



Emerging Technologies

(with emphasis on Virtualization)

R Rajesh

Instructor & Technology Evangelist
Sun Learning Services, India
Sun Microsystems India Pvt. Ltd.
<http://blogs.sun.com/rajeshr>



NEVER
Hesitate to invest
on **YOURSELF**





Office Productivity



Database Platform



PostgreSQL



Java DB

Application Infrastructure



Virtualization



Operating System



Architecture



SUN TECH DAYS 2008-2009

The Apache Software Foundation
<http://www.apache.org/>

NFS



UNIX SVR4

SPARC

Sun 1 with TCP/IP

THE Open GROUP

Jini



XML

OpenOffice.org

LIBERTY ALLIANCE



GNOME

PROJECT LOOKING GLASS



Project JXTA



Java.net



The screenshot shows the Java.net website interface. At the top, there's a navigation bar with 'My pages', 'Projects', 'Communities', and 'java.net'. Below this, there's a 'Get Involved' section with links for 'java.net Project', 'Request a Project', 'Project Help Wanted Ads', 'Publish your Project', and 'Submit Content'. A 'Get Informed' section includes links for 'About java.net', 'Articles', 'Blog', 'Events', 'About Java Today', 'java.net Online Books', and 'java.net Archives'. A 'Get Connected' section has links for 'java.net Forums', 'Wiki and Javadocs', 'People, Partners, and Jobs', 'Java User Groups', and 'RSS Feeds'. A 'Search' section includes 'Web and Projects', 'Online Books', and 'Advanced Search'. A 'Weekly Stats' section for 'January 28, 2007' shows 'Number of projects: 4,087' and 'Total Members: 418,321'. A 'Top Projects' section for 'January 2008' is also visible. The main content area features a 'Today on java.net' section dated 'February 15, 2008' with a headline 'Here Comes A Regular: A big day for OpenJDK'. Below this is a 'Java Today' section with a 'Community Homepage' link. A 'Featured Articles' section includes 'OpenJDK 6 Source Release', 'The OpenJDK Developers' Guide', and 'OpenJDK clears several imaging encumbrances'. A 'Weblogs' section features 'The end of the beginning of OpenJDK6' with a photo of David Heister. A 'Java.net Polls' section asks 'Which Java 7 classes proposal do you suggest?' with options like 'Full classes (BODG)', 'Simplified inner classes (ICE)', 'Final class methods (FCM)', 'Something else (please comment)', and 'I don't want closures in Java 7'. A 'Related Links' section includes a 'NetBeans' link.

Home of OpenJDK, GlassFish, Mobile and Embedded, Java FX, and other large and small communities and projects

