Cloud Object Storage Plugfest

Planning call #1

June 5, 2024
10:00 am PT / 1:00 pm ET
Today’s Presenters

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SNIA Is

- An industry organization that focuses on technologies related to handling and optimizing data

- A collaboration of experts on data that
  - Develops global standards
  - Delivers vendor-neutral education

- SNIA Cloud Storage Technologies Initiative (CSTI)
  - Committed to the adoption, growth and standardization of intelligent data storage usage in cloud infrastructures.
Agenda

- SNIA Overview
  - Survey overview
- Plugfest Collaboration and Network Goals
  - Discuss your goals
- Testing Process
- Logistics
- NDA, Fee, and Registration
- Next Steps
- Q&A
Interoperability Challenges

- Incompatibilities are costing our customers
- We have hit a plateau in terms of compatibility
- There are no open forums to assist with multi-vendor testing
- Most object storage clients test against cloud service offerings
- Server behavior often needs to be inferred from cloud service offerings
- There are no formal specifications
- Most object storage servers only implement a subset of defined functionality
Interoperability Challenges

- What does success look like?
  - Identification and documentation of common implementation pitfalls
  - Compatibility implementation guidance for client implementations
  - Guidelines for a base subset of functionality (80%/20% rule)
  - Recommendations for testing (server and client)
  - Clients that “just work” with servers
  - Reduction in integration costs and risks for customers
  - Happy Customers
Interoperability Challenges

- **How do we get there?**
  - Open communication in a safe (under NDA) environment
  - Collaboration to identify issues
  - Sharing of testing tools and techniques

- **Some questions for participants:**
  - What does success look like for you?
  - What are your goals as a contributor?
  - What are your existing pain points?
  - How significant do you see these issues?
  - How fast are these getting resolved?
  - How do you envision this forum helping?
  - What time to market improvements do you think we can help facilitate?
  - How is the existing community network enabling you to interact with the right people?
Cloud Object Storage Survey Results (as of 6/4/24)

Interested Companies

- Centre for Development of Advanced Computing
- Dell
- Flexify
- Google
- Hewlett Packard Enterprise
- IBM
- Microsoft
- NetApp
- Nutanix
- Versity Software
- Zadara

Implemented Protocols

- Amazon S3 Client
- Amazon S3 Server
- Microsoft Azure Blob Storage Client
- Microsoft Azure Blob Storage Server
- Google Cloud Storage Client
- Google Cloud Storage Server
- Other Interest
  - Backblaze B2
  - Ceph Object Storage
  - Dropbox
  - OpenStack Swift

https://www.snia.org/plugfestsurvey
SNIA Cloud Object Storage Plugfest Goals

- Ensure smooth interaction between multiple cloud object storage solutions based on the same protocol (for example, S3-compatible or Azure-compatible) from different providers.
- Collectively address the challenges associated with object storage compatibility.
- Reduce compatibility issues, thus improving customer experience and increasing the adoption rate of object storage solutions.
Testing Procedures

- The participants of the Plugfest work together to define the testing process and matrix, assuring that objectives are accomplished.
  - Planning calls held prior to the event to work out the details
- Based on supported protocols each participant will test with other compatible participants
- Test Tools
  - Participant supplied
  - Open source (e.g. Ceph s3-tests, AWS sdk, etc.)
Logistics

- Plugfest is open to all, SNIA membership is not required
- Co-located at SNIA Developer Conference (SDC) 2024
  - September 16-18, 2024, Santa Clara, CA
- SNIA will provide and support the network and infrastructure for the Plugfest, creating a collaborative framework for testing.

Schedule

- **Set Up:** Sunday 9/15/2024, 1 pm – 5 pm PDT
- **Testing:** Monday 9/16/2024, 9 am to Wednesday 9/18/2024, 5 pm PDT
- **Tear-down starts:** Wednesday 9/18/2024, 5 pm PDT (complete by 8 pm)
NDA, Fee, and Registration

- All Plugfest participants are under an NDA
  - Any information obtained at the Plugfest about the performance, compatibility or test results relating to the products of any participant is confidential.
  - https://www.snia.org/plugfestnda
- The fee to participate is $895 per engineer which includes full access to the SNIA Developer Conference sessions and meals

Registration
- Authorized representative from company completes the Plugfest Company Registration form, agreeing to the NDA on behalf of the company
- Each participating engineer:
  - Register for SDC at the discount rate of $895
  - Complete the Plugfest Participant Registration form
  - Attend the Plugfest planning calls
Next Steps

1. Fill out Plugfest survey at https://www.snia.org/plugfestsurvey
2. Stay informed, join the Plugfest email reflector (receive copy of this presentation)
   ▪ Send email to subscribe-cloudplugfest@snia.org
3. When ready visit the Plugfest registration page at https://www.snia.org/cloudplugfest
   ▪ Please register as soon as possible so that we can finalize logistics
4. Attend upcoming Plugfest planning calls
   ▪ July 10th at 10 am PDT
   ▪ August 14th at 10 am PDT

Need additional details, email us at askcloudplugfest@snia.org
Important Links

- Cloud Object Storage Plugfest Survey
  - https://www.snia.org/plugfestsurvey

- Cloud Object Storage Plugfest event details
  - https://www.snia.org/cloudplugfest

- Cloud Object Storage Plugfest Mailing List
  - cloudplugfest@snia.org

- Cloud Object Storage Plugfest Confidentiality Agreement
  - https://www.snia.org/plugfestnda

- Cloud Object Storage Plugfest Webinar
  - https://youtu.be/o6RIPL-S8sA

- SNIA Developer Conference
  - https://www.sniadeveloper.org

- Contact us
  - askcloudplugfest@snia.org
QUESTIONS?