



What's new in SFS 3.0

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What is SPEC FS 3.0

- The latest version of the Standard Performance Evaluation Corp.'s benchmark that measures NFS file server throughput and response time.
- Provides a standardized method for comparing performance across different vendor platforms.



What is SPEC FS 3.0 (cont.)

- The measurements are publicly available.
- There are rules, established by the SPEC SFS Subcommittee and approved by the SPEC Open Systems Steering Committee, that must be adhered to before a result will be accepted.
- Measurements from SFS 3.0 can not be compared with SFS 2.0



More Information on Spec FS

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Overview of changes in SFS

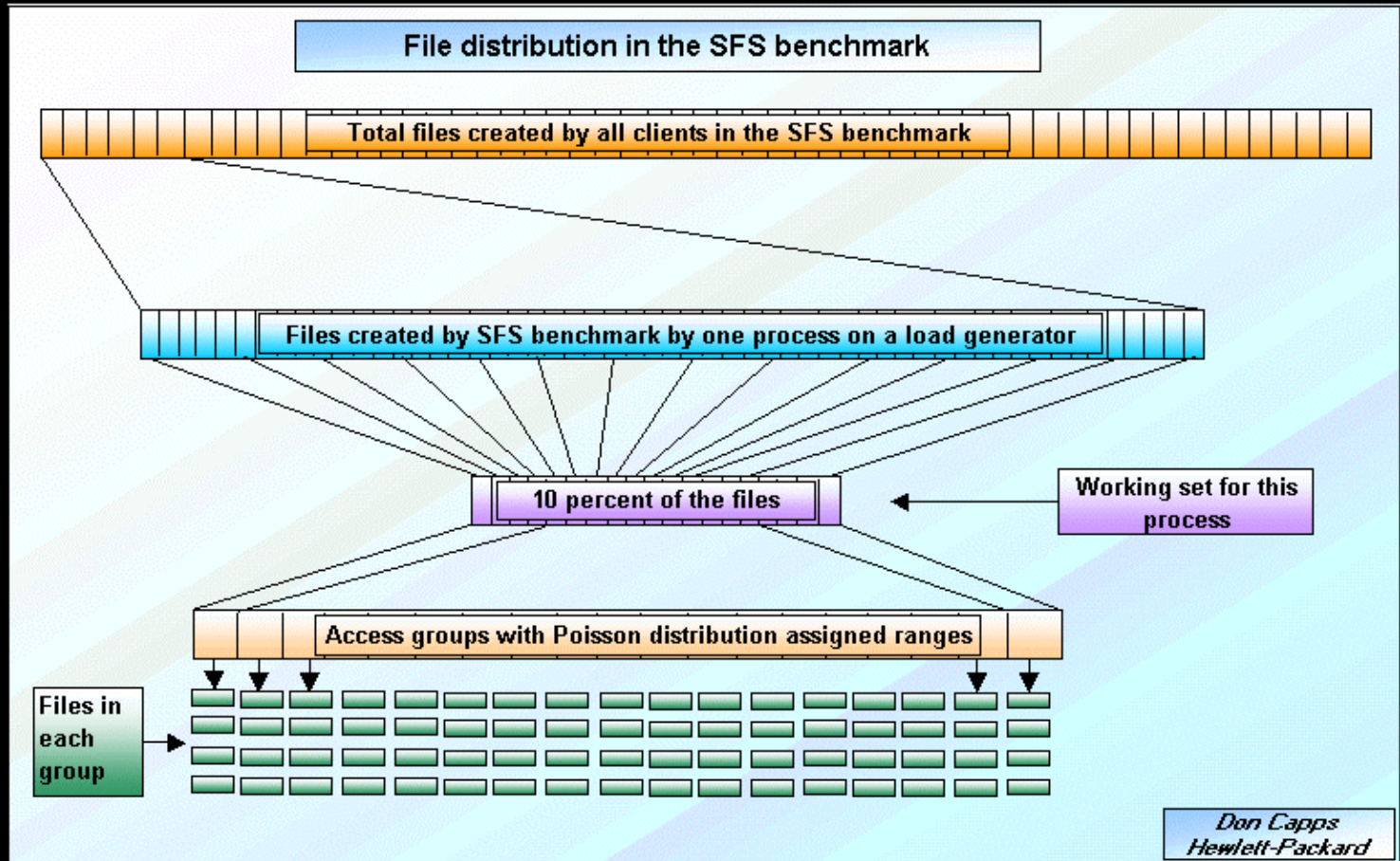
- Introduction to SFS internals
- New file access distribution algorithm
- Measurement of time
- Regulation of load
- Other enhancements
- Documentation changes



