

slower performance with awsim #3405

 Closed

 Answered by maxime-clem

zillur-av asked this question in Q&A



zillur-av on Apr 5, 2023

I installed autoware along with AWSIM simulator and just run the demo code following <https://tier4.github.io/AWSIM/GettingStarted/QuickStartDemo/>. After launching ros nodes, the computer became too slow to do anything and simulation windows becomes blurry. I here attached the system monitor which shows my cpu and ram became full. Does anyone have any suggestion to handle this? Or I just have to use a more powerful CPU and larger RAM?

SYSTEM INFO:

CPU: Intel(R) Xeon(R) CPU E5-2603 0 @ 1.80GHz

RAM: 16GB

500 SSD Card

2 Nvidia RTX 2070 GPU

Category



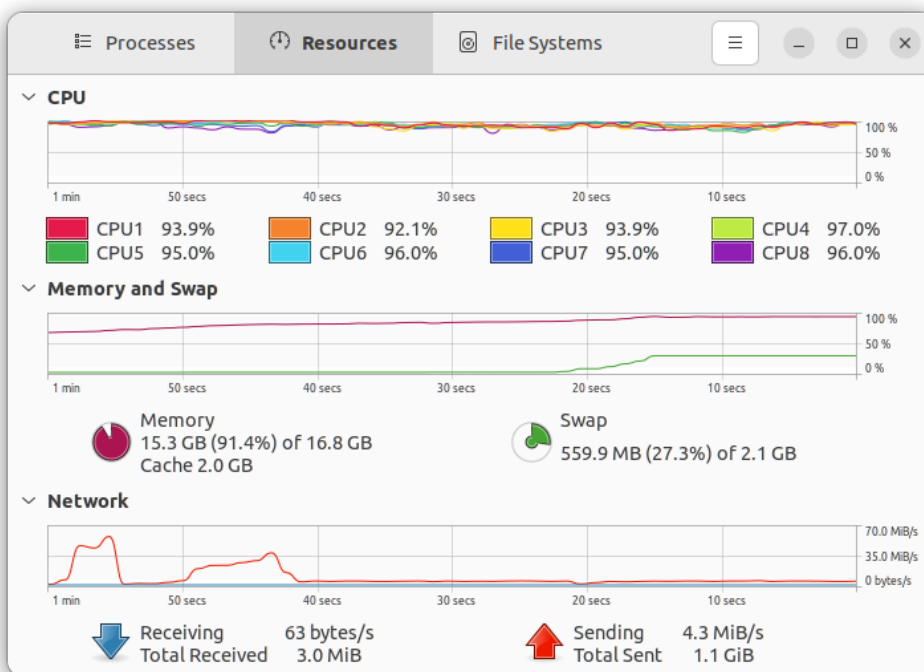
Q&A

Labels

None yet

2 participants





```
trc@rahzar: ~
trc@rahzar: ~/awsim
trc@rahzar: ~
trc@rahzar: ~

trc@rahzar:~$ nvidia-smi
Wed Apr 5 15:54:35 2023

+-----+
| NVIDIA-SMI 530.30.02                Driver Version: 530.30.02   CUDA Version: 12.1   |
+-----+-----+
| GPU  Name                Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf           Pwr:Usage/Cap|   Memory-Usage  GPU-Util  Compute M. |
|-----+-----+-----+
|  0  NVIDIA GeForce RTX 2070      On   | 00000000:05:00:0 Off |         30%      Default |
| 27%   58C   P2              45W / 175W| 6664MiB / 8192MiB |           N/A      N/A  |
+-----+-----+-----+
|  1  NVIDIA GeForce RTX 2070      On   | 00000000:22:00:0 Off |         0%      Default |
|  0%   46C   P8              9W / 175W|    8MiB / 8192MiB |           N/A      N/A  |
+-----+-----+-----+

Processes:
+-----+
| GPU  GI  CI           PID  Type  Process name                        GPU Memory |
| ID   ID  ID                                   Usage     |
+-----+
|  0  N/A  N/A       1649    G    /usr/lib/xorg/Xorg                    213MiB |
|  0  N/A  N/A       1829    G    /usr/bin/gnome-shell                  57MiB |
|  0  N/A  N/A       2489    G    ...irefox/2487/usr/lib/firefox/firefox 130MiB |
|  0  N/A  N/A       3877    C+G  ./AWSIM_demo.x86_64                  4487MiB |
|  0  N/A  N/A       7024    C    ..._centerpoint/lidar_centerpoint_node 976MiB |
|  0  N/A  N/A       7102    C    ..._components/component_container_mt 672MiB |
|  0  N/A  N/A       7497    G    /opt/ros/humble/lib/rviz2/rviz2       113MiB |
|  1  N/A  N/A       1649    G    /usr/lib/xorg/Xorg                     4MiB |
+-----+

trc@rahzar:~$
```

↑ 1

✓ Answered by **maxime-clem** on Apr 6, 2023

The main issue seems to be that AWSIM must use some swap memory, which is VERY slow.

Do you have other processes running that are using a lot of memory ? If so, try to close them before starting AWSIM so that there is no need to use the swap.

[View full answer ↓](#)

1 comment · 1 reply

Oldest Newest Top



maxime-clem on Apr 6, 2023 Collaborator

The main issue seems to be that AWSIM must use some swap memory, which is VERY slow.

Do you have other processes running that are using a lot of memory ? If so, try to close them before starting AWSIM so that there is no need to use the swap.

Additionally, your CPU is being used at near 100%, which can cause slowdown. You can reduce the simulation speed ("Time Scale") to get a nicer (but not real-time) experience.

✓ Marked as answer ↑ 1

1 reply



zillur-av on Apr 7, 2023 Author

The main issue seems to be that AWSIM must use some swap memory, which is VERY slow. Do you have other processes running that are using a lot of memory ? If so, try to close them before starting AWSIM so that there is no need to use the swap. Additionally, your CPU is being used at near 100%, which can cause slowdown. You can reduce the simulation speed ("Time Scale") to get a nicer (but not real-time) experience.

Thanks. After lowering time scale, it is working better. It seems autoware perception module uses a large portion of RAM.

Answer selected by **zillur-av**