BFVZ POWERHealth – Quick Setup Guide, Version 6.0.10

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VISUAL INTELLIGENCE SUITE

Overview

BFVZ POWERHealth is a DCMA 14-point schedule health analyzer for Power BI. It grades project and program schedules against the 14 industry-standard metrics, classifies every task by risk, analyzes resource utilization and recommends leveling actions. Version 6.0 shows one view at a time – Health, Risks or Resources – inside a fixed frame with a header, a context strip and three overlays (Status, Data, Help). This guide walks through setup with the included sample dataset.

Step 1: Open the Sample .pbix File

A sample .pbix file is included with the submission. Open it in Power BI Desktop. The visual loads with the sample dataset pre-configured and opens on the Health view.

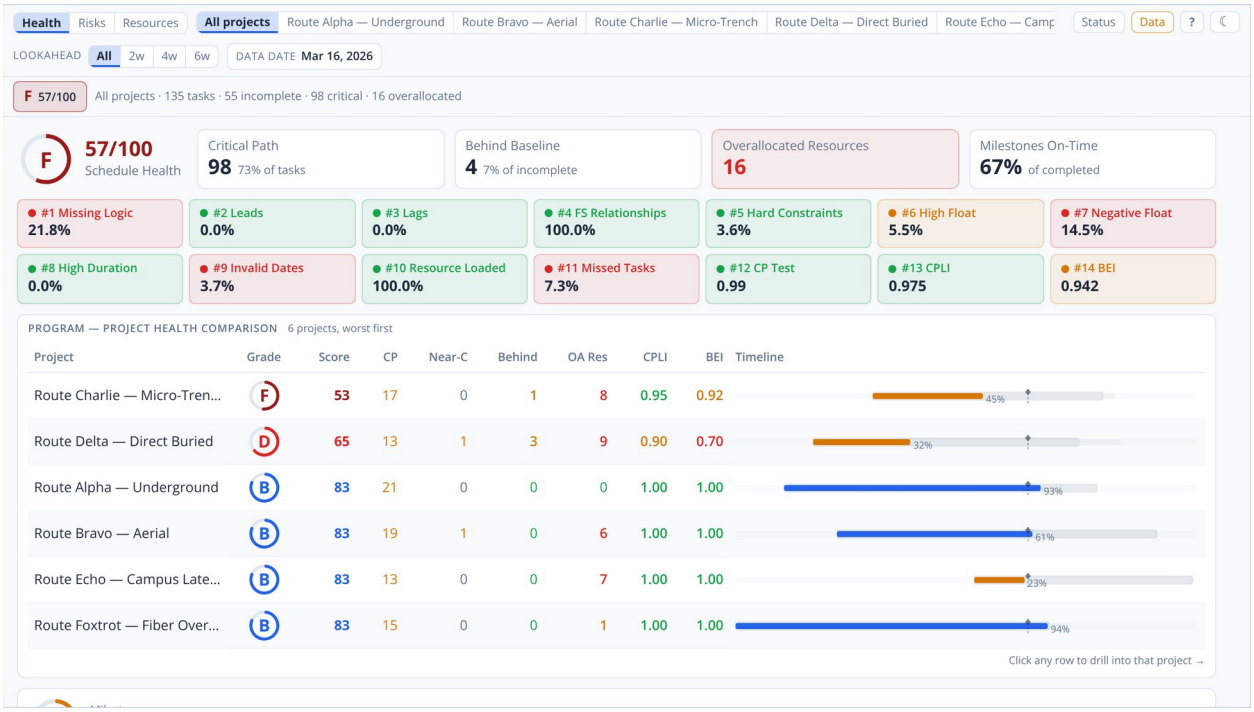


Figure 1. The sample report after opening: the Health view on the six-route program (light theme, status date Mar 16, 2026).

If the visual shows its landing page (“Drag schedule fields into the data roles to begin”) instead of data, the dataset is not loaded. Follow Steps 2 to 4.

Step 2: Import the Sample Dataset

If starting from a blank report, import the included Excel file:

1. Click Get Data, then Excel Workbook.
2. Select the dataset file.
3. In the Navigator, check both sheets: Schedule and ResourceAssignment.
4. Click Load.

Step 3: Create the Table Relationship

POWERHealth uses a two-table data model. Power BI may auto-detect the relationship. If not:

1. Switch to Model view (the three connected boxes on the left sidebar).
2. Drag Task ID from the Schedule table onto Task ID in the ResourceAssignment table.
3. Set Cardinality to One to many (Schedule is the “one” side).
4. Set Cross-filter direction to Single.
5. Click OK.

Step 4: Map Data Roles

Add the POWERHealth visual to the canvas, then drag fields from the Data pane into the visual’s wells. The visual has 23 wells; the five marked * are required (the landing page lists them in green).

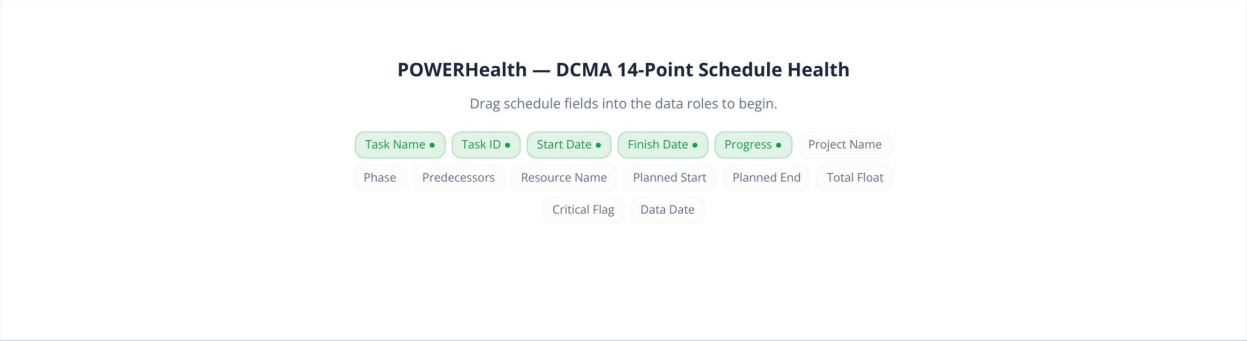


Figure 2. The landing page before any field is bound: the required wells in green.

