# **Energy Scope report**

Date of the report: 2022/04/20 00:17:59

## **GENERAL INFORMATION**

- Jobid: 20220420020515
- Command: /root/energy-consumption-of-gpubenchmarks//results/night\_exp\_19\_04/191\_0//gpu0/scripts/script\_final.sh
- Date of run: 2022/04/20 02:05:16.167619
- Duration (including ES prologue and epilogue): 743 (sec)

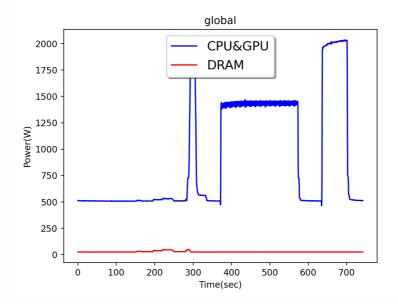
## ARCHITECTURE INFORMATION

- nodelist: gemini-1
- processors type: Intel(R)Xeon(R)CPUE5-2698v4@2.20GHz (TDP=135W)
- gpu type: Tesla V100-SXM2-32GB (TDP=250W)

### **ENERGY DATA**

- Ratio Energy / Duration= 959.1 (J/sec)
- Application energy consumption measurement: 712592 (J) 0.1979 (kWh)
- Global application energy consumption estimation: 1054372 (J) 0.2929 (kWh)
- Global application carbon production estimation (FR): 14.972 (gCO2)
- Energy efficiency (ref TDP): 42.25 (%)

Eprofile:



## **ENERGY ACQUISITION INFORMATION**

• Period(ms): 521.386

• Acquisition quality (low, medium, high): high

• Information dumped: ecpu edram core\_temperature

## **ENERGY BEHAVIOR**

#### **SUMMARY**

node	cpu/gpu	model	TDP (W)	Energy (J)	efficiency (%)	Cores Temp (C)
node gemini- 1						
	cpu 0	Intel(R)Xeon(R)CPUE5- 2698v4@2.20GHz	135	66451	56.3	60.4
	cpu 1	Intel(R)Xeon(R)CPUE5- 2698v4@2.20GHz	135	64422	53.8	54.1
	gpu gpu- nvidia-0	Tesla V100-SXM2- 32GB	250	71570	38.5	20.0
	gpu gpu- nvidia-1	Tesla V100-SXM2- 32GB	250	73583	39.6	20.0
	gpu gpu- nvidia-2	Tesla V100-SXM2- 32GB	250	72633	39.1	20.0

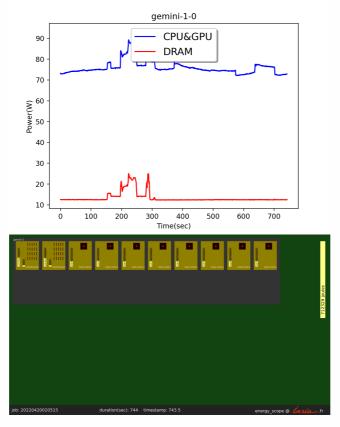
node	cpu/gpu	model	TDP (W)	Energy (J)	efficiency (%)	Cores Temp (C)
	gpu gpu- nvidia-3	Tesla V100-SXM2- 32GB	250	72499	39.0	20.0
	gpu gpu- nvidia-4	Tesla V100-SXM2- 32GB	250	73632	39.6	20.0
	gpu gpu- nvidia-5	Tesla V100-SXM2- 32GB	250	73068	39.3	20.0
	gpu gpu- nvidia-6	Tesla V100-SXM2- 32GB	250	72490	39.0	20.0
	gpu gpu- nvidia-7	Tesla V100-SXM2- 32GB	250	72244	38.9	20.0

### PROFILES and CORE TEMPERATURE

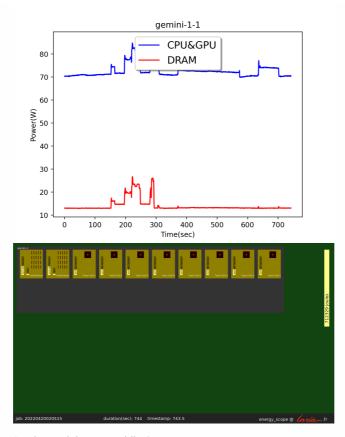
Images showing core temperature are generated when the average (of all the core) is maximum.