Introduction to SFS internals

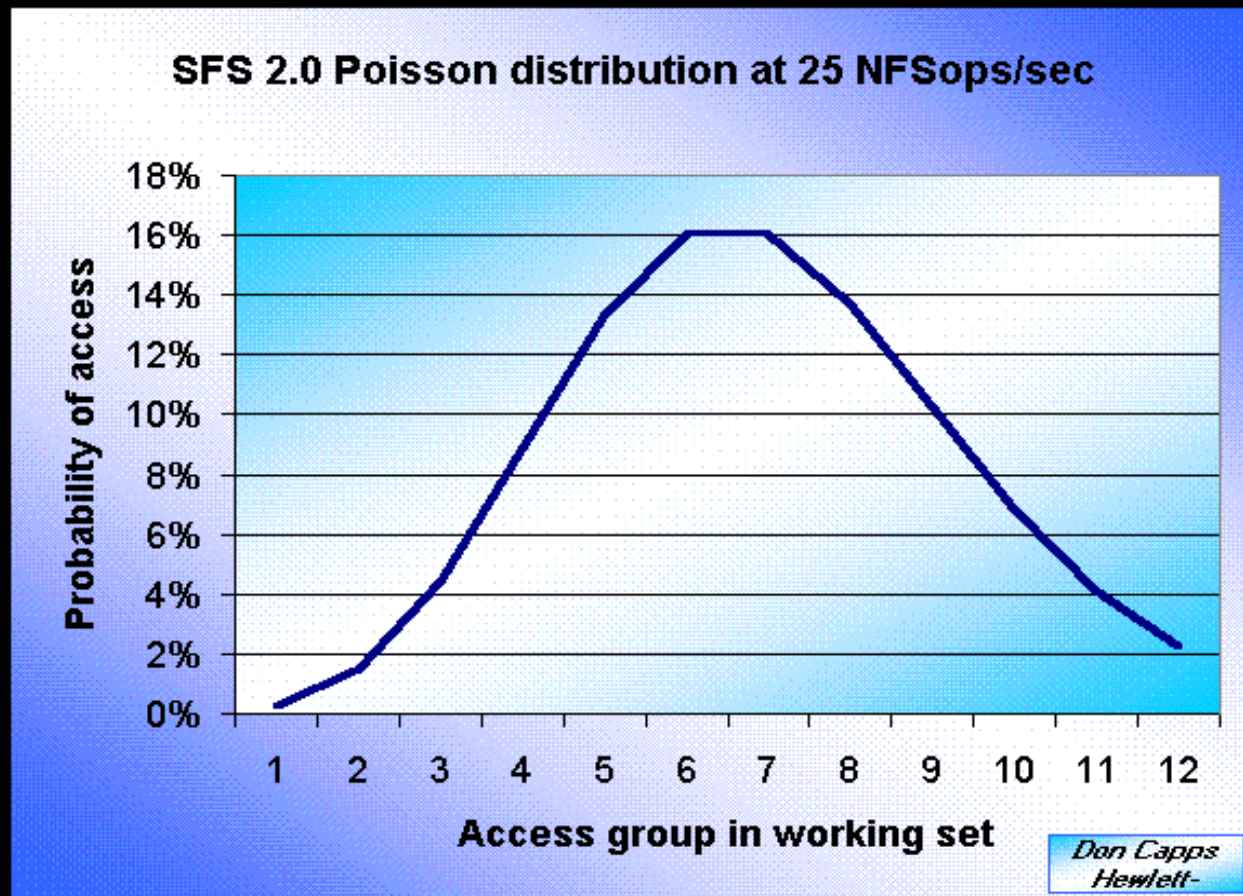
- Files created by SFS 2.0
- Working set of files in SFS 2.0
- File layout in SFS 2.0
- File access groups in SFS 2.0
- Poisson distribution in SFS 2.0