From the Schedule table:

Well	Sample column
Project Name	Project
Phase	Phase
Task Name *	Task Name
Task ID *	Task ID
Milestone Type	Milestone Type
Predecessors	Predecessors
Start Date *	Start Date
Finish Date *	Finish Date
Planned Start Date	Planned Start

Well	Sample column
Planned End Date	Planned End
Progress *	Progress %
Progress Baseline	Progress Baseline
Constraint Type	Constraint Type
Company	Company
Contractor Project Manager	Contractor PM

From the ResourceAssignment table:

Well	Sample column
Resource Name	Resource Name
Budgeted Work	Budgeted Work
Actual Work	Actual Work
Resource Capacity	Resource Capacity

New in 6.0, optional, from the scheduler when the export has them (the sample dataset does not): Total Float (days), Critical Flag, Remaining Duration (days) and Data Date. When Total Float and Critical Flag are bound, POWERHealth uses the scheduler's float and critical path instead of its own CPM; when Data Date is bound, the status date comes from the data instead of the Data card or today.

Set the status date for the sample: Format visual, Data card, Data date override, as YYYY-MM-DD (2026-03-16 for the sample; the figures in this guide use it). Without a bound Data Date or a valid override the header's data date chip turns amber and the visual uses today.

Step 5: Verify the Dashboard

After mapping the fields the visual should show:

- A header with the view selector (Health / Risks / Resources), the project selector (one pill per project, "All projects" first), the lookahead buttons (All, 2w, 4w, 6w), the data date chip, and the Status, Data and ? buttons with the light / dark toggle at the top right. In edit mode a grey BFVZ mark sits at the left; it is hidden in reading view.
- A context strip under the header: grade chip and score, scope, task counts, and one removable chip per active filter.
- The Health view: grade gauge and score with the four primary KPI cards (Critical Path, Behind Baseline, Overallocated Resources, Milestones On-Time); the 14 DCMA tiles as a uniform grid, #1-#7 over #8-#14 (one row on wide pages); the Program – Project Health Comparison table for the six routes; the milestone card (health-index ring, stacked bar, on-time / late / overdue / upcoming / remaining counts); a second KPI row (Total Tasks, Incomplete, Near-Critical, Avg Float, WIP Backlog, Lookahead Compliance, Duration Growth, CP Compression) with the CPLI and BEI gauges side by side; a top-risks preview with a link to the register.

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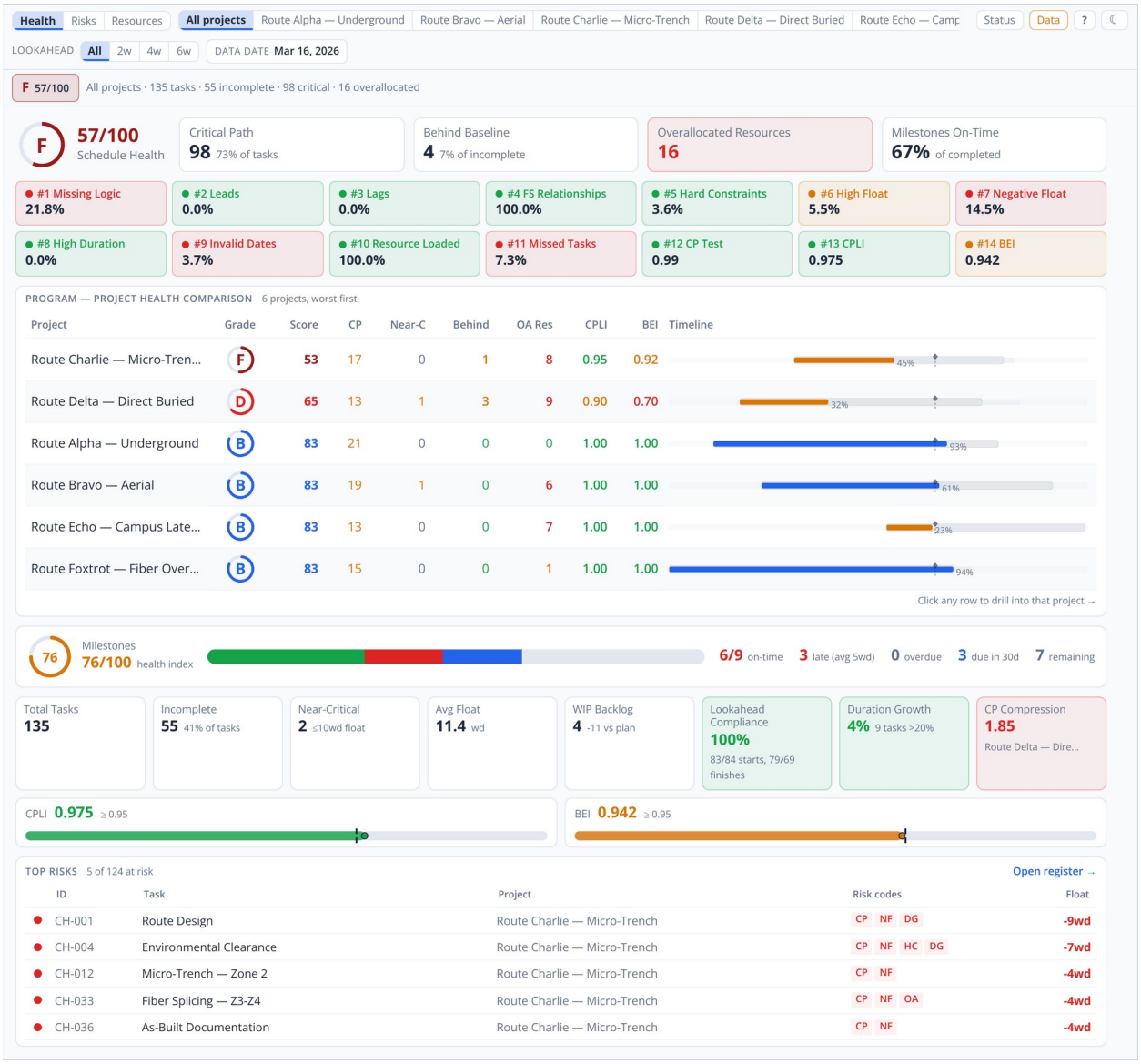


Figure 3. The whole Health view after mapping: header, context strip, grade and primary KPIs, the DCMA tiles, the project comparison, the milestone card, the second KPI row with the CPLI and BEI gauges, and the top-risks preview.

