Metric post processor 5.24 Release Notes

New Features

- Performance improvements based on partition processing via the Rust/Polars backend, a new Rust-based xlsx writer, and improved parallel balancing.
- MPP automatically adjusts parallel processing for the available hardware and input. Most users can get the faster default behavior without new command-line options. Existing manual settings continue to override the automatic values.

Performance

- On an 80-logical-CPU Skylake server, a 50 MB, 64-thread EMON test file generated from an Ice Lake input decreased from 32.7 seconds to 13.9 seconds for all views. This is a 57.5% decrease in processing time (2.3x faster). The summary workload decreased from 19.1 seconds to 7.6 seconds. This is a 60.2% decrease in processing time (2.5x faster). These results use medians from interleaved runs.
- In the broad full-view CSV test, total processing time for Diamond Rapids decreased by 43.6% (1.8x faster). A typical Diamond Rapids run had a 41.4% decrease in processing time (1.7x faster). Total processing time for Granite Rapids decreased by 36.1% (1.6x faster). A typical Granite Rapids run had a 33.8% decrease in processing time (1.5x faster).
- Typical processing time decreased by 31.8% for Lunar Lake (1.5x faster), 28.4% for Meteor Lake (1.4x faster), and 26.7% for Arrow Lake (1.4x faster).
- Some client metric files contain complex top-down microarchitecture analysis (TMA) formulas. These formulas do not receive the full metric-calculation speedup in this release.

Fixed Issues

- The installer now recovers pip when possible if pip is missing. If automatic recovery is not possible, the installer gives focused steps for the current platform.

Known Issues

- mpp.py will fail with "Error running Metric post processor: No module named 'tdigest'" if --percentile is included on the command line but tdigest is not installed. Prerequisites (C++ compiler) and instructions for installing percentile dependencies are included in README.md.
- An empty 95th percentile column is present in the system summary report when --percentile is not included on the command line. In a future release, the presence of this column will be determined by the --percentile command-line argument.
- The percentile column in the system summary report reads 95th percentile, even when a custom percentile is given. This is a beta feature, and the column label behavior will be fixed in a future release.
- Excel charts are not supported for uncore views.