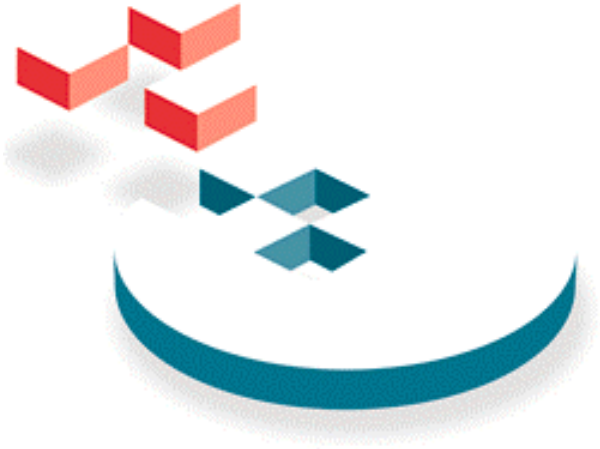

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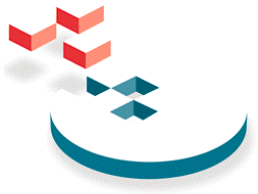
SNIA CIFS Documentation Work Group

Steven French

IBM Linux Technology Center

SNIA CIFS Technical Workgroup



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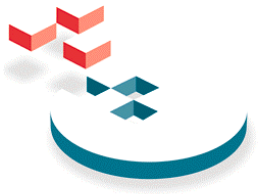
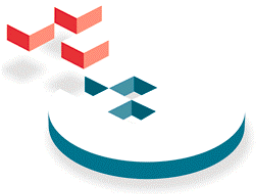
Agenda

- GENERAL SESSION TOPICS
  - CIFS Technical Reference Status
  - Benchmarking
  - Test Suites
  - CIFS C&PF
  - Layering Spreadsheet
  - An invitation …



CIFS TR 1.0

- **Currently on SNIA Web Site**
  - **www.snia.org**
    - http://www.snia.org/English/Collaterals/Work_Group_Docs/NAS/CIFS/CIFS_Technical_Reference.pdf
- **Change from 0.99**
  - **Document Classified as "SNIA Technical Proposal" to conform to SNIA Guidelines**
  - **Document is not a proposal to any formal standards body**
- **TR is independent of other CIFS documents**



SNIA CIFS Work Group

- Sub-group of the NAS WG
- Chartered December 1999
- Open participation
  - SNIA members
  - Non-SNIA CIFS developers
- Meetings
  - Bi-weekly conference calls
  - Face-to-face meeting 3-4 times a year
  - Special meetings and conference calls

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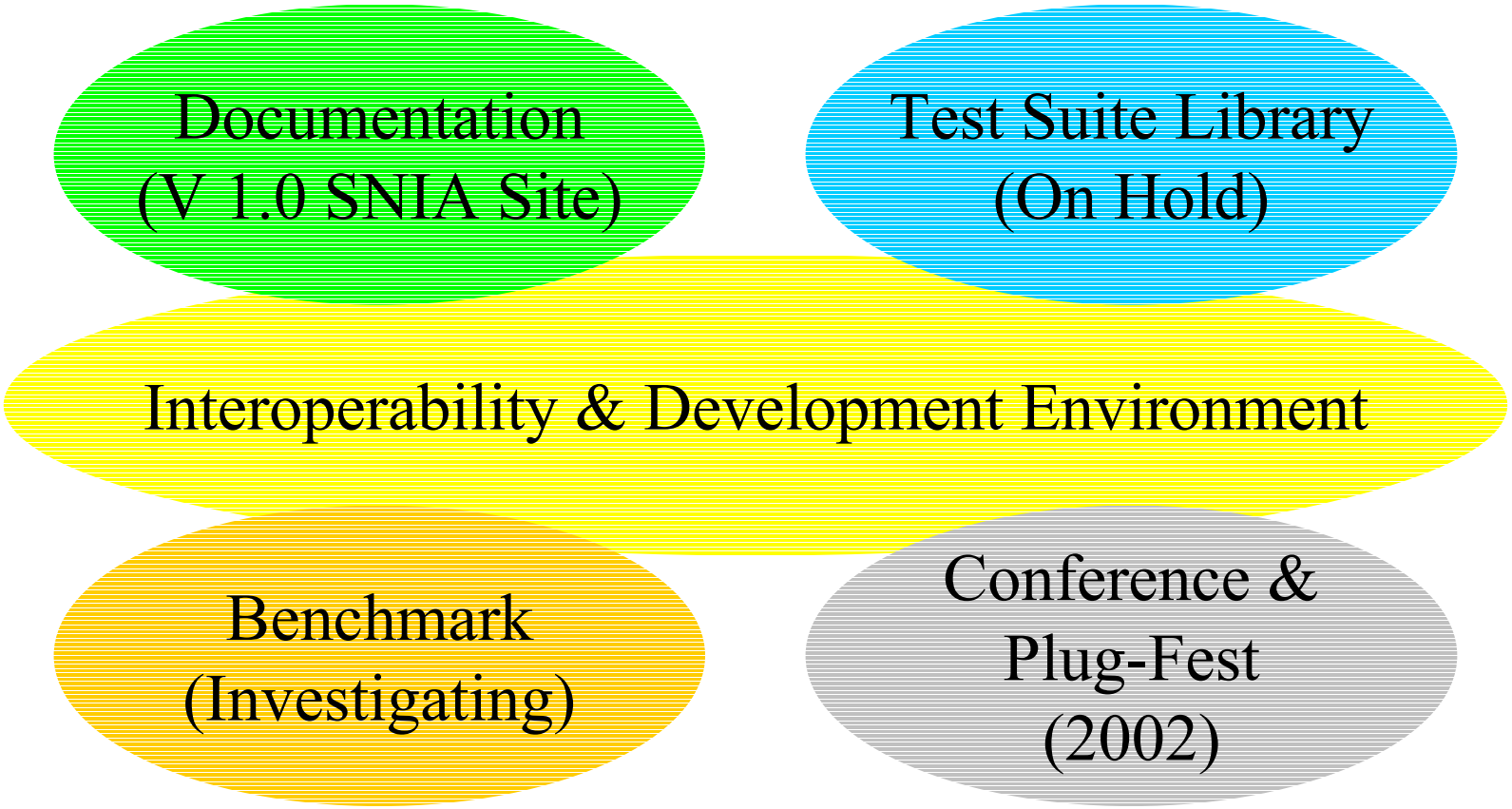
TWG Mission & Status