The visual needs at least 480 × 280 px. Below that it keeps its layout and scrolls, so every part stays reachable.

Step 6: Test Key Features

A. Views. Click Health, Risks or Resources in the header; exactly one view shows at a time and scrolls inside itself. The Views card sets the default view, can disable views and can lock the selector.

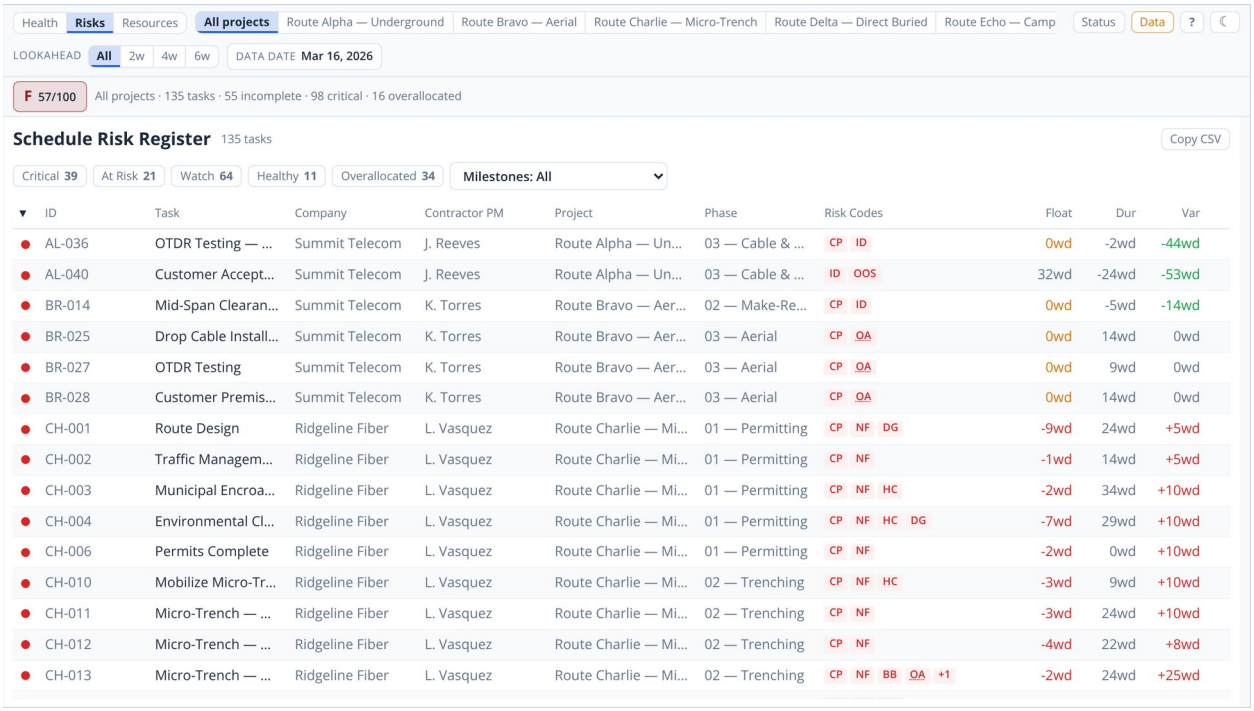


Figure 4. The Risks view: the schedule risk register.

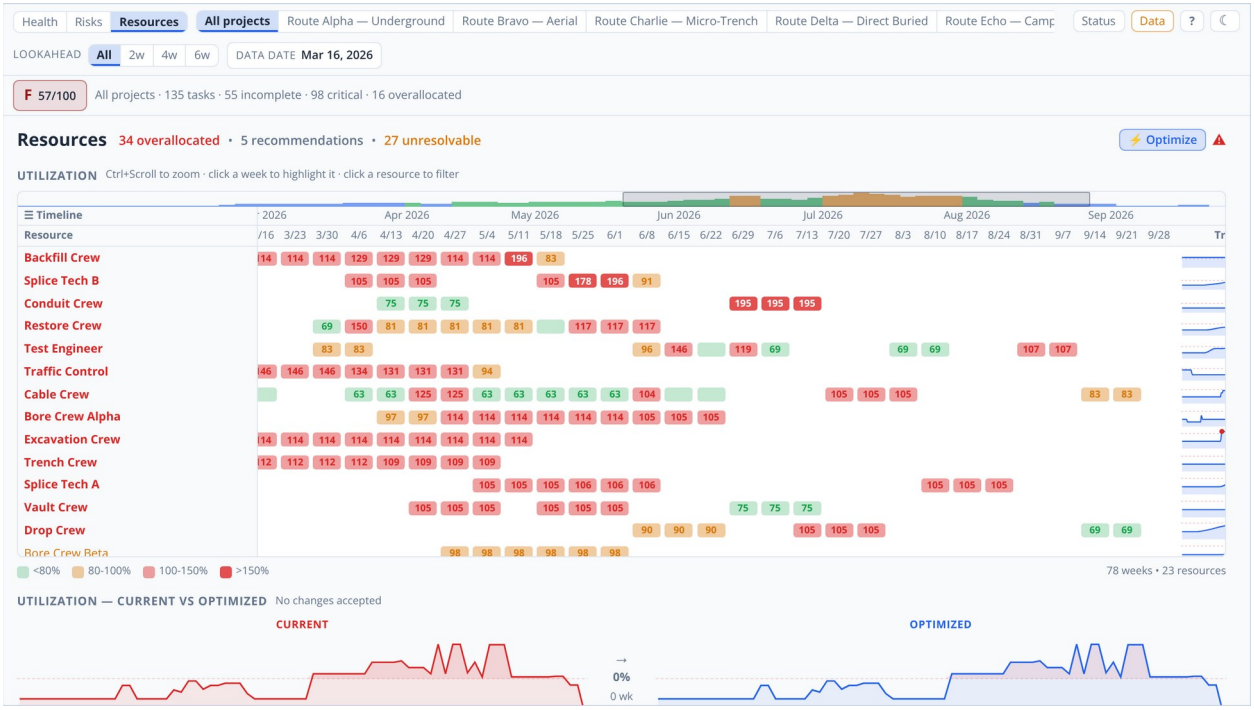


Figure 5. The Resources view: the utilization matrix.

