



Solaris Installation Umbrella May 2007

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Agenda

- Problem statement
- Goals, principles, features
- Delivery
- Issues, casualties, dependencies
- Alternatives

Problem Statement - Developers

- Most aren't using Solaris, need to lower barriers to entry
- Most are using x86/x64 platforms, which means:
 - > Need to co-exist with Windows, Linux, MacOS
 - > Driver support clear, complete
- Easy, complete, reliable interactive installation and upgrade
 - > Focus on user experience
- Simple software management
- Show off advanced Solaris features

Problem Statement – Enterprises

- Large number of deployments
- Repeatable, recoverable installations
- Network installation model that scales and conforms with their network reality
- Seamless integration of virtualization technologies with automated deployment tools
- Integration points for third-party products and local customizations

RFE's Won't Do...

- Existing installation architecture assumes installing/upgrading a whole OS from CD or LAN to UFS on slices defined in 10 MIPS, 16 MB SPARC system disk's VTOC
- We now have multiple hardware platforms, software sources, media options, network topologies, and filesystems
 - > Virtual machines even further from design center
- Increasing rate of Solaris technology change demands scalability, flexibility, and maintainability in the installation technology

Goals and Principles

- Goals
 - > Inviting interactive installation
 - > Best-in-class automated installation and replication
- Principles
 - > No distractions from installing
 - > Encourage/require best practices for system management
 - > All upgrades can be undone
 - > Configuration tasks and tools are available after installation
 - > Leverage general-purpose technologies

Key Features

- “Slim Install” - download only a single CD to start
 - > Full media still available & supported
 - > Side-effect is WAN installation using packages for all platforms
- “Snap Upgrade” - leverage ZFS to its fullest
- Hardware/driver checking tools on the media
- Jumpstart/sysidcfg re-based on SMF profiles
- Install “authoring” tools that RE, developers and sysadmins can all use
- Better interfaces, performance, for Zones and Xen

Delivery Plan

- Contribute to adoption goals via Solaris developer releases
 - > Deliver solution incrementally
- Focus first on developer problems
 - > First project is Dwarf Caiman, to replace the GUI for SXDE3 installation & upgrade
- Plug ZFS support into new GUI
- Deliver “Slim Install” and “Snap Upgrade”
- And so forth...
 - > Enterprise problems at lower priority

Issues

- Avoiding the LU architecture hole
 - > And providing a completely “safe” upgrade
- Scalable upgrades with zones
- Repositories for images, packages, driver updates
- What do “diskless server” customers want?
- What installation choices do we offer?
- Transitions
 - > UFS -> ZFS, Jumpstart/sysidcfg -> SMF profiles, smdiskless -> ???

Stuff We're Not Doing

- Replacing packaging or patching
- Non-destructive disk re-partitioning
 - > If one is brought in, we'll leverage it
- UFS*/SVM/Veritas
 - > UFS is used in Dwarf Caiman
- Traditional diskless clients

Known Dependencies

- ZFS boot/root
- Network Automagic (NWAM)
- Visual Panels/Single System Management tools
- SMF Extended Profiles
- Installation Check Tool
- HSFS enhancements from Live Media

Why not openInstaller?

- LSARC/2005/070 et al
- Different design centers:
 - > Application on OS vs. OS
 - > Hide the platform vs. install the platform
- Maturity of code, schedule alignment
- Java's footprint in the install environment
- Incremental delivery problematic
- Will look for integration opportunities

Why not Anaconda?

- Deep dependencies on Linux, rpm, YUM
- Enterprise features significantly different or missing
- Licensing alignment – GPL
- Incremental delivery problematic



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