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Linux fedfs-utils 0.8

Chuck Lever
Consulting Member of Technical Staff

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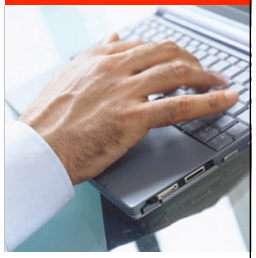
Today's Talk



- Terminology
- Package contents
- Roadmap
- Demonstration
- Questions

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Terminology

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Terminology

- System roles
  - FedFS-enabled server
  - FedFS-enabled client
  - FedFS administrative host
  - NSDB

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Terminology

- Domain root directory
  - Located via DNS SRV record
- Finding file data
  - Fileset Name - a collection of fileset locations
  - Fileset Location - a single physical instance of a fileset
- Connecting filesets to a namespace
  - FedFS junction
  - NFS basic junction

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Package Contents

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fedfs-utils Manifest

- FedFS-enabled file server
  - Junction resolution library for mountd
  - nfsref
  - rpc.fedfsd
  - nsdbparams
- FedFS-enabled filesystem client
  - autofs program map
  - mount.fedfs (optional)

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fedfs-utils Manifest

- FedFS administrative host
  - nsdbparams
  - nsdbc clients
  - fedfsc clients
- NSDB
  - LDAP server
  - FedFS schema

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Minimum Effective Dose

- Managing NFS referrals with NFS basic junctions
  - Latest mountd with junction support (nfs-utils-1.2.5)
  - Junction resolution library (fedfs-utils-0.8.0)
  - The nfsref command (fedfs-utils-0.8.0)
  - Linux 3.2 kernel

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Roadmap

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0.9 (3Q 2012)

Alpha Quality

- Support for new DNS SRV standard
- Support for TLS and NSDB authentication
- Follow LDAP referrals during junction resolution
- FedFS schema refresh
- Improve check-in testing

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0.10 (1Q 2013)

Beta Quality

- RPCSEC GSSAPI support for rpc.fedfsd and ADMIN clients
- ADMIN protocol support in nsdbparams command
- Support NFS relative pathnames
- Server-side `fs_locations_info` prototype

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1.0 (3Q 2013)

Production-Ready

- Prototype high-level FedFS domain administration tool
- `fs_locations_info` support in NFS client
- Asynchronous NSDB client API

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1.1 (1Q 2014)

Production-Ready

- Support FEDFS_{CREATE,DELETE}_REPLICATION
- Multi-threaded rpc.fedfsd
- First crack at language support
- libnsdb.a API standard

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Demonstration

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Questions

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For More Information

http://wiki.linux-nfs.org/wiki/index.php/FedFsUtilsProject

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