B. Project scope. Click a project pill (or pick from the dropdown that replaces the pills when the header is narrow or there are more than six projects), or click a row in the comparison table. The strip, the metrics, the register and the resources all follow the scope. Click “All projects” to return to the program view.

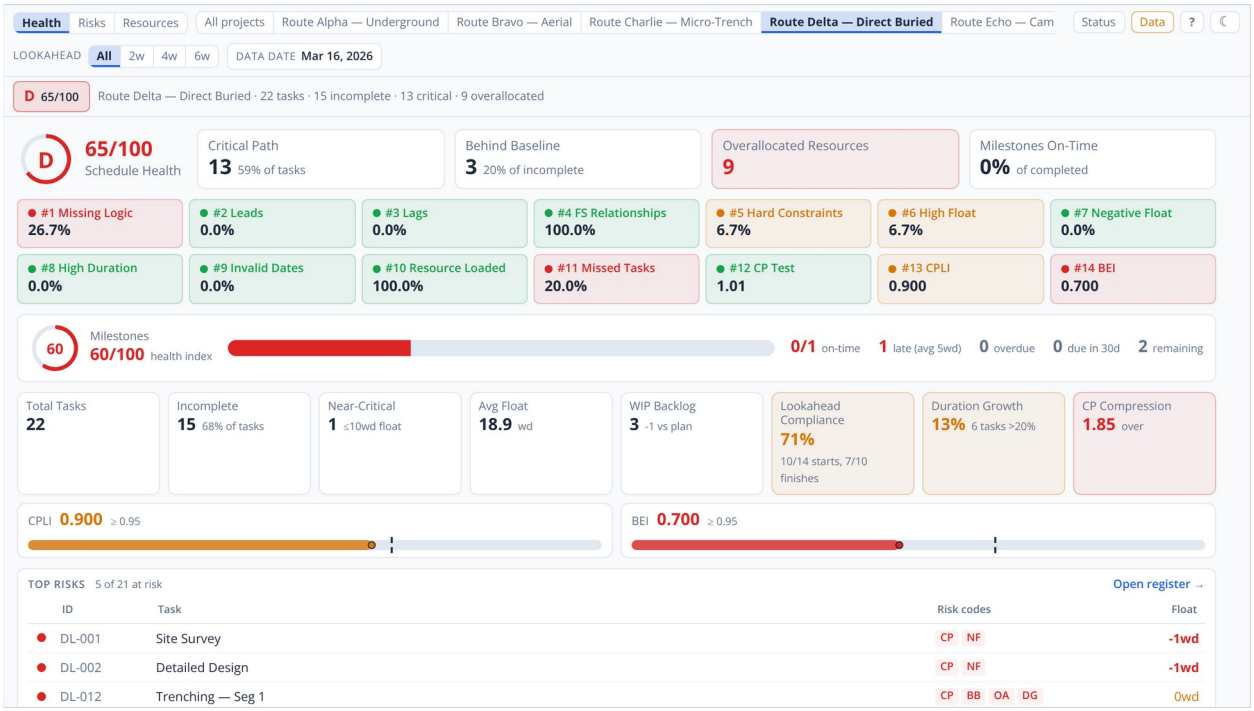


Figure 6. Route Delta – Direct Buried selected: the pill, the strip and every metric follow the scope.

C. DCMA 14-point analysis. Hover a tile for the metric's status, score, threshold, flagged-task count and the standard's rationale. Click a tile to open the Risks view filtered to that metric's tasks; the strip shows the metric as a chip with an x to clear it. Tile status is the dot, the name color and the tint: red fail, amber warning, green pass, grey N/A.

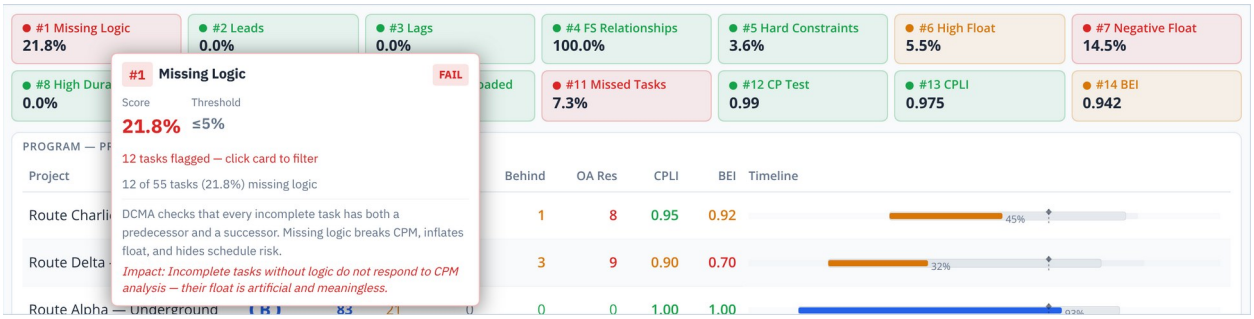


Figure 7. Hovering #1 Missing Logic: status, score, threshold, flagged tasks and the rationale.