Over **400,000*** registered members, 15% have role(s) in projects

Over **4,500** Projects, 134 JUGs, 20 Communities

Community-building infrastructure

Java Champions, JUG Leaders, and other key Java™ leaders participate

The meta-community for Java Developers



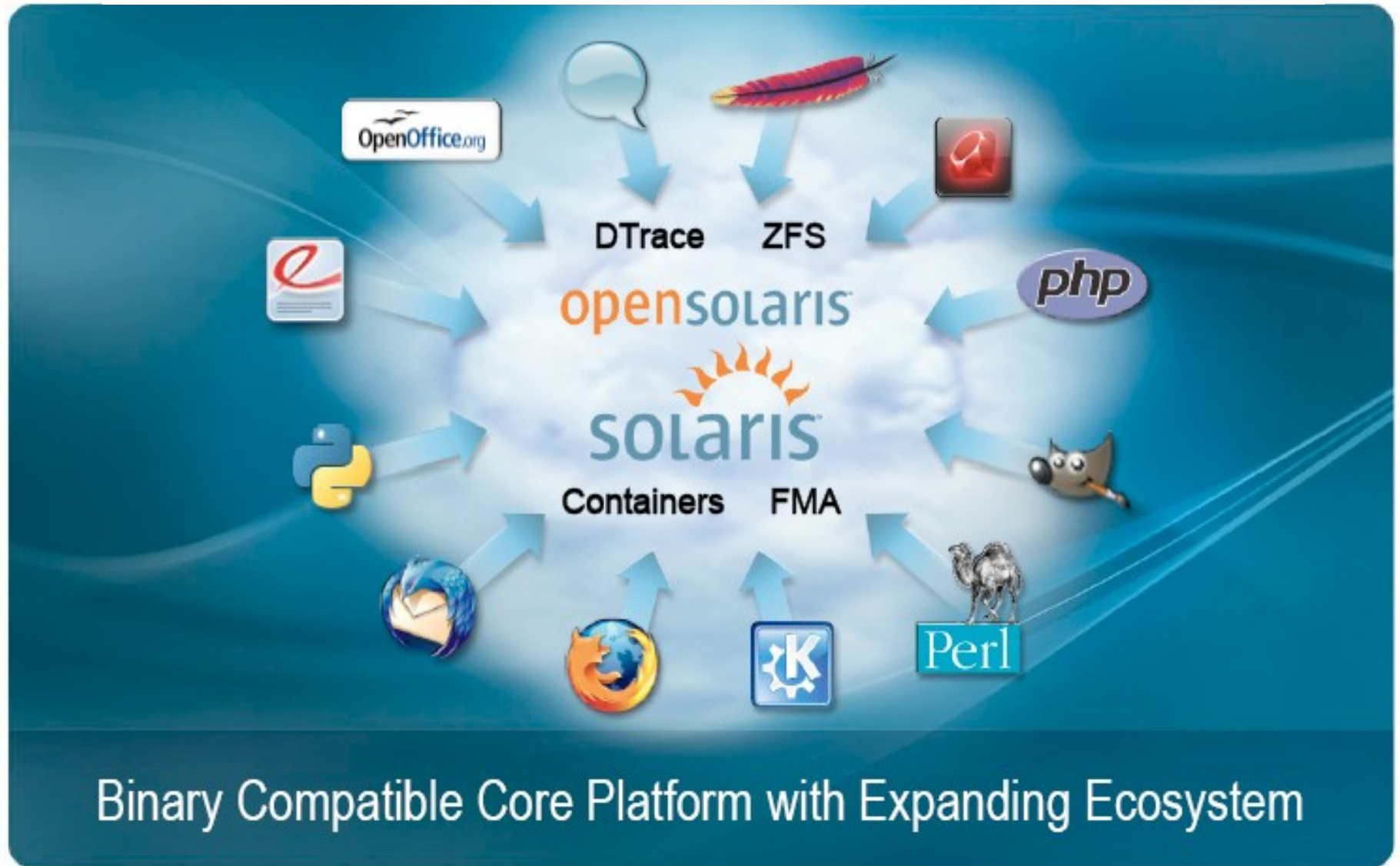
A frog in the well knows nothing of
the great ocean.

An old Chinese Proverb





Best of Both Worlds



Easy to Acquire



Easy to Install

```
File System and Disk Layout

The summary below is your current file system and disk layout, based on the
information you've supplied.

NOTE: If you choose to customize, you should understand file systems, their
intended purpose on the disk, and how changing them may affect the operation
of the system.

File sys/mnt point Disk/Slice      Size
-----
c0d0s0                5090 MB
swap                  c0d0s1                576 MB
overlap               c0d0s2                16.355 MB
/export/home          c0d0s7                106.36 MB

F2. Continue  F3. Go Back  F4. Customize  F5. Exit  F6. Help
```



- Simplified install and upgrade
- Localized graphical installer
- Automates basic system configuration

Easy to Maintain

Image Packaging System

Upgradable
Frozen
Incorporated
eXcluded

```
Terminal
File Edit View Terminal Tabs Help
$ pkg refresh
$ pkg status -a | grep coreutils
pkg:/application/gnu-coreutils@6.7-0.71 uninstalled ----
$ pkg install gnu-coreutils
$ pkg status gnu-coreutils
FMRI                                STATE  UFIX
pkg:/application/gnu-coreutils@6.7-0.71 installed ----
$ ls /usr/gnu/bin
basename      ...
```

```
Terminal
File Edit View Terminal Tabs Help
$ pkg refresh
$ pkg status -a gnu-coreutils
FMRI                                STATE  UFIX
pkg:/application/gnu-coreutils@6.7-0.71 installed U---
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FMRI                                STATE  UFIX
pkg:/application/gnu-coreutils@6.7-0.72 installed ----
```

