Growing-up with Lvstre!

Robert Triendl, DDN
Welcome to LVUG!

This *is* a marketing presentation, dedicated to…
It’s \textit{not} Human, it’s a Beast!

But, \textit{what} beast?

I think it’s a hedgehog…

"The fox knows many things, but the hedgehog knows one big thing."

Maybe it’s a hedgehog \textit{wanting to become a fox}? A \textit{Foxhog}???
What *kind* of Beasts!
Lustre is “Open Source”

“It might be conceivably-possibly-maybe-open!”

“We fixed 1500 bugs, but don’t tell anybody!!!”

“It will be all open, once patches are no more useful”

“What do you mean? All source is always open!”
Why Lustre?

Only viable Open Source parallel file system that offers a globally consistent POSIX namespace

Small, but resilient user/developer community (including: resilient towards corporate politics!)

Focus on traditional HPC, but with an increasingly diverse user basis

Not “enterprise”, not an “appliance”, not controlled by a single vendor
Growing-up with Lustre!

2003
1st Large Lustre System Implementation

2009
Launch of EXAScaler

Today
Diverse Customer Basis
Broad Portfolio
• Software-only
• ExaScaler “Appliances”
• ExaScaler on ZFS
DDN | EXAScaler
Enterprise Lustre Distribution

• Based on most stable Lustre community distribution available
• Open Source with no forked code basis
• Extensive QA and Hardening
• Proven High-Availability
• Internally Developed Features
• Unique Tools
• Powerful Monitoring
• Optimizations for DDN Hardware
• Global Support – Level 1, 2, and 3
Future Architectures

POSIX Namespace

Object Namespace

Lustre
Lustre, the Next 20 Years?

Globally-consistent POSIX namespaces will be around for a long simply time due to application lifetimes.

Increased focus on data management, rather than pure performance.

More focus on management, usability, logging, etc.

Remain a community-driven, open source effort.