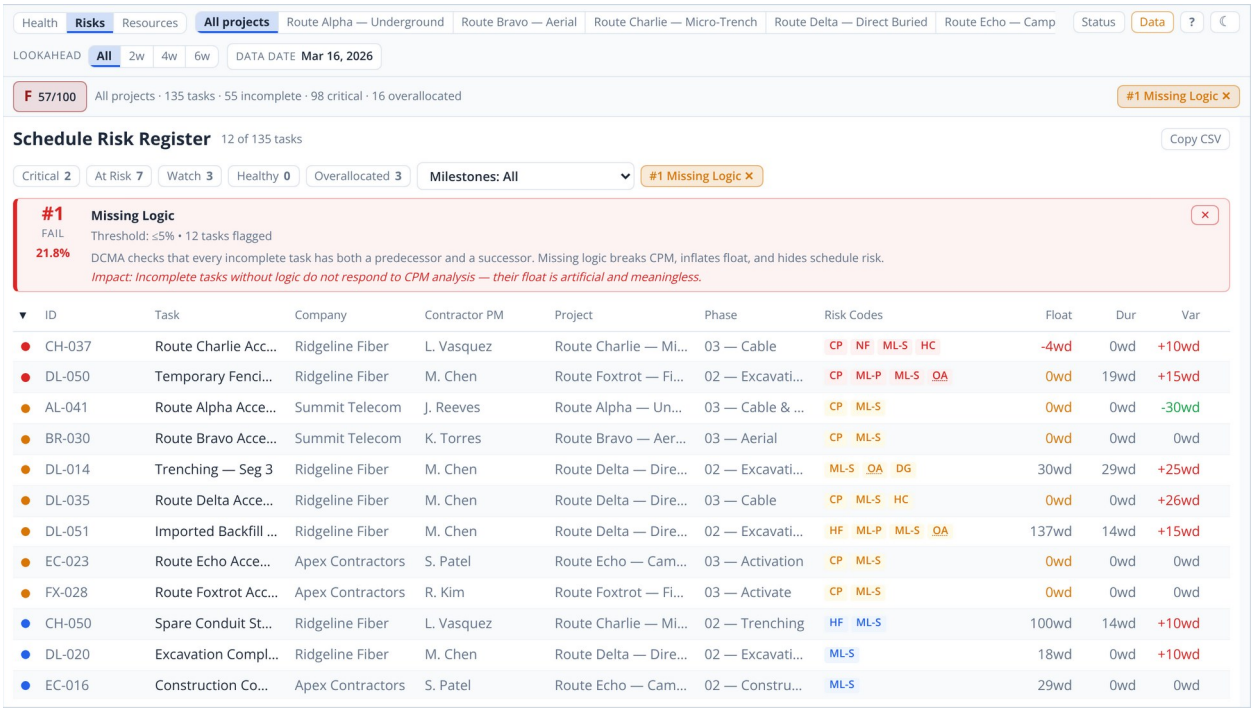


Figure 8. The tile clicked: the register filtered to the metric's tasks, with the chip in the strip.

D. Lookahead filtering. Click 2w, 4w or 6w to restrict the metrics, KPIs and register to the upcoming window; with a lookahead active the DCMA tiles show a trend arrow against the projected window. Click All to reset. The windows are configurable in the Views card ("2w, 4w, 6w").

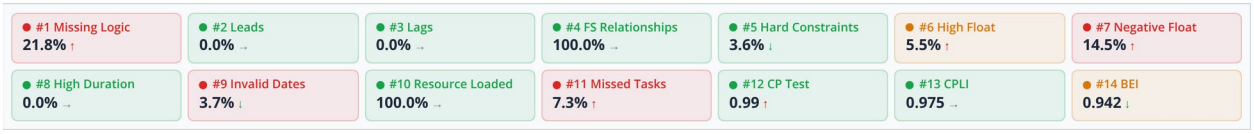


Figure 9. The 4w lookahead: a trend arrow on every tile.

E. Risks view. The register lists every task in scope with severity (Critical, At Risk, Watch, Healthy), risk codes, float, duration, variance and progress in working days (wd). Filter with the severity chips, the Overallocated chip and the Milestones dropdown (All, On-time, Late, Overdue, Upcoming); click a column header to sort (descending is worst or largest first) and drag its edge to resize; click a row for the task detail card; Copy CSV copies the filtered register for Excel. Company, Contractor PM and Phase columns appear only when those fields are bound; Project only with more than one project.

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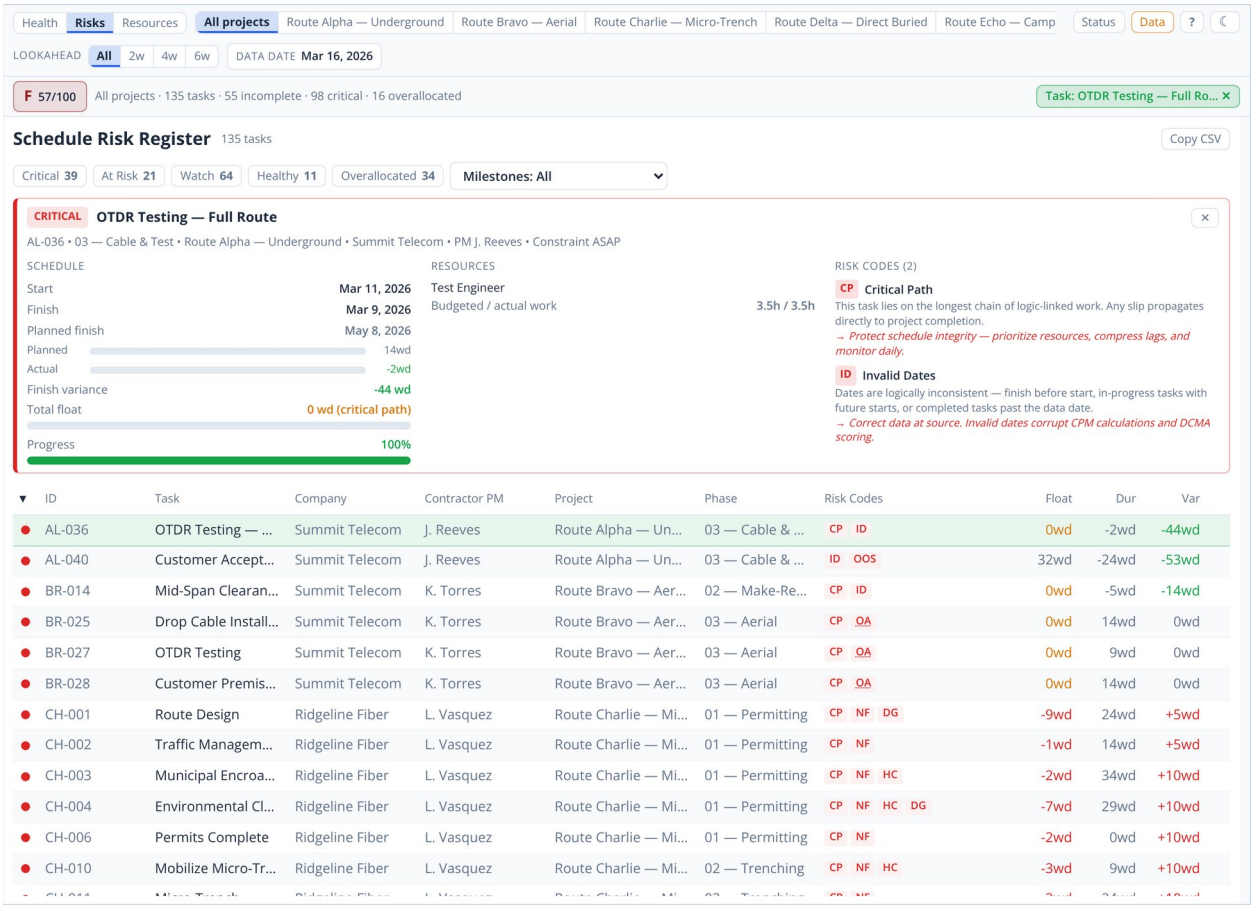


