Telemetry Tool Matrix

Use case	Solution	Tooling Options	How to get/update	Metric	Command	Collection Rate	Tool Category
ALL	All	**Recommended** /proc svrinfo	native svrinfo github lnk https://github.intel.com/ssgcce/svrinfo/archive/master.tar.gz	all	/proc/cpuinfo	Every restart	Configuration
Reliability	SSD/NMVe Failure	**Recommended** /proc	native	all	/proc/diskstats	Once a day	Utilization
ALL	All	**Recommended** uname svrinfo	native svrinfo github lnk https://github.intel.com/ssgcce/svrinfo/archive/master.tar.gz	all	uname -a	Every restart	Configuration

Reliability	Memory Failure	**Recommended**
		MCElog
			sudo yum install mcelog
			   sudo modprobe mce-inject
			   sudo systemctl start mcelog
				all	mcelog	Collect log diff every hour	Reliability

Reliability	SSD/NMVe Failure	**Recommended** smartmontools	yum install smartmontools	all	smartctl	Once a day	Reliability
ALL	All	**Recommended** sar	yum install sysstat	user	sar	Every 1-10 min (default 1m)	Utilization
				system			
				%memused	sar -r		
				pgpgin/s	sar -B		
				pgpgout/s			
				rxKB/s	sar -N ALL		
				txKB/s			
Infra Efficiency	Power Capping/Any Failure Algorithm	**Recommended** ipmitools	yum install ipmitool	Airflow	ipmitool sdr	Every 30s-5m (default 1m)	Reliability
				Fan_SYS*_*			
				Volt_VR_DIMM_**			
				Volt_VR_CPU*			
				Temp_Outlet			
				Temp_Inlet			
				Temp_VR_DIMM_**			
				Temp_CPU*			
Infra Efficiency / Performance	Any failure algorithm	**Recommended** perf	sudo yum -y install sysstat	instructions	perf stat -e [metric]	Every 1-30 seconds (default 10s)	Performance
				cpu-cycles			
				cpu-clock			

				context-switches			
				LLC-load-misses			
				LLC-loads			
				LLC-store-misses			
				LLC-stores			
				intel_cqm/llc_occupancy/			
				mem-loads			
				mem-stores			
				uncore_imc_*/cas_count_read/			
				uncore_imc_*/cas_count_write/			
				power/energy-cores/			
				power/energy-pkg/			
				power/ebergy-ram			
				tx-capacity			
				tx-commit			
				tx-conflict			
				tx-start			
Performance	Workload Co-location	**Recommended** numastat	yum install numactl	numa_hit	numastat	Every 1-10 sec (default 1s)	Performance
				numa_miss			
				numa_foreign			
Performance / Security	Workload Co-location	RDT	sudo yum install intel-cmt-cat sudo dnf install intel-cmt-cat	ipc	pqos -T	Every 1-10 seconds (default 1s)	Performance
				misses			
				LLC			
				MBL			
				MBR			