

Emerald V3.0 Specification - Overview



- The Emerald Power Efficiency Measurement Specification has supported Energy Star Data Center Storage V1.0 (released Dec'13)
 - ◆ The current Emerald release is V2.1.1 (dated December 2, 2015)
 - ◆ No issue with Online Block testing methods
- Status of Emerald V3.0 (draft)
 - ◆ Foremost: Adds File-access (to Block) into the Online Taxonomy categories
 - › Includes File-access workload, measurement and data reduction extensions.
 - › Four workloads adopted from SPEC SFS ® 2014 test suite
 - › SPEC SFS run rules have been modified to create comprehensive suite
 - › Extensions include power and IO bandwidth measurement instrumentation
 - ◆ Additional minor clarifications / upgrades
 - › Removable and Virtual Media Library edits to align to Online
 - › Aligned Environmental (Power, Temp) test conditions to ENERGY STAR
 - › Accommodated new solid state modules in the Online taxonomy
 - › Considered Stability Criterion filter parameters in light of AFA characteristics, but no changes needed
- Plans for 2017
 - ◆ Review Draft Emerald & POV with EPA / Industry at San Jose Tech Symposium (Jan)
 - ◆ Finalize V3.0 and supporting material (e.g., User Guide, Test Data Report)
 - ◆ Spec Publication and Industry Training by Summer
 - ◆ Enable Energy Star V1.1 release by Sept.