File layout in SFS 2.0

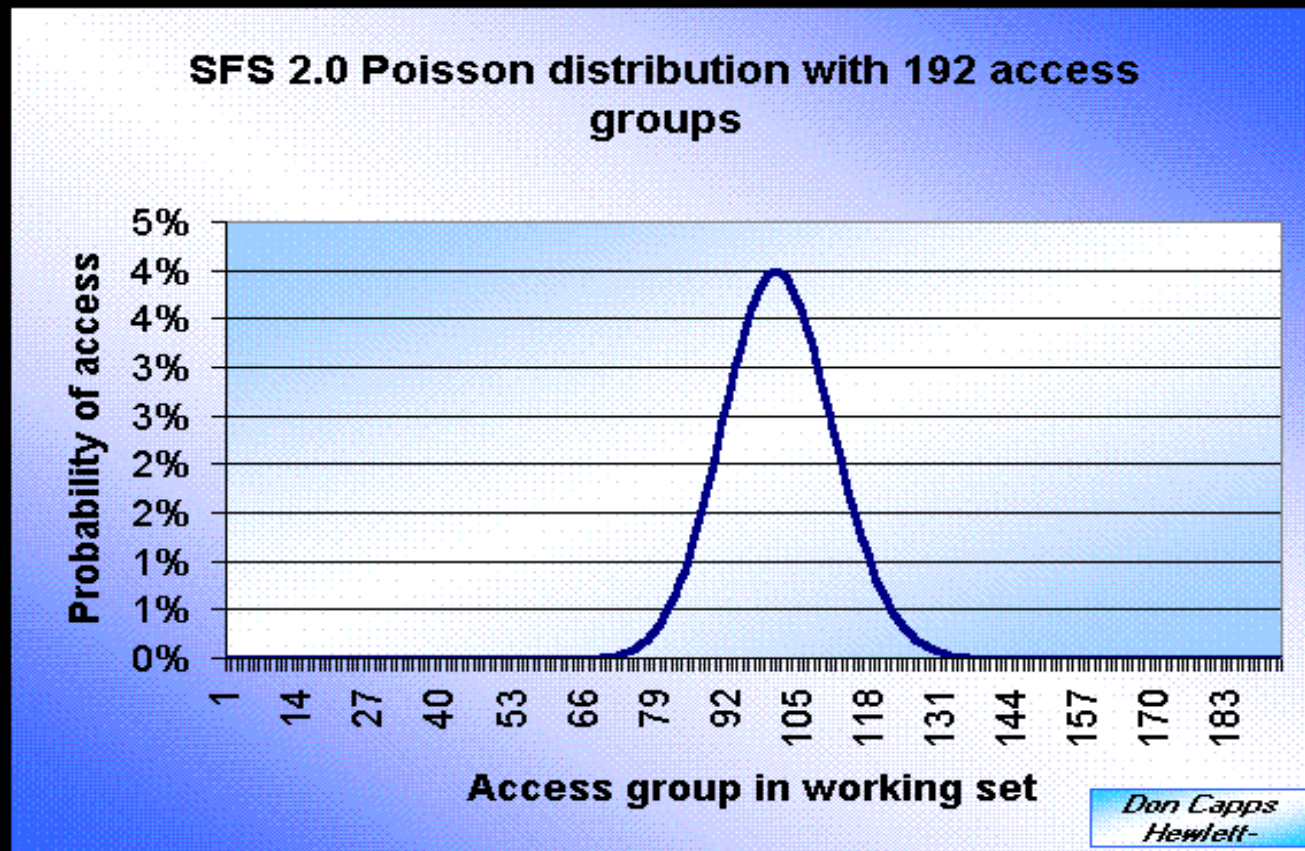


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Small file access group behavior in SFS 2.0



