



# Perf Tools - AutoPerf

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# ● AGENDA

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Introduction



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# What is AutoPerf?

- AutoPerf is a Performance Testing and Monitoring Tool
- Can do
  - Setup Workload Infrastructure and Generate Workload
  - Collect Metric Stats / Artifacts
  - Provide Live Monitoring and Visualization
- Can't do
  - Setup CORTX Infrastructure
  - Provide Summary
  - Export Run Data



# How AutoPerf Work?

- Workloads
  - Industry Benchmarks – S3bench, HSBench, COSBench, Fio
  - Custom Workloads – failover & failback (Time taken to failover and failback)
- Easy to use interface
  - Automated environment setup, No user intervention required
  - Customized workload configuration for minimal user input
  - Abstracted benchmark specific configuration details
- Observability – Live running dashboards
  - System Stats – CPU/Memory/Network/Storage etc.
  - Workload Stats – Throughput, Latency etc
  - Live running console for execution status



Run Script GRAFANA HELP

Benchmark\* ▼

Configuration\* ▼

Client\* ▼

Client Password\*

Primary Server\* ▼

Secondary Server\* ▼

Server Password\*

Sampling\* ▼

RUN SCRIPT CLEAR

25-January-2021 07:19:52 PM

Auto-Perf Terminal \*  
(View Script execution logs)

```
>>> ansible-playbook /root/.seagate-tools/performance/AutoPerf/main.yml --extra-vars "BENCHMARK=cobenchmark CONFIGURATION=long SAMPLE=5 OPERATION=mixed TEMPLATE=null
SKIPCLEANUP=no CLIENT=sm16-r19.pun.seagate.com PRIMARY=sm18-r19.pun.seagate.com SECONDARY=sm19-r19.pun.seagate.com KEY=seagate1" -v
Using /etc/ansible/ansible.cfg as config file
[2021-01-25 19:19:53] autoPerf: Updating hosts files: Monday 25 January 2021 19:19:53 +0530 (0:00:00.025) 0:00:00.026 *****
[localhost] CHANGED: 148ms
- changed: True
}
[2021-01-25 19:19:53] autoPerf: Refreshing "known hosts" file: Monday 25 January 2021 19:19:53 +0530 (0:00:00.170) 0:00:00.196 *****
[DEPRECATION WARNING]: The __init__ pyc callback plugin should be updated to
use the _get_item_label method instead. This feature will be removed in version
2.11. Deprecation warnings can be disabled by setting
deprecation_warnings=False in ansible.cfg.
{
- msg: All items completed
- changed: True
- results: [
- {
- stdout: ""
- rc: 0
```

Demo

# Configuration Parameters

Type	Clients	Number of Samples	Object Size
Short	32	2048, 4096	1Mb, 4Mb, 8Mb
Long	64	2048, 4096	32Mb, 64Mb
Small	128, 256	4096	4Mb, 16Mb, 32Mb
Large	128, 256	4096	64Mb, 128Mb, 256Mb



# Future Enhancements

- LDR R2 Support
- New Benchmarks / Workloads - Veeam & BareOS
- More Control - Stop/Terminate Job Gracefully
- Data Export Option – Downloadable/Accessible Run Results and Artifacts
- User Personalization – Display User's Past Runs, Logs and Configuration History
- More Customization– Detailed Configuration Interface for Advanced User
- Grafana Dashboard Enhancements – More System and Workload Stats



# Talk to us!

- Autoperf Location
  - Hosted at : [Auto Perf \(seagate.com\)](https://auto-perf.seagate.com)
  - Github Repository : [Seagate/Seagate-tools](https://github.com/Seagate/Seagate-tools)
- Have query/suggestion/idea for AutoPerf ?
  - Email : [cortx.perf@seagate.com](mailto:cortx.perf@seagate.com)
  - Jira : **project = EOS AND component = Cortx-Perf**





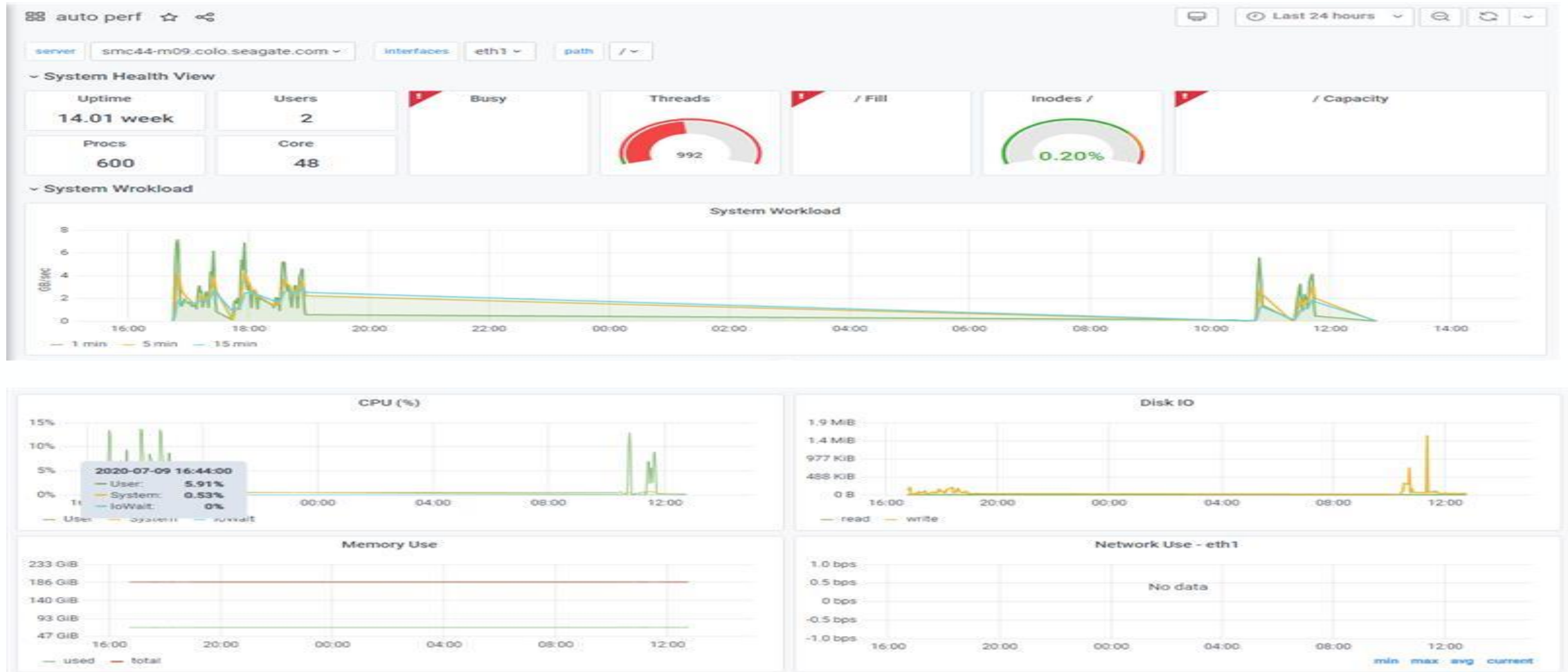
# Q & A



# Backup Slides



# Sample Grafana Screenshots



# Sample Grafana Screenshots

## ▼ Benchmark Performance