CIFS Technical Reference

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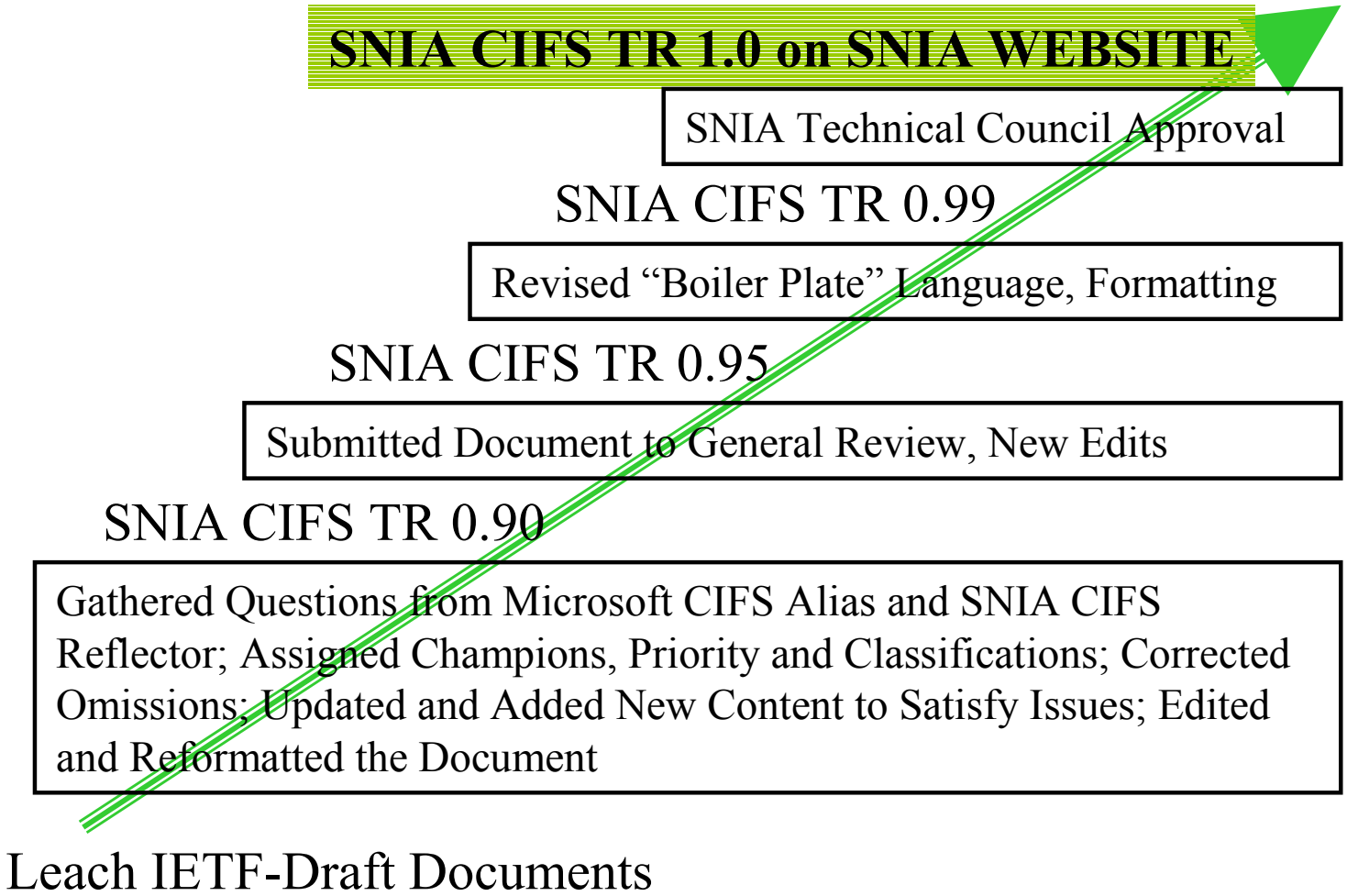