Figure 10. The register with a task's detail card.

F. Resources view. The weekly utilization matrix is heat-colored per resource (Ctrl + scroll to zoom, click a cell for its tasks, click a resource name to filter); under it, the current-vs-optimized utilization curves show the weekly peak load before and after the moves you accept (green when the plan alone is applied, blue with manual decisions). Optimize runs the program-level auto-solve and opens an ordered plan with Apply all and Reset directly under the curves. Below it, each leveling recommendation offers push, pull or compress scenarios in working days with a strategy picker and Accept / Reject buttons (the view stays put; Reset Manual reverts your own decisions and keeps the plan); conflicts no shift can resolve are listed with the reason. Each table has its own Copy CSV button.

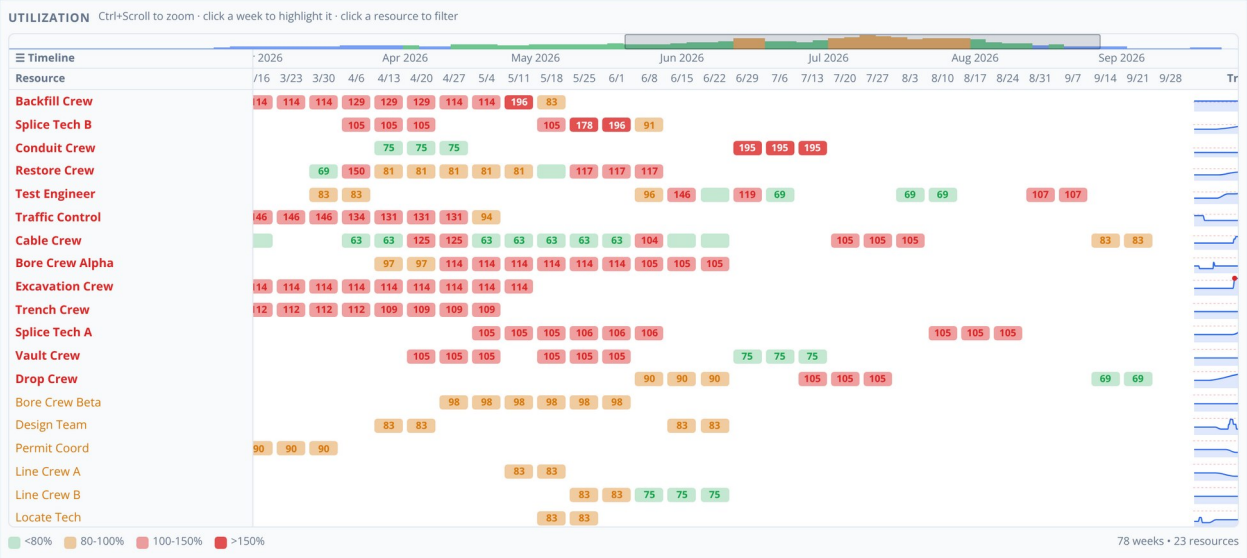


Figure 11. The utilization matrix.

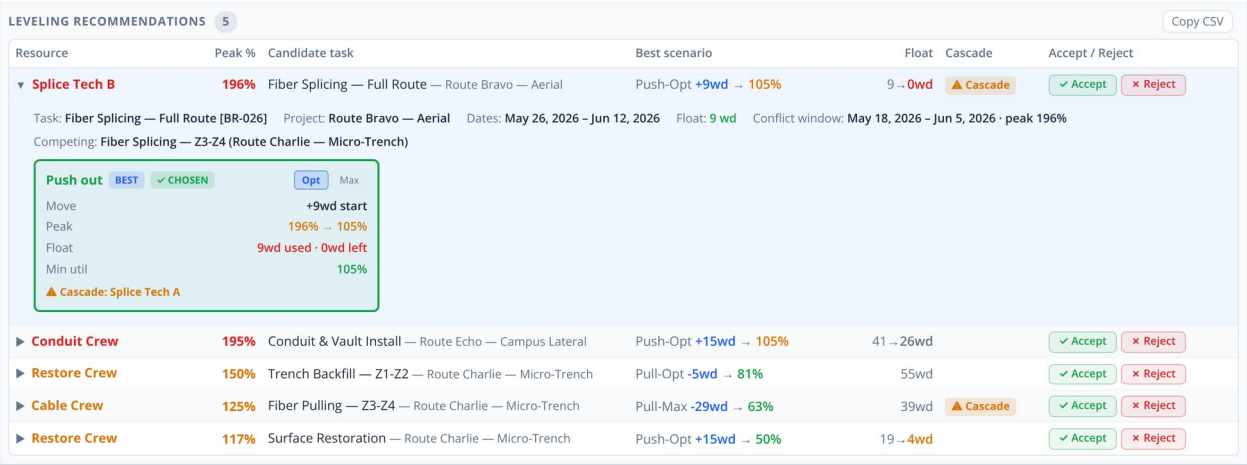


Figure 12. A leveling recommendation expanded, with Accept / Reject.

