

Eclipse APP4MC 1.0



NEW AND NOTEWORTHY

APP4MC 1.0 (NOV 2020)

General description of platform changes

Model changes

- ▶ Removed MeasurementModel (deprecated since 0.9.9 and replaced by new ATDB)
- ▶ Removed ProcessEventType 'deadline'

Product

- ▶ New Amalthea Trace Database (ATDB)
- ▶ New transformations BTF -> ATDB, ATDB -> Amalthea
- ▶ Extended Metrics Viewer

UI

- ▶ Added possibility to refresh a pinned visualization

Amalthea Trace Database

Amalthea Trace Database

- ▶ **SQLite database**
- ▶ **structured and consistent representation of**
 - trace data
 - extract of model content
 - metrics
- ▶ **suitable for exchange of metrics**
- ▶ **intended as a replacement for the measurement sub model**

Extended Metrics Viewer

The screenshot shows the 'Extended Metrics Viewer' window for a trace file named 'trace-example.atdb'. The table displays performance metrics for two tasks: 'Task_10MS' (rows 1-15) and an unnamed task (rows 16-21). The metrics include startDelayTime, runningTime, pollingTime, parkingTime, waitingTime, readyTime, responseTime, coreExecutionTime, netExecutionTime, grossExecutionTime, activateToActivateTime, startToStartTime, endToEndTime, endToStartTime, and slack. The columns are: Process name, Metric, Minimum [ns], Maximum [ns], Average [ns], and Std. Dev. [ns].

	Process name	Metric	Minimum [ns]	Maximum [ns]	Average [ns]	Std. Dev. [ns]
Task_10MS	1	startDelayTime	0	165508448	140427337.65	43489618.66
	2	runningTime	12995540	13401390	13199933.70	73881.47
	3	pollingTime	1120	1121	1120.09	0.29
	4	parkingTime				
	5	waitingTime	0	0	0.00	0.00
	6	readyTime				
	7	responseTime	13125715	178833500	153628391.44	43490546.46
	8	coreExecutionTime				
	9	netExecutionTime	12996660	13402510	13201053.80	73881.48
	10	grossExecutionTime				
	11	activateToActivateTime	10000000	10000000	10000000.00	0.00
	12	startToStartTime	13139340	26666725	17602330.26	4308101.53
	13	endToEndTime	13149835	26770070	17596217.70	4286840.00
	14	endToStartTime	0	13541010	4403339.48	4293717.19
	15	slack	-165141026	-3125715	-120217549.48	52107737.37
	16	startDelayTime	13125715	178833500	159650165.43	38245936.43
	17	runningTime	370000	429740	402166.19	12849.30
	18	pollingTime	30	30	30.00	
	19	parkingTime				0.00
	20	waitingTime	0	0	0.00	
	21	readyTime				

Process Time Metrics | Runnable Time Metrics | EventChain Time Metrics