Large file access group behavior in SFS 2.0

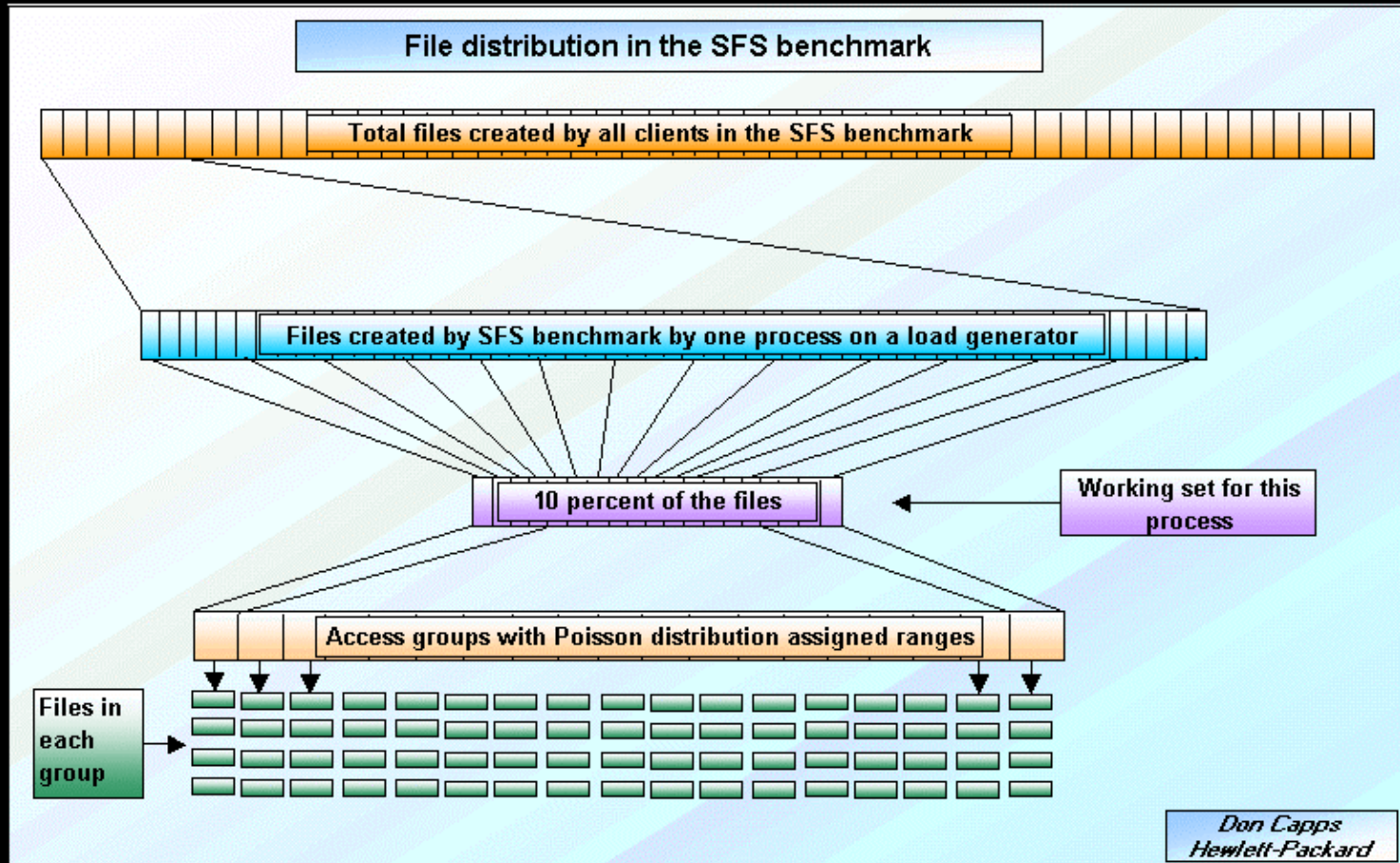




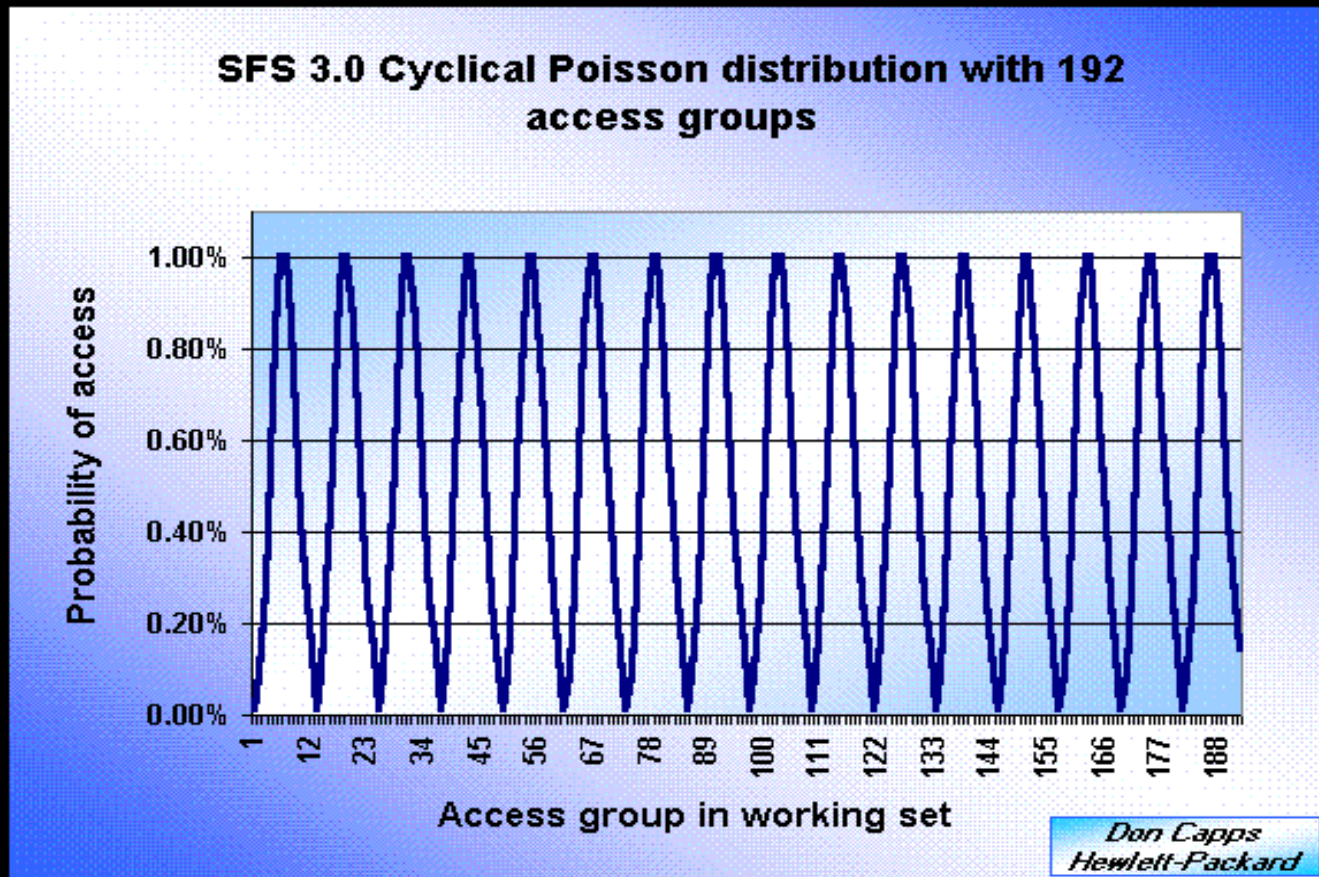
New file group access distribution algorithm

- Files created by SFS 3.0
- Working set of files in SFS 3.0
- File layout in SFS 3.0
- File access groups changes in SFS 3.0
- New Poisson distribution in SFS 3.0

