WARPSimLab

Release Notes

Version 4.1

Release Date: August 10, 2026

Overview

Version 4.1 adds tested Ubuntu/Linux support and substantially updates WARPSimLab's reporting.

New Features

- Improved Ubuntu/Linux support with cross-platform GUI sizing and window placement, including a user setting for manual geometry control when needed. Added and tested complete Ubuntu source-run instructions using a Python virtual environment.
- Updated the Executive Summary, Year-by-Year, Tax, Historical Window Risk, and Monte Carlo Risk reports with clearer terminology, additional portfolio and cash-flow detail, and improved presentation.
- Improved reporting of portfolio depletion and shortfall results so Historical Window and Monte Carlo reports describe measured outcomes more directly.
- Substantially redesigned the Detailed Year-by-Year report into separate **Income and Cash Flow** and **Portfolio** sections, making it easier to follow how household finances affect portfolio balances.
- Expanded detailed portfolio reporting to show **Equity, Bonds, Cash, and Total** for Pre-Tax, Post-Tax, and Roth assets, while retaining HSA reporting and clarifying **Retirement Withdrawals**, **Cash Flow Shortfall**, and **Net Cash Flow**.
- Improved detailed report readability with clearer section dividers and sticky table headers.

Known Limitations

- Results are generated from simplified mathematical models. For example, the current model assumes that 100% of Social Security benefits are taxable. After-tax equity realized gains and dividends are grouped together and treated as qualified long-term capital gains.
- Simulations simplify financial markets and individual financial situations and do not reproduce every real-world condition.

- HSA balances are supported, but HSA contributions and medical-expense withdrawals are not yet modeled.
- Output should not be interpreted as predictions or recommendations.

Future Development

- Add explicit future health expense options.
- Add HSA savings and withdrawal features.
- Additional documentation.
- Add advanced research-oriented analysis using the Monte Carlo and Historical Windows engines.
- Add additional withdrawal options.
- Additional examples.