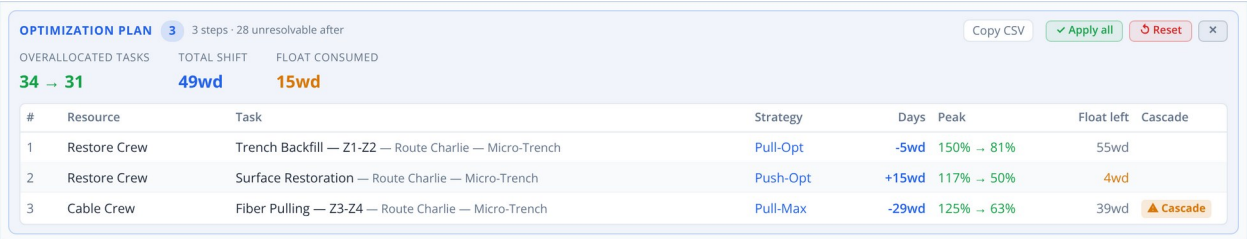


Figure 13. The Optimize plan.

G. Overlays. Status writes the narrative for the current scope with a fix list and copy buttons. Data shows the bound fields, the data date source, the join-gap warning and the dataset checks (the button turns amber when a check fails). ? opens the built-in help: views, fields, the 14 metrics, risk codes, KPIs and leveling strategies.

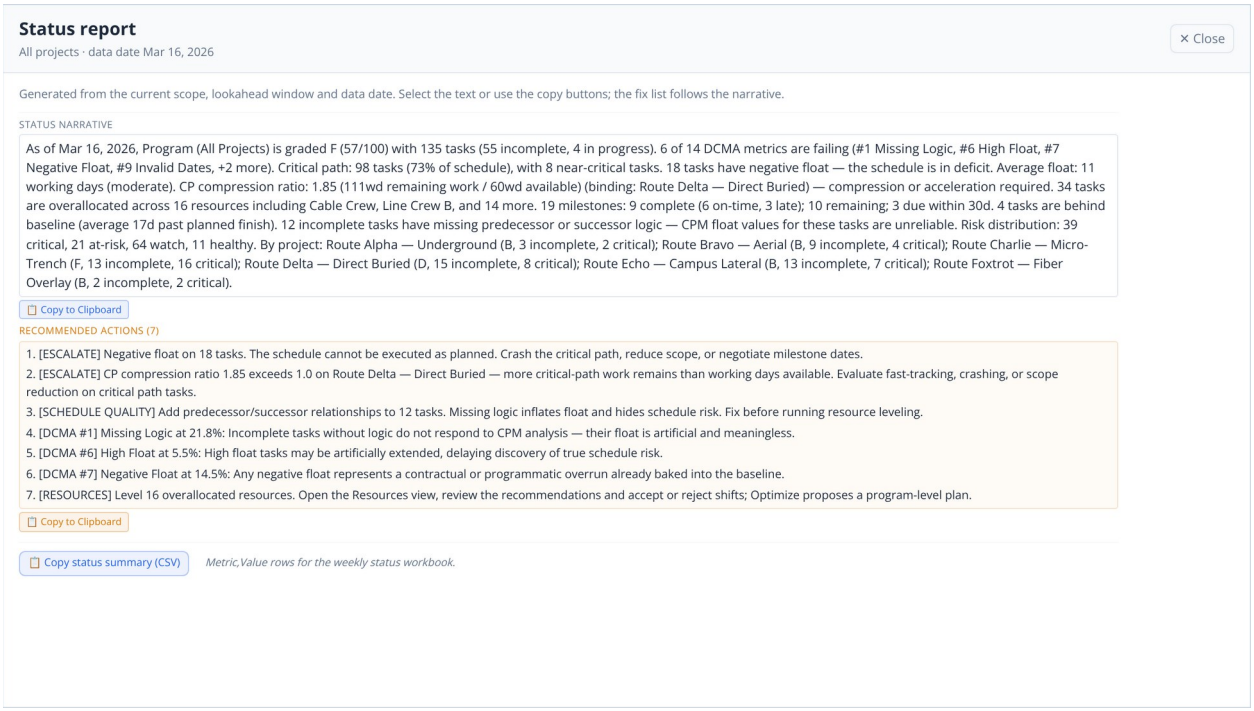


Figure 14. The Status overlay.

