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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