
Data Center Benchmarking Drafts

draft-dcbench-def-00
draft-bmwg-dcbench-methodology-01

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Data Center Benchmarking Drafts Overview

Redefine Definitions draft-dcbench-def-00

Latency

Redefine how latency calculations are used
Update usage of FIFO, FILO, LIFO and LILO

Jitter

Define the application Jitter RFC 3393 and packet size requirement and histogram for DC devices

Physical Layer Calibration

Cable test calibrations and documentation

Line Rate

Consequences of PPM: 99.98%

Buffering

Define Buffering and Buffer Efficiency, Burst, Intensity of Microburst

Define Incast [many-one, many-many]

Application Throughput

Goodput definition and how to measure it

Redefine Methodology draft-bmwg-dcbench-methodology-01

Line Rate Testing

Test all ports at 99.98% including latency, jitter histogram for min/max/avg and drops

Buffering Testing

Buffer highest efficiency
Maximum port buffer size
Maximum port pair buffer size
Maximum DUT buffer size
Microburst

MicroBurst Testing

Use all ports, at 100% intensity of microburst

Head of Line Blocking Testing

Measure two groups (8 ports) of DUT, up to all ports
Reports provides percent of traffic loss during HOLB

Incast Stateful and Stateless Traffic

measure TCP goodput while measuring UDP latency

Successful call for adoption on list

- Drafts Proposed IETF 86 – Presented and updated at IETF 87, 88, 89, 90, 91
- Drafts have been updated with the numerous comments from the list around buffering calculation and methodology
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- **Next step: Any more comments?**