



How is Solaris Containers useful to customers

An interactive presentation – not a one way session, ok!

Michael Chua

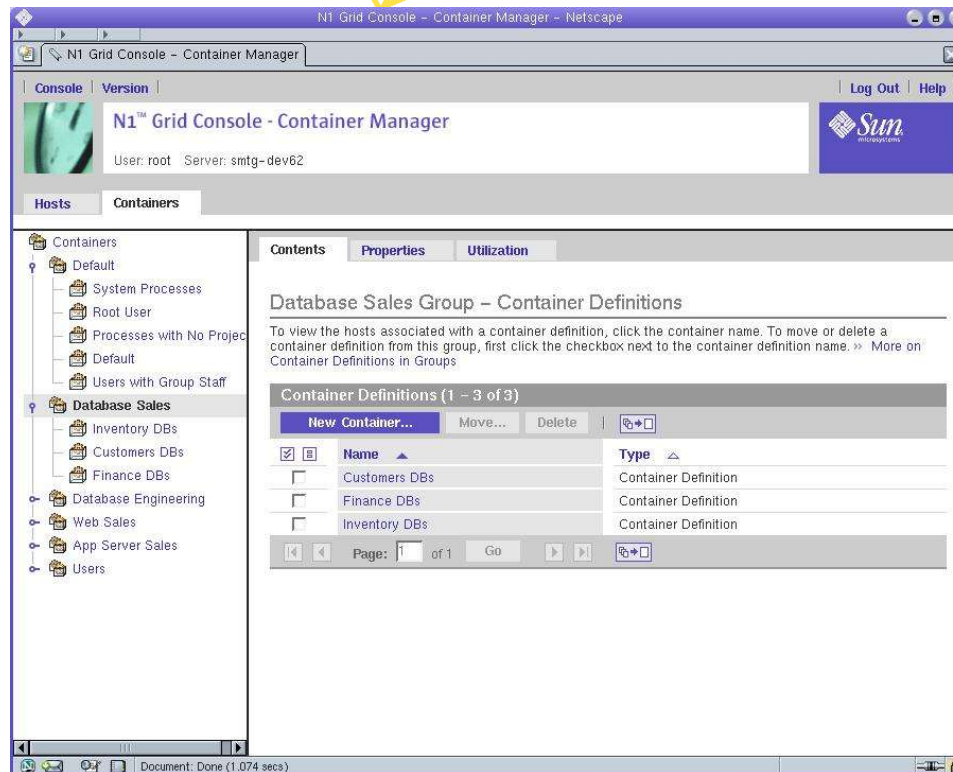
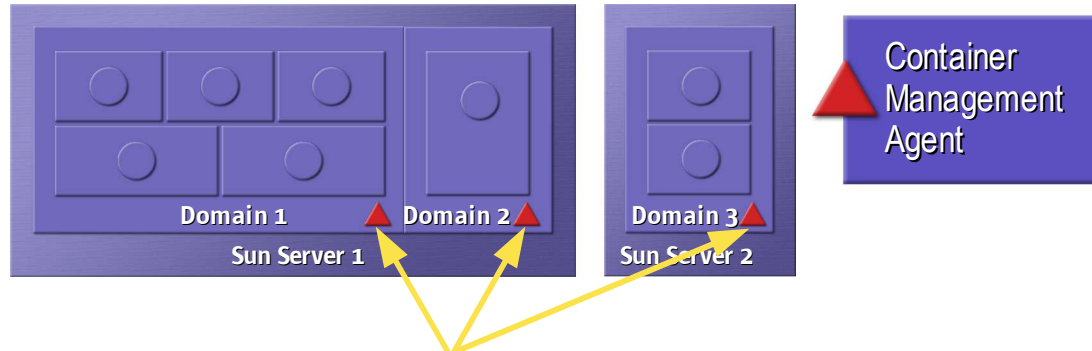
IT Solution Architect