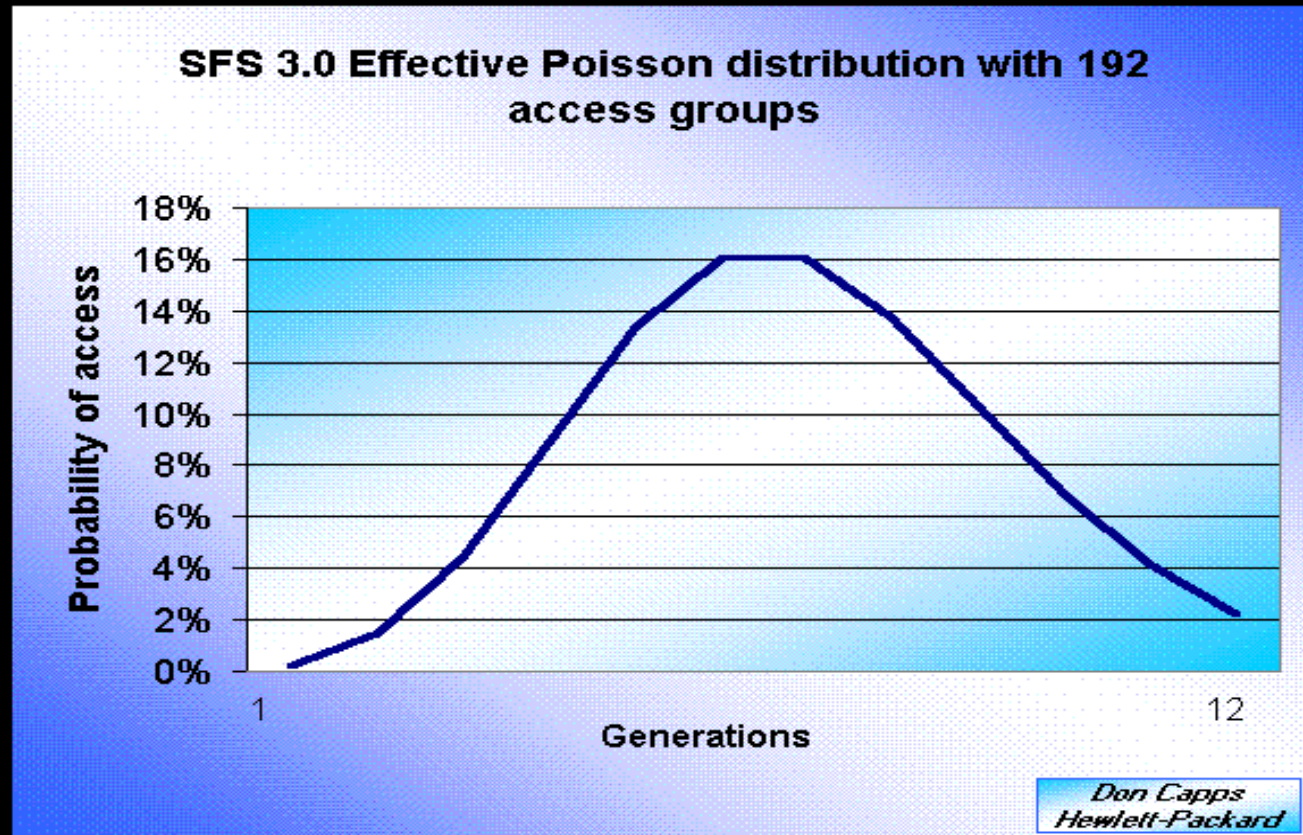
File layout in SFS 3.0

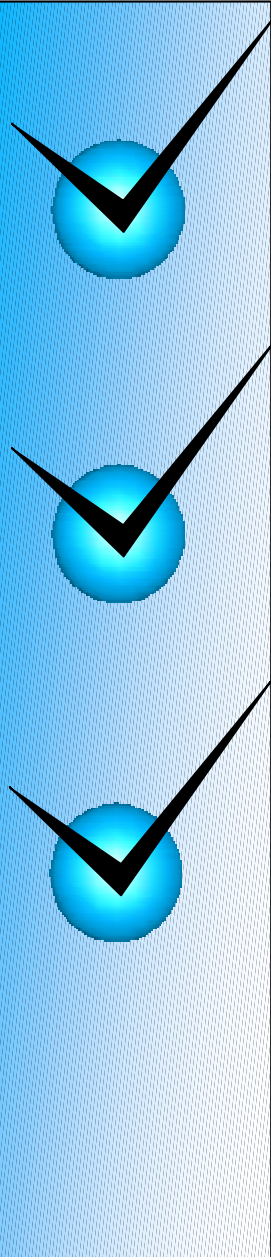


Large access group behavior in SFS 3.0



Effective file group access behavior in SFS 3.0





Changes in the workload for SFS 3.0

- There are no changes in the workload for SFS 3.0 only fixes that correctly implement the intended workload from SFS 2.0



Measurement of time in SFS 3.0

- Checking of timer resolution
- Gettimeofday enhancement.
- Select enhancement.



Regulation of load in SFS 3.0

- SFS 2.0 was too aggressive and did not ensure work was being done.
- SFS 3.0 is less aggressive and ensures that all measurements contain work.



Other enhancements in SFS 3.0

- Enhancement to NFS PV3 readdirplus
- Best fit algorithm
- Reduction in client memory consumption
- New submission tools
- Changes for improved portability
- Bug fixes

Documentation changes in SFS 3.0

- Documentation is now available in HTML, rich text and PDF formats.
- New “What’s new in SFS 3.0 chapter”
- Updates to the run rules
- Updates to the FAQs
- Additional information on submissions tools
- Changes in the disclosure rules.



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