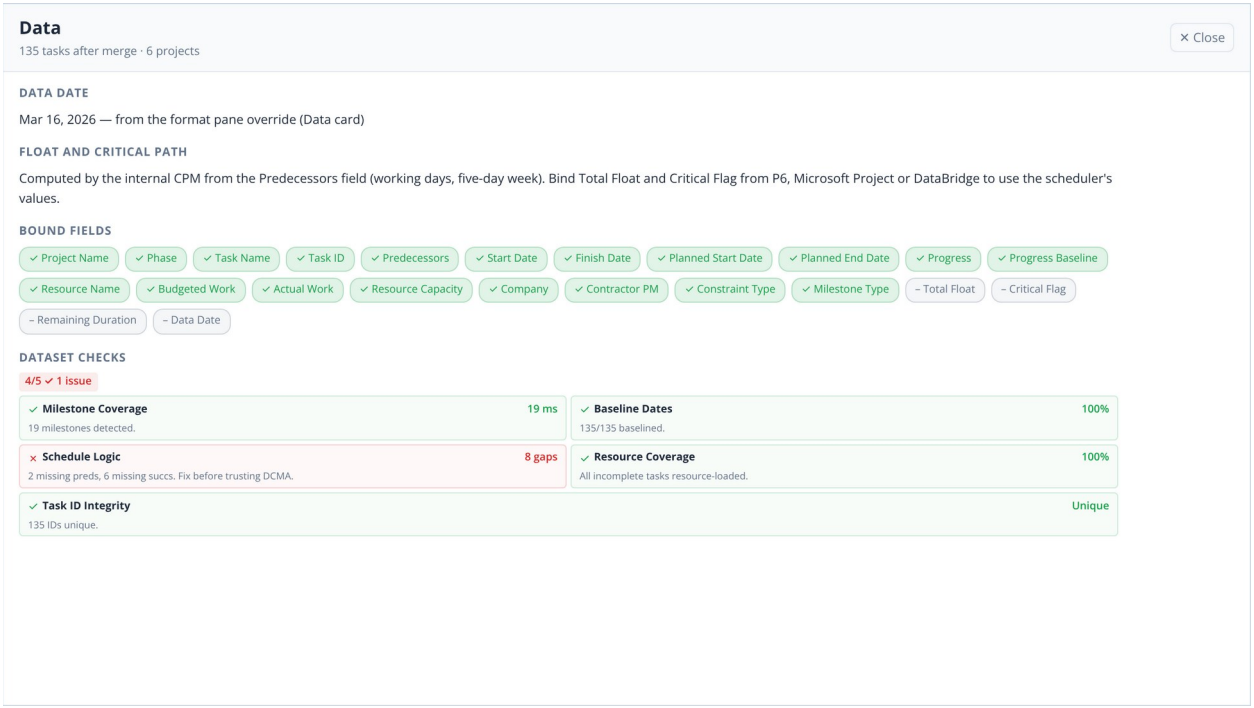


Figure 15. The Data overlay with the dataset checks.

H. Theme, scale, text size and tooltips. The moon / sun button at the top right flips between light and dark and saves the choice to the Appearance card (Theme Mode). Appearance also holds Font Family; Scale (%), which enlarges or shrinks everything in the visual (50-300, default 100) while the frame still fills the tile and the views still scroll; Scale up in focus mode (default on), which keeps the page layout in focus mode and scales it up to the focus width so the visual reads larger instead of shrinking into one page; Text size (%), which scales the text alone (60-250, default 100); and Tooltip mode (Concise, Educational, Off).



Figure 16. The dark theme.

Format Pane Reference

The visual exposes 10 cards with 82 properties (plus a hidden Page width the visual writes for focus mode):

Card	Properties	Contents
Views	10	Default view; Health / Risks / Resources enabled; Lock view; Show project selector; Program name; Show lookahead buttons; Lookahead windows; Show help button
Health view	6	Comparison graphic (Schedule Timeline, Phase Progress, Risk Composition, Float Distribution); Show top-risks preview; Show milestone strip; Show second KPI row; Milestone upcoming window (days); Phase order
Data	2	Data date override (YYYY-MM-DD); Float source (Auto, Computed, Source column only)
DCMA thresholds	15	Pass / fail thresholds for the 14 metrics plus the high-float and high-duration working-day limits
DCMA weights and grades	18	14 metric weights and the four grade bounds
Risk register	4	Default sort; Near-critical float threshold (working days); Behind-baseline grace (calendar days); Overallocation threshold (%)
Resources view	9	Simulation depth; Preferred shift strategy; Max shift days; Min utilization target; Max optimization steps; Min compression ratio; Max matrix resources; Show Optimize button; Show load curves

Card	Properties	Contents
Appearance	6	Theme Mode (Dark / Light); Font Family; Text size (%); Scale (%); Scale up in focus mode; Tooltip mode
Status colors	7	Pass, warning, fail, overallocation, healthy resource, accent, cascade
Grade colors	5	Grades A through F

DCMA thresholds, weights, register thresholds, resource tuning, colors, data date and theme keep their 5.8 names, so values saved in 5.8 reports carry over.

Sample Dataset Summary

The included MetroFiber 6-Route Telecom Program (MetroFiber_6Route_Telecom_Program_V2.xlsx) contains:

- 137 tasks across 6 projects (Route Alpha – Underground, Bravo – Aerial, Charlie – Micro-Trench, Delta – Direct Buried, Echo – Campus Lateral, Foxtrot – Fiber Overlay) with varied health profiles
- 168 resource assignment rows across 24 resource names
- 19 of the 23 data roles mapped; the four optional scheduler roles (Total Float, Critical Flag, Remaining Duration, Data Date) are not in the file, so POWERHealth computes float and the critical path itself
- Constraint types in DCMA, P6 and Microsoft Project wording (ASAP / As Soon As Possible, FNLT / Finish No Later Than, SNET / Start On or After, and others)
- Milestone types Start, Approval, Inspection, Acceptance and Complete
- Intentional schedule errors (missing logic, overallocation) to exercise the warnings
- Two-table model (Schedule + ResourceAssignment) joined on Task ID

Troubleshooting

Symptom	Fix
Landing page instead of data	Map at least Task Name, Task ID, Start Date, Finish Date and Progress. Rows without valid start and finish dates are skipped.
Duplicate task count	Open Model view; the Task ID relationship is missing or set many-to-many.
Resources view says “No resource data”	Map Resource Name and Budgeted Work from the ResourceAssignment table (Resource Capacity is optional; 8 hours per day otherwise).
Metrics show N/A	Map Progress and Predecessors.
#14 BEI shows N/A	Map Planned Start Date and Planned End Date (the baseline).
#5 Hard Constraints shows N/A	Map Constraint Type from the Schedule table.
Data date chip is amber	No Data Date field is bound and the Data card override is empty or not a valid YYYY-MM-DD date, so today is being used.
Data button is amber	A dataset check failed; open Data for the list (bound fields, join gap, checks).
Watermark or a 100-task cap	No Creator or Viewer plan was found for the signed-in account, so the visual is in sample mode.
Copy CSV says the copy was blocked	The host refused clipboard access; select the text and press Ctrl+C.

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