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End of Status

- Thank You

CIFS Interoperability Challenge

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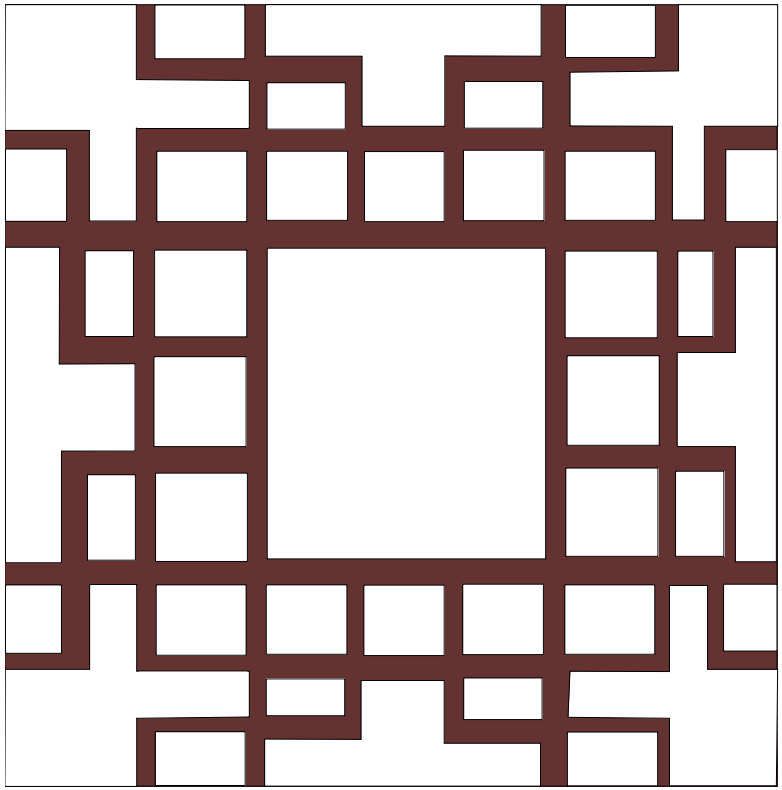

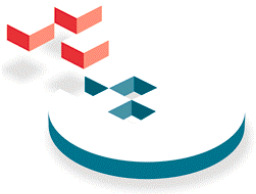

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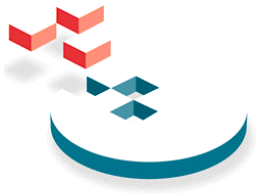
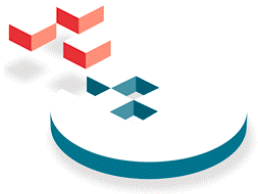
CIFS Protocol Understanding

Grade	Operation	Description
A-	File	Retrieve and modify files and directories, read and writes to files, file and byte range locking, client caching, operations on file system volumes
B+	Shared Resource	Locate shared resources and the servers they are on, how do you connect, how do you locate shared resources in the global namespace
B+	Authentication & Authorization	Authenticate and authorize access to resources
B	Printing	Print job submission, Print job control, Print Queue management
C+	Server Management	How you manage resources on a server -- closing an open file on a remote server, things relating to adding or deleting a share
C-	Topology Management	How you manage server and users in a domain -- things beyond the server – how do structure the domains, trust relationships, server to server kinds of information, replication of servers
A	Infrastructure	Core components common to multiple operation areas such as the documentation relating to use of underlying transport and RPC protocols