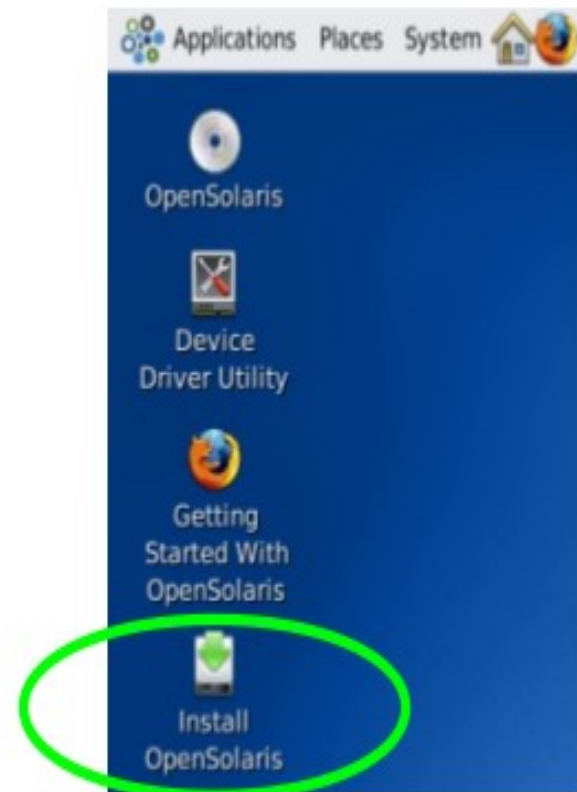
- Easy to administer
- Easy to package for the developer
- More frequent fixes
- Upgrade and rollback with ZFS snapshots

- LiveCD .iso image file available:



<http://www.opensolaris.com/get/>

- Just 3 Steps to Install:
 - > Boot the LiveCD
 - > Start the installer
 - > Answer a few questions



VirtualBox

- Cannot install on the bare metal?
 - > Driver not available
 - > Do not want to re-partition your hard drive

... Not a Problem!



VirtualBox



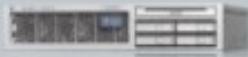
Guest Platforms



Sun xVM | VirtualBox



Host Platforms



x86 Hardware



Types of Virtualization



Multiple OS's

Single OS

Trend to flexibility

Trend to isolation

Dynamic System Domains

Logical Domains
OpenSolaris xVM

Solaris Containers
(Zones + SRM)
BrandZ

Solaris Resource Manager (SRM)

Crossbow

Questions?



Let's Have Some Fun!



1

- **Who is popularly known as the father of Java?**

2

- **Name the 'missing' co-founder of Sun Microsystems from the list below:**
 - > **Andreas Bectelsheim**
 - > **Bill Joy**
 - > **Scott Mcnealy**
 - > **?**

3

- **Who co-created the UNIX Operating System in 1969 with Dennis Richie?**

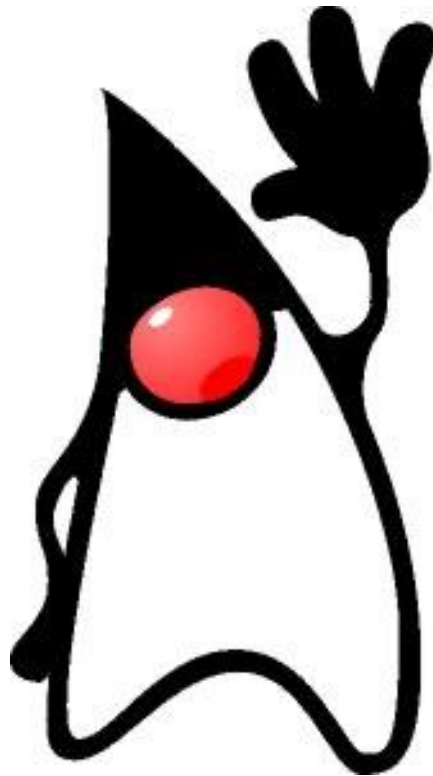
4

- **Which Programming Language has the following mascot?**



5

- **Following is the Java mascot. What is its name?**



6

- **Name the company co-founded by David Filo & Jerry Yang:**

7

- **Which Computer Company is popularly known as “Big Blue”?**

8

- **Which Computer Company developed a product named 'TelePresence' that creates a live, face-to-face communication experience over the network?**

