

Metric post processor 5.18 Release Notes

New Features

- Metric post processor (“MPP”) now supports a “Die view”, which is currently supported by Diamond Rapids (DMR) systems running EMON, and can be invoked using `--die-view`. This will generate a new CSV file and Excel view in between core and thread views and represents an aggregation of the Compute Building Block (CBB) structure.
- MPP now supports core filtering when processing views, using `--core-filter <OS_PROCESSORS>`. Core filtering will take single, multiple, or a range of ‘OS Processor’ values and will filter the data that gets processed by the specified ‘OS Processor’ values. This requires knowledge of which ‘OS Processor’ maps to which core number, which can be found in the EMON header. Below are some examples of core filtering syntax (when added after invoking `mpp.py` with regular command line arguments):
`--core-filter 0` # Filters by OS Processor 0
`--core-filter 1,3` # Filters by OS Processors 1, 3
`--core-filter 0-4,6,8-10` # Filters by OS Processors 0-4, 6, 8-10

Fixed Issues

- Fixed a bug where array notation metrics were unable to compute as block-level metrics and would produce the following warning: *“WARNING:root:Unable to calculate block-level metrics: Length of values (X) does not match length of index (Y)”*
- Removed the following warning from appearing when no ‘PERF_METRICS’ events were collected: *“<timestamp> WARNING: Missing the following topdown event/s at timestamp <timestamp>: {'PERF_METRICS.BACKEND_BOUND', 'PERF_METRICS.FRONTEND_BOUND', 'PERF_METRICS.RETIRING', 'PERF_METRICS.BAD_SPECULATION'} Skipping topdown event normalization. To avoid this warning, remove the following event/s at that timestamp from the input data file: []”*
- Removed generation of ‘uncore_view_summary’ and ‘uncore_view_details’ views that were not specific to any uncore unit and provided redundant information

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 dynamically determined by the presence or absence of the `--percentile [PERCENTILE]` command line argument.

- The label for the percentile column in the system summary report reads 95th percentile, even when a custom percentile is given as an argument (--percentile [PERCENTILE]). 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.