



Create your own OpenSolaris distribution

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What will you need?

- Conception what should have your distribution
- IPS repository
- Building tool – Distribution Constructor

Your IPS repository can be used for

- Publishing packages
- Testing your new packages
- Creating image from your packages
- For making the building process faster
- Additional repository

Overview of the Distribution Constructor (DC)

- Command-line tool for building preconfigured, bootable OpenSolaris images
- Takes an XML manifest file as input
- Primary or Global CD
- ISO and USB images are output

Get official OpenSolaris 2008.11 release

- The DC creates comparable image to official OpenSolaris 2008.11 release using the default settings
- Just install package: *SUNWdistro-const* and run the building

Customize your OpenSolaris

- Edit the manifest files
- Create a new manifest file
- Add/remove packages
- Set compression
- and more

Let's see how the manifest file looks

- Default manifests are located in:
/usr/share/distro_const/slim_cd/

ZFS and Distribution Constructor

- Checkpointing – DC creates snapshots
- Pause the building
- Delete the snapshot
- Make changes
- Create the snapshot
- Resume the building

Some of the available steps

- **im-pop** – Populate the image with packages
- **slim-im-mod** – Slim CD image area modifications
- **grub-setup** – GRUB menu setup
- **ISO and USB** image creation and more

Let's see how it works I

- Our image is already created
- Is located in: */rpool/dc/media/*
- Installed data are in:
/rpool/dc/build_data/pkg_image/
- Snapshots are created by the DC
- Let's go back to the snapshot number 1 – **im-mod** and see how the *build_data* area looked before

Let's see how it works II

- Make some changes
- Delete the snapshot
rpool/dc/build_data@.step_slim-im-mod
- Recreate the snapshot
rpool/dc/build_data@.step_slim-im-mod
- Resume the building process from this snapshot

What have we done

○ Hebrew Live CD

Requirements:

English keyboard layout

Hebrew Desktop language

Localized icons

Terminal font

Working on

○ Chinese and Korean Live CD

Requirements:

Make SCIM default

Remove packages

Other customizations

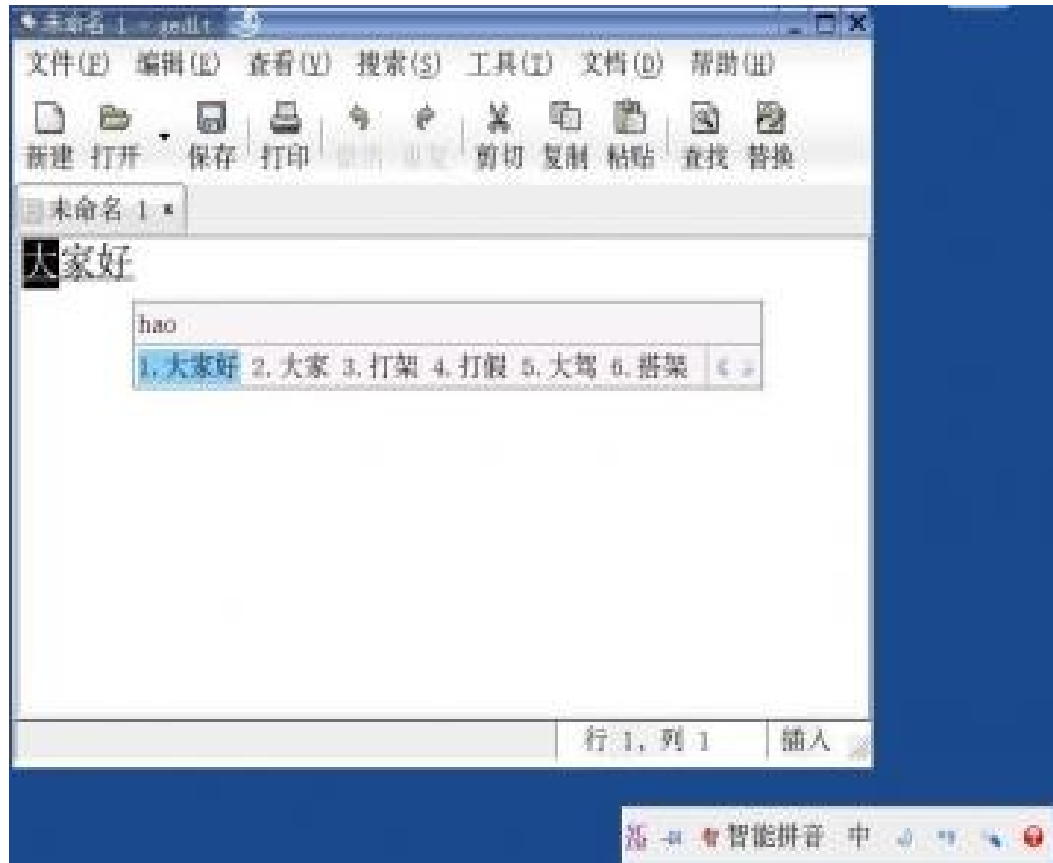
What is SCIM?

What is SCIM?

- A) Scottish Churches Industrial Mission
- B) Service Capability Interaction Manager
- C) Statutory Corruption Identification of Members
- D) Spinal Cord Independence Measure
- E) Server Client Invocation Model

SCIM is

- The Smart Common Input Method



Future of Distribution Constructor

- GUI – friendly user graphical interface
- Filters

Documentation

- Project page – Caiman team

<http://opensolaris.org/os/project/caiman/Con>

- Our G11n blog

<http://blogs.sun.com/sunwg11nprg/>

Let's have a look at the results

- Hebrew Live CD in VirtualBox (VB)
 - Keyboard layout and Desktop language are set automatically

- Live CD with multimedia support in VB
 - Play movie in *.wmv* format in the VLC player

Questions

Thanks for your attention