The full video showing the core temperature and the energy consumption over the time is available on demand.

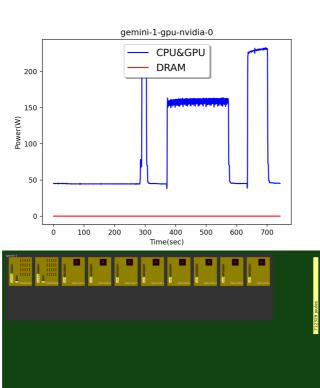
\*node gemini-1/0

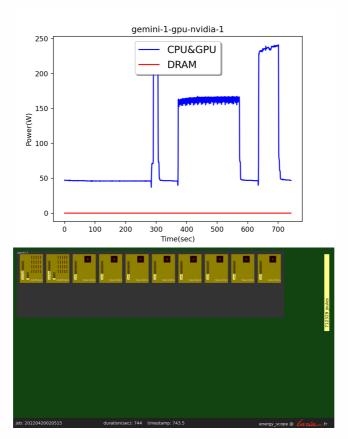


\*node gemini-1/1

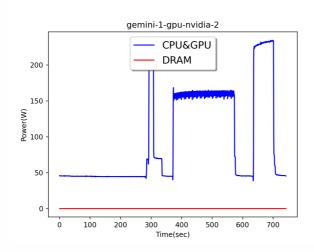


\*node gemini-1/gpu-nvidia-0



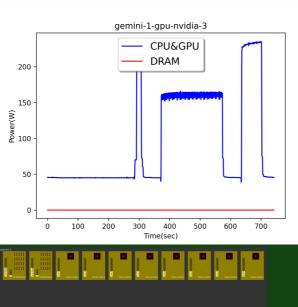


\*node gemini-1/gpu-nvidia-2



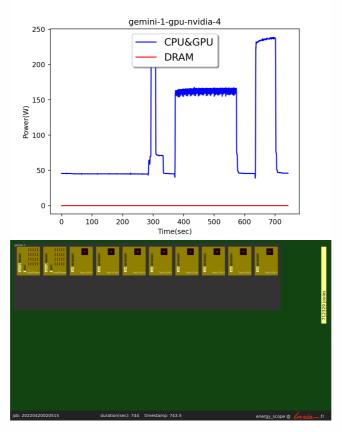


\*node gemini-1/gpu-nvidia-3

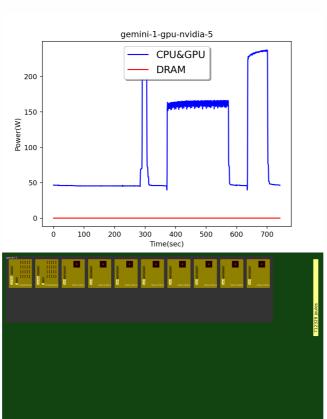


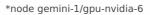


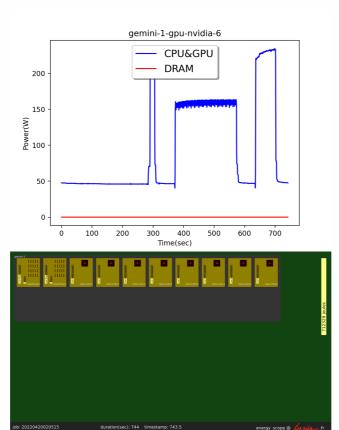
\*node gemini-1/gpu-nvidia-4



\*node gemini-1/gpu-nvidia-5







\*node gemini-1/gpu-nvidia-7

