” button in the “Print / PDF / Reset” panel. The process has several steps and protects against accidental data loss:

- First you are asked whether the current project should be exported before resetting.
- If you confirm, and a file has previously been imported or exported, you are additionally asked whether to save under the original filename (overwriting it) or to use a new filename with the current timestamp.
- Only then is the project fully reset: all sections, steps, partners, documents, attachments and the status log are cleared, and a new, empty project begins.

16. Language (German / English)

JUMBO BLOCK Project is fully bilingual (German/English). The language is switched centrally via the shared JUMBO BLOCK header menu (DE/EN toggle, top left) and applies immediately to all labels, placeholders, messages and the print report.

The chosen language is stored in the browser and applies across the entire JUMBO BLOCK Engineering Suite.

17. Data Integrity (SHA-256)

In the top right of the tool, a SHA-256 checksum of the current project state is continuously displayed and is included in every exported file as well as the print report. This checksum changes with every substantive change to the project and serves as a traceability aid: two files with an identical checksum contain exactly the same data.

This checksum does not replace version control; it serves as a quick plausibility check — for example, to confirm whether two seemingly identical files are in fact identical.

18. Limitations, Notes and Best Practices

- The application runs exclusively locally in the browser. There is no automatic synchronisation between devices — exchange happens deliberately through exporting and importing .jbpr files.
- Local storage (localStorage) is tied to the device and browser. When switching device or browser, the project must first be exported and then imported again.
- When merging two files that reference the same attached-file path, only the metadata level (label, note) is checked for conflicts; the file content itself is not compared byte by byte. In unclear cases, a brief conversation between those involved is recommended.
- For a small feasibility study, a single section with one or two steps is often enough — the structure is deliberately not limited to large projects, but remains fully usable for small use cases too.
- Before a larger merge (an import with many expected conflicts), it is advisable to create a backup export of your own current version first.

19. Quick Reference of Icons and Buttons

Icon / Button	Meaning
□ Export (.jbpr)	Save the current project state as a file
□ Import / Merge	Read in a file and additively merge it with the current state
🖇 Add attachment	Upload one or more files and create document entries for them
🖇 Attach file	Attach a file to an existing document entry
⬇ Download	Download an attached file
🖶 Print / PDF	Open a print-ready report in a new window
🖶 Print Gantt / PDF	Open the timeline (Gantt chart) as a standalone, print-ready document
♻ Reset project	Save the project (optional) and then clear it
⚠ unassigned	Responsible party or executor is still missing
⚠ no date – completion incomplete	Status “Done” without a due date on record
🔒 SHA-256 …	Current checksum of the project state