



PROJECT SCHEDULE VISUALIZER



Manage large, complex projects with a user-friendly software tool

When managing a complex project schedule, any change to one aspect of the schedule can have far-reaching downstream effects, and the driving factors may not be obvious amid volumes of interdependent data.

The Project Schedule Visualizer (PSV) software tool, developed at Pacific Northwest National Laboratory, generates clear visualizations of evolving, complex schedules to provide valuable insights for analysis by users with and without expertise in technical project scheduling. Directors, program managers, project managers, risk professionals, domain experts, and project control specialists alike can successfully use the PSV software to support quality project delivery.

The PSV is available for license at low or no cost.

HOW DOES IT WORK?

Clear and Simple Visuals

PSV uses the Oracle P6 software framework and integrates tree and branch visualizations that are easier to interpret than typical – and highly technical – Gantt chart outputs. These clear, simple visualizations also make it easier to compare schedules side by side to see where changes occurred. The result is a tool that is intuitive even for users who only need high-level information or who lack formal software user training.

Scenario Comparisons

PSV allows users to compare multiple schedule configurations, such as the risk-embedded schedule, from one month to the next. A user also can compare the probability distributions for primary and mitigated risks.

Before beginning detailed risk analysis, a project risk analyst can use PSV to view differences between various schedule combinations, such as baseline-to-baseline, baseline-to-risk, and risk-to-risk. Because the software generates easy-to-understand schedule visualizations and can render side-by-side changes in values, project managers can readily compare specific critical paths before and after a schedule change, either as part of evaluating project health or in a “what-if” analysis to consider alternatives. This yields important information about how schedule adjustments impact milestones.





FEATURES AT A GLANCE

PSV offers a complementary and more natural perspective than widely used commercial project schedule risk management software, at significantly lower cost.

- ▶ Easy to learn and easy to use for non-project-control professionals; users can be off and running with a few hours of instruction and the supplied user guide, compared to multi-day bootcamps required for more complicated tools
- ▶ Currently compatible with Oracle P6 (XER exports), and could be expanded through collaborative development
- ▶ Rapidly visualize risk and project flow to quickly spot changes made in a schedule or task, review summary task information, or identify the nearest milestones and associated changes
- ▶ Analyze schedules for maturity and potential weaknesses
- ▶ Render robust, detailed schedule layouts or only critical paths
- ▶ Evaluate data using different visualization formats – with dates, without dates, circular view, left-to-right flow, and more
- ▶ Zoom in and out of schedule and view slices as desired – especially helpful for projects with hundreds to thousands of tasks
- ▶ Automatically populate drop-down menus with analysis of schedule-based changes
- ▶ Use the sleek, intuitive search function to find a task without remembering codes
- ▶ Use the Reporting feature – view reporting on how many tasks have been added or removed, see what changes have occurred between two schedules, and export reports to Excel

LICENSING AND OPTIONS FOR USE

PSV is a proprietary copyrighted software that is ready for plug-and-play deployment in all fields with a user license. The tool is available at no cost to academic, non-commercial, and federally contracted users. Trial software is available now.

With further development, licensees of PSV can also incorporate the software into existing project management tools or provide it to consumers as a standalone solution for managing large, multi-year, and highly complex projects.

PSV is already in use and proven for a multi-million-dollar Department of Energy project with schedules imported from widely used commercial project schedule risk management software. The web-based nature of the application allows seamless visualization of read-only schedules by geographically dispersed users. The software can also be deployed as a standalone web application on a user's laptop.

GET PROJECT SCHEDULE VISUALIZER

Battelle Memorial Institute (Battelle) retains copyright on all versions, revisions, and operational modes of the Project Schedule Visualizer (PSV) software, as permitted by the Department of Energy. The software is available for user or non-exclusive developer licensing in all fields.

[Visit the Availability and Licensing page for guidance on fees and how to get started.](#)

<https://www.pnnl.gov/projects/schedule-visualizer>



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