FedFS NSDB and ADMIN Updates

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FedFS Protocol Documents

- "Using DNS SRV to Specify a Global File Namespace with NFS Version 4"
  - Proposed Standard RFC 6641

- "Administration Protocol for Federated Filesystems"
  - draft-ietf-nfsv4-federated-admin-fs

- "NSDB Protocol for Federated Filesystems"
  - draft-ietf-nfsv4-federated-fs-protocol

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draft-ietf-nfsv4-federated-fs-admin

- Since IETF 84 - Vancouver:

  - Already in Last Call

  - Lever made document editor to expedite IESG review

  - IANA and Ballot review items addressed in GitHub

  - Telechat scheduled for 15 November

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draft-ietf-nfsv4-federated-fs-protocol

- Since IETF 84 - Vancouver:
  - NSDB schema updates due to LDAP community review
    - Updates appear in draft revision 13
    - New schema prototyped on Linux
  - Lever made document editor to expedite IESG review
  - Last Call started 8 October
  - Contingent approval of new registries by LDAP OID expert
  - Most IANA and Ballot review items addressed in GitHub
  - Telechat scheduled for 15 November

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NSDB Protocol Draft
Remaining Issues

- Ballot DISCUSS

  - Confusing use of RFC 2119 terms "MAY" and "MUST" when discussing the new FsnTTL field

  - Leiba proposed replacement text which has been integrated

NSDB Protocol Draft
Remaining Issues

- IANA

  - Section 7 requests creation of two new IANA registries

  - IANA unclear on certain registry details

  - Proposed:
    - One new top level registry for FedFS
      - Separate from existing LDAP and NFSv4 registries
      - Requested FedFS registries to be sub-registries

Ongoing FedFS Work

- Multi-domain authentication and authorization

- Maintaining standards documents

- Support for SMB FSLs

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IETF Process

- IESG's LDAP expert had no time for full review

- We relied on LDAP community review, this time

- Future work will involve LDAP components

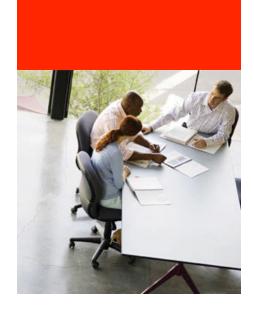- What expert reviews future LDAP-related work?

Possible Future FedFS Work

- Domain namespace
  - Discovering the local domain name
  - Pre-populating /nfs4
  - Cross-protocol filename aliasing

- NSDB authentication
  - New connection security types (ldaps, SASL)
  - Dealing with revoked server certificates (OSCP)
  - Good practices for replicating NSDB nodes

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Further Discussion

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