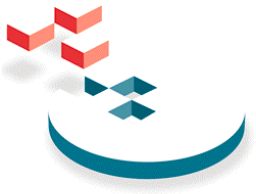
CIFS C&PF

- Requested SNIA to host CIFS C&PF 2002
  - FORMAT: Same as the 2000 & 2001 conferences with the follow modifications
    - Increase conference length 1 additional day this would be 3 days of conference agenda
    - Allow for tutorial presentations (including SNIA material)
  - LOCATION: San Jose, CA
  - Date: TBD – mid August or September
    - Targeting the week after Linux World, San Francisco



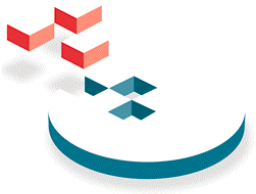
CIFS C&PF

- CIFS C&PF Value
  - Widely used by CIFS developers for
    - Design debug
    - Interoperability testing
  - 5 Previous Events
    - (last 2 hosted by SNIA)
      - San Jose, CA
      - Redmond, WA
  - Plug-Fest
    - Attended by most CIFS developers
    - 2001 16 Companies
    - 2000 18 Companies
  - Conference
    - Attended by developers & managers
    - 2001 110 people (34 companies)
    - 2000 200 people (47 companies)



CIFS Problem

- CIFS protocol
  - CIFS/SMB protocol is widely used in the industry
  - Expertise not readily available
  - Protocol test suite for backward compatibility is not available
  - Perception of proprietary elements
  - Documentation information spread across various sources
- CIFS development community
  - Must interact with CIFS protocol for product competitiveness
  - Incomplete/Inaccurate documentation
  - Always chasing an existing implementation
  - Desire for a documented Standard
  - Development is expensive and unreliable



SNIA CIFS Objective

- **Stabilize the CIFS development environment using a four prong approach:**
  - **Submit Incremental improvements to CIFS protocol**
  - **Develop a CIFS Benchmark**
  - **Collect CIFS test suites and information (to improve interoperability year round)**
  - **Collect reference implementations of CIFS client(s) and server(s)**

End of TR Status Presentation

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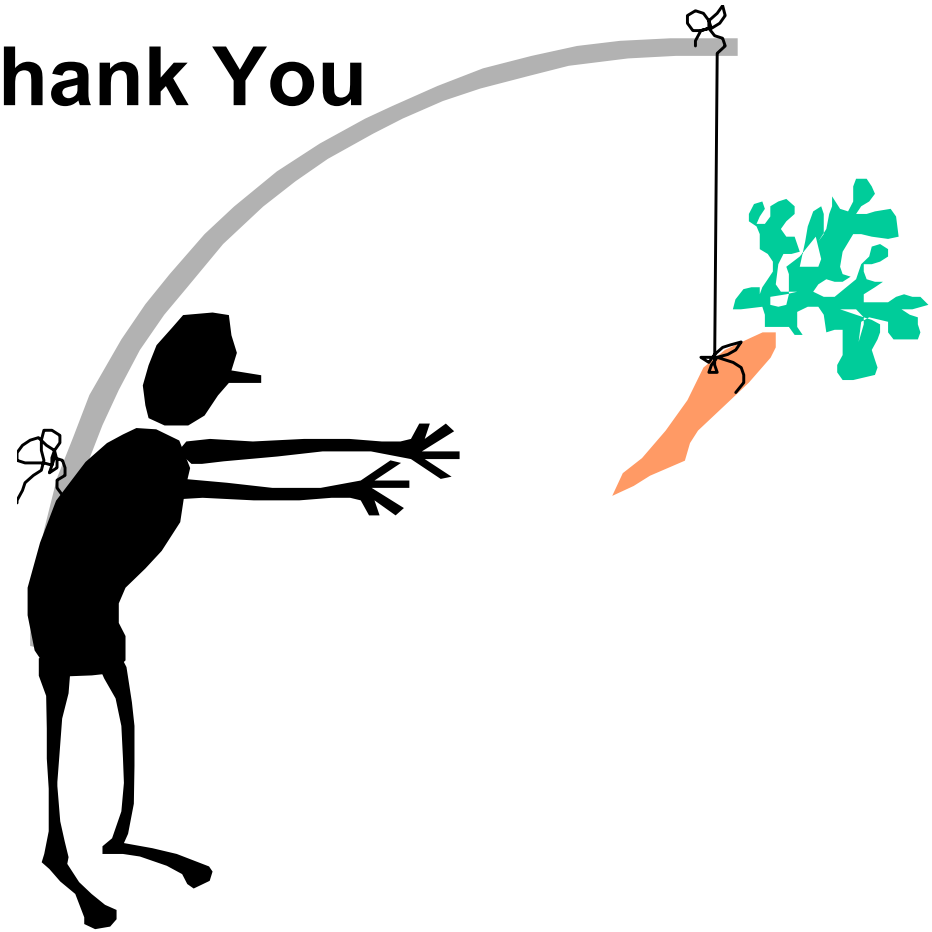
- Thank You