

# OpenAFS development

a.k.a. "That thing lurking just over the hill is  
version 1.4"

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The OpenAFS project

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# We've come so far...

- ◆ Large file support now also in the server (currently "namei" only)
- ◆ HP-UX 11.0 support took several years, 11.11, 11.22 and 11.23 followed quickly.
- ◆ Windows NT (XP) port is finally getting the love it needs.

# And we continue ahead

- ◆ A Kerberos 5 solution now
- ◆ Another more complete solution coming.
- ◆ Kerberos 5 tools will be integrated.

# Improved recognition

- ◆ Vendors who aren't IBM no longer sneer when AFS is involved in reports submitted to them.
- ◆ Some (Apple, HP, RedHat, Sun, SGI) have actually contributed code and fixes. (officially and unofficially)

# Miles to go

- ◆ Network performance complaints
- ◆ MacOS 10.3 client has a persistent bug which is exercised by “Finder” and native applications.
- ◆ Cache manager not MP-fast yet.
- ◆ AIX 5 contributed, but troublesome.

# Oceans to cross

- ◆ Ultimate direction for the Windows client
- ◆ Linux 2.6 saga

# The Linux story

- ◆ Updates needed for 2.4 have tapered off (notable exception: SuSE)
- ◆ 2.6 deployment has begun and we have no client yet.
- ◆ But 3 different groups now working on a client.

# Taking the bad with the good

- ◆ 100% PAG solution for 2.6 unlikely until feature freeze ends.
- ◆ But once we have an answer vendors may take patches.



# Why the model we have

- ◆ Limited developer time currently available.
- ◆ Focusing on 1.3 to reach 1.4.
- ◆ Critical fixes are pushed to 1.2.

# Mea culpa

- ◆ Less common problems take longer to resolve due to lack of developers.
- ◆ “Exotic” systems harder to debug due to low availability (>2 way SMP).
- ◆ Some of this could be solved by OpenAFS, Inc.
- ◆ But developers hard to find.

# Nagging issues

- ◆ Disconnected AFS work still not integrated.
- ◆ No good answer to backups, but no 2 sites asking the same question.
- ◆ Not providing for proactive monitoring.
- ◆ Good admin suite not included.

# Improving use cases

- ◆ Looking at possibilities of “hot spare” fileserver function.
- ◆ Client improvements for clustering environments: but what?
- ◆ Optimization for laptops (disconnected, power management, network events)

# 1.4 expectations

- ◆ By USENIX technical conference
- ◆ Existing issues resolved
- ◆ Large file “inode” fileserver
- ◆ Verifying enhancements
- ◆ If we can get full Kerberos 5, we will target a 2.0.

# Then what?

- ◆ long volume names. (maybe for 1.4)
- ◆ ptserver LDAP proxy?
- ◆ Multiprotocol file service? (NFSv4?  
WebDAV?)
- ◆ Other ideas?

# OpenAFS development snapshot

The 1.4 hits

[more]

Questions?

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