Common Question From IT Managers

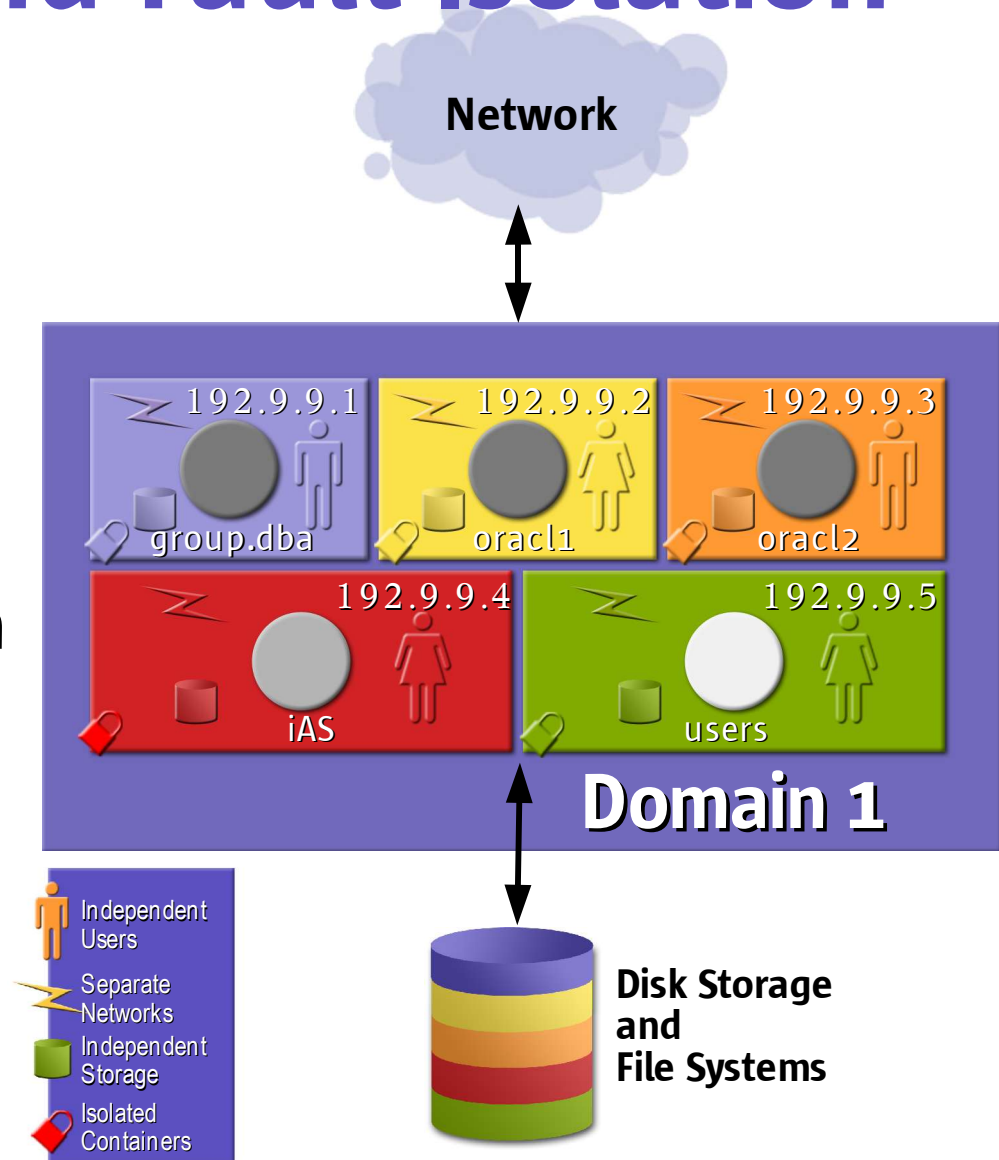
How can I provide predictable service levels to my end users, and ensure all systems are running cost-effectively and efficiently ?

Container Management



Security and Fault Isolation

- Virtualize OS
- Secure Boundaries
- Namespace Control
- Network Isolation
- Application Fault Containment



Benefits (1)

- How about 1 container per system
 - For fast reboots !
- Fast setup of clean OS environment for development and testing
 - Create a container in 3-4 mins
 - Destroy a container in < 1 min

Benefits (2)

- Multiple /etc/system tunings
 - Mixed workload environments
 - Perhaps a /etc/system tuned for Oracle OLTP
 - Another /etc/system tuned for Oracle Batch
- Less patching ??
 - Patch 1 OS for multiple environment

Benefits (3)

- Separate namespaces
 - users, root, IP addresses, ports, filesystem, ...
 - Possibility for different name servers (LDAP, ...)
- No visibility outside own environment
 - ps, /proc, prstat, ... only show local processes
 - No sharing memory other than local

Benefits (4)

- Filesystem is split
 - Private piece of disk for identity & application
 - Shared read-only to underlying OS (/lib,/usr,...)
- Very scaleable
 - Many (+4000) per OS instance
 - Very low overhead

Benefits (5)

- Platform independent
 - Runs on existing SPARC and x86 Hardware (also Opteron)
 - No need for special HW firmware support
- Hardware is dynamically shared
 - Idle cycles can be used by others
 - Uses the RM for guarantees

Benefits (6)

- What else ??

What competitors do ?

- Sow uncertainty
 - Tell customer: What if you want to run different applications dependent on different kernel patch rev
 - In reality: How often do applications demand a specific kernel patch rev
 - Most of the time xxxxx-xx and ABOVE.



Thank you !!

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