

# Upcoming Sessions: Plans and Suggested Preparation

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SNIA Emerald™ Training

SNIA Emerald™ Power Efficiency Measurement Specification

Version 3.0

February-March 2018





## March 6<sup>th</sup> – 8<sup>th</sup> \*\*\*could be March 13<sup>th</sup>-15<sup>th</sup>, notice by Feb 28th



Mar 6, Tuesday, 10-2	PUT Config Overview and setup for File
10 mins	Overview of next 3 days of training
220 mins 55 mins Youtube	SFS 2014 Overview
45 mins Youtube - inc above	SFS 2014 SNIA Emerald
inc above	1. Setting up AC power.
15 mins - 2014 inc above	2. Setting up the power meter, and measurement system.
inc above	3. Setting up Sflow on the switch, and sflow collector.
inc above	4. Setting up the SFS2014 benchmark.
inc above	a. Software configuration.
inc above	b. Hardware configuration
inc above	c. Install and setup ssh automatic logins.
30 mins - 2014 inc above	Capacity Optimization testing and types (applies to both file and block)
10 mins	Q&A,
Mar 7th, Wednesday, 10-2	Part 1 Run the SNIA Emerald Tests and Generate Data; Analyze Data
10 mins	Overview of today agenda
220 mins	Continue - 4. Setting up the SFS2014 benchmark.
inc above	d. Finding the peak throughput, for each workload type.
inc above	e. Finding the optimal throughput versus power for each workload typ
inc above	5. When things go wrong.
est 15 mins 2014 inc above	Run COM Test
10 mins	Q&A
Mar 8th, Thursday, 10-2	Part 2 Run the SNIA Emerald Tests and Generate Data; Analyze Data
10 mins	Overview of today agenda
210 mins	Continue - 4. Setting up the SFS2014 benchmark.
inc above	f. Merging the power meter results with Sflow results.
	g. data reduction, validation, and metric calculation
inc above	Mistakes to avoid, lessons learned - tests and - data analysis
30 mins 2014 inc above	SNIA Test Data Report elements
10 mins	Q&A
10 mins	Support, Help, Resources



### March 6th



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Block IO testing with Vdbench not covered Refer to V2.0.2/V2.1 Training Materials SNIA Emerald V3.0 Block IO same V2.1

https://www.snia.org/emerald/training/July2014 https://www.snia.org/emerald/training/July2015



### Suggested Activities February 23 to March 5th



- Review Block IO training materials from 2014/2105, raise questions via email and we answer
- Watch these two Videos ahead of March 6<sup>th</sup> and join 12N PT on March 6 Instead of at 10AM <a href="https://www.spec.org/sfs2014/presentations/index.html">https://www.spec.org/sfs2014/presentations/index.html</a>
  - Application-Level Benchmarking with SPEC SFS 2014
  - Using SPEC SFS with the SNIA Emerald Program for EPA Energy Star Data Center Storage Program
- Watch for an email confirming either of these dates
  - March 6-8
  - Or
  - March 7-13



### https://www.spec.org/sfs2014/presentations/index.html

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#### The Basics....



Collected here are various presentations and supporting materials (if available) about the S Application-Level Benchmarking with SPEC SFS 2014

Presented by SFS committee members Nick Principe and Vernon Miller at SNIA SDC 2015





#### SPEC SFS 2014: An Under-the-Hood Review

Presented at the SNIA Storage Developer Conference in September 2014 by SFS committee





#### Using SPEC SFS with the SNIA Emerald Program for EPA Energy Star Data Cent

Presentation by Vernon Miller (Senior Software Engineer, IBM) and Nick Principe (Principal
Using SPEC-SES with the SNIA Emerald Program for EP...











# Questions? emerald-training@snia.org

