

# open



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EVANGELIZE

## Caiman Umbrella PSARC/ 2007/ 039 March 2008

Dave Miner  
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Solaris Installation

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## Some things remain stable

- Next 3 slides are the same things we said in May 2007



## Problem Statement - Developers

- Most aren't using OpenSolaris, 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 OpenSolaris 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



# 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



# Component Projects

- Dwarf Caiman
- Slim Install
- Snap Upgrade
- Distribution Constructor
- Automated Installation



## Dwarf Caiman

- PSARC/ 2007/ 284
- Provides new GUI, simplified installation for SXDE
- Completed, integrated in snv\_70

## Slim Install

- Single Live CD for try- before- you- buy, desktop/ laptop installation
- GUI for timezone and software selection
- ZFS as root
- Updated L10N packaging & media architecture
- Integrate driver detection and update
- Prototype built, design & development in progress
  - Completed lofi compression, PSARC/ 2007/ 569, working to add LZMA for higher compression



# Snap Upgrade

- Boot environment management designed for ZFS, including zones
  - Automated snapshot aging and management
  - File system re-organization to simplify problem
- Provide snapshot and rollback library for IPS transactions
- Transition tools from UFS to ZFS
- Library and CLI design complete, under development



# Distribution Constructor

- Manifest description for media contents
- IPS integration
- CLI and GUI
- Image- specific customization
- Localization support
- Prototype built and in use, supported version in design/ development



# Automated Installation

- Update/ enhance/ replace Jumpstart
- Consistent capabilities across platforms, networks
- Currently gathering requirements, prototyping



## Things to figure out

- Non- GUI interactive interface
- Safemode boot
- Co- existence between OpenSolaris and Solaris 10, other distros
- Replacement for Flash Archives
- Non- destructive repartitioning
- Diskless server requirements & solution
- Additional media formats



# Development & Delivery Plan

- Indiana Previews 1 & 2
  - Slim Install prototype, built with Distribution Constructor prototype
  - x86 only, C locale only
- Indiana 1H CY 2008
  - Snap Upgrade initial version
  - Slim Install further developments
  - Built with modified Distribution Constructor prototype
  - x86 only
  - Additional localizations



## Development/ Delivery, Cont.

- Indiana 2H CY 2008
  - Snap Upgrade enhancements
  - Slim Install enhancements
  - Built with supported Distribution Constructor
  - Automated Installation initial version
  - SPARC support
  - Additional localizations
- Integration to ON as pieces ready
  - Scheduling is presently Indiana-oriented, thus Nevada integration is a TBD in most cases



## Related Work

- Image Packaging System
- Solaris Modernization PSARC 2007/ 492
- Extended Partition Support PSARC 2006/ 379
- Device Detection Tool
- xVM support for Indiana as PV domU
- SMF Enhanced Profiles

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## Thank you!

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“open” artwork and icons by chandan:  
<http://blogs.sun.com/chandan>

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