9

- The organization 'Computing Tabulating Recording Corporation (CTR)', incorporated on June 15, 1911 is now known by a different name. What's it?

10

- **Larry Page & Sergey Brin were two Stanford students, who brought a Computer organization to life in September 1998. Name the organization?**

11

- **Name the Indian who co-founded the web-based e-mail service named “Hotmail”?**

12

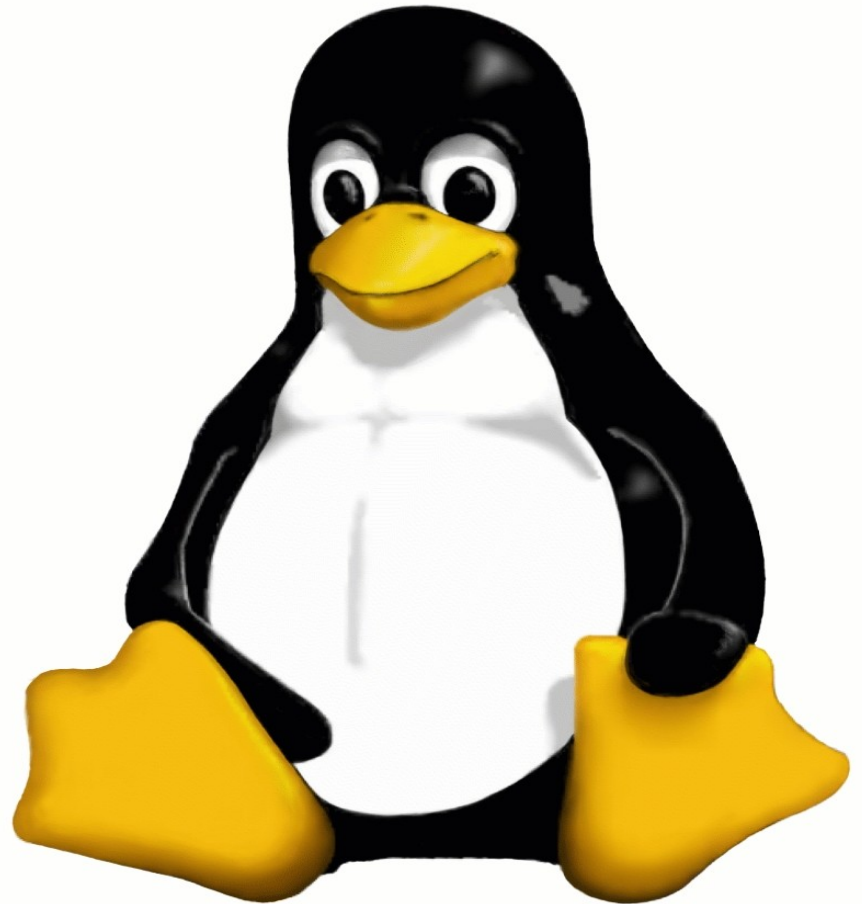
- **Name the Indian behind the invention of Universal Serial Bus (USB)?**

13

- **Paul S Otellini is the President and Chief Executive Officer of a famous organization in the Computer Industry. Which one?**

14

- This is the mascot of Linux. What's its name?



15

- **Which company first manufactured CDs?**

16

- **Name the company who released its latest Operating System with a code name 'Snow Leopard'**

17

- **What does 'Sun' stands for?**

18

- **Who developed the vi editor in Unix Operating System?**

19

- **Who developed the emacs text editor?**

20

- **Who is the Chief Executive Officer of Oracle Corporation?**



Be Nice To Others





Thank you!



Rajesh.R@Sun.COM