Integrating Linux on HP ProLiant Servers

Jonathan Anderson

Infrastructure Architect

Hewlett-Packard

Agenda

- RDP-LE 1.10 for scripted or image Server installation

- iLO for remote management

- ProLiant Support Pack installation and configuration

- Syslog, IML and /proc Server Agent Health Log Monitoring

- Insight Online Diags

- Integration with Systems Insight Manager

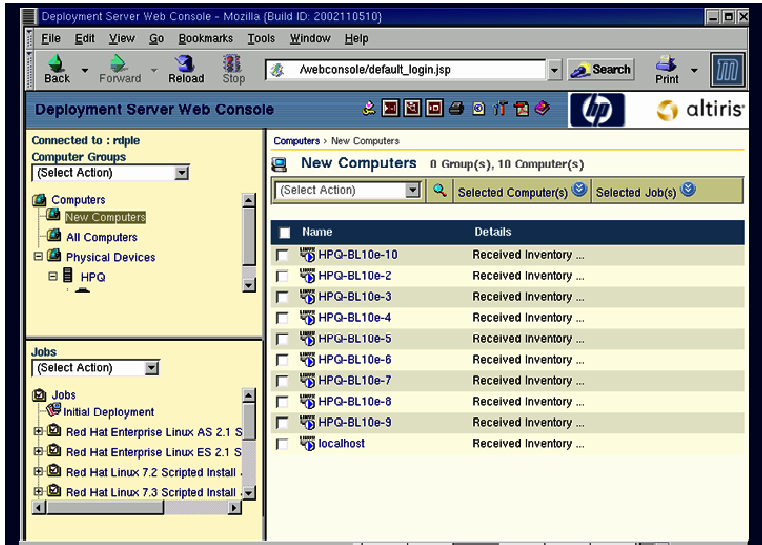- CPQACUXE - HP Array Configuration Utility

"[System] administration can prove quite challenging. It takes skill and experience…"

Bruce Momjian

Core developer on PostgreSQL

RDP-LE 1.10 for scripted or image Server installation

Joint HP and Altiris solution

- Altiris Deployment Server for Linux
  - Off the shelf version
- ProLiant Integration Modules
  - Includes SmartStart Scripting Toolkit and optimizations for ProLiant servers

- Deployment solution hosted on Linux server (Red Hat AS/ES 2.1, United Linux 1.0)
- Utilizes PostgreSQL, Apache/Tomcat, Samba
- Browser-based UI including Mozilla and Netscape
- Event utilities to initiate actions from a command line
- Supports scripted or imaged OS installation
- New imaging engine
  - Support for ext 2 and ext 3 file systems
    - Resize images to different disk types and geometries
    - Better compression than previous versions
    - Image editor to add or change image components
- Collects basic system inventory (hardware and software)
- Software Distribution (patches, security updates, applications)

RDP-LE 1.10 Linux Deployment Server

- Scripted Linux OS install of RHEL 2.1/3.0 and SLES8 distribution from a configuration answer file
- Post OS installation steps to upgrade kernel and source tree
- Server image and recovery testing
- Demonstration of typical ongoing scripted server maintenance and upgrade tasks, i.e., online ROM flashing from within Linux host OS

iLO Remote Management Processor

- (HPONCFG) Local Online Configuration of iLO
- (LOCFG) Perl implementation for Network based iLO configuration
- Simple Command Line Interface (CLI)
  - Serial (RS232) or network based
  - Network mode is provided via SSH or Telnet
  - Serial mode can operate non-authenticated
  - Serial port is shared with host system devices

  - Command set:
    - HELP: Display help text
    - POWER: Control server power
    - UID: Control server Unit-ID light
    - NMI: Assert the NMI signal to the server CPU
    - REMCONS: Invoke Remote Console
    - SERIAL: Invoke Virtual Serial Port
    - EXIT: Exit the CLI

- Scriptable Virtual Media
- Sideband support on Nocona servers

ProLiant Support Pack installation and configuration

- Graphical mode installation

- Terminal window installation

- Scriptable silent installation

Syslog, IML and /proc Server Agent Health Log Monitoring

- /var/log/messages

- /proc
  - cpqfan
  - cpqpwr
  - cpqtemp

- hpimlview – text or XWindows viewer for the Integrated Management Log

- hpuid – check or change status of Unit ID light

Online Survey Functionality
Web-based management and service tool

- Captures hardware and operating system configuration

- Records critical information for documentation and disaster recovery

- Compares historical configurations on the same server or a baseline server

- Streamlines configuration analysis & troubleshooting process

Accessibility
- Windows or Linux Browser
- From the System Management Homepage
- From HP Systems Insight Manager

Integration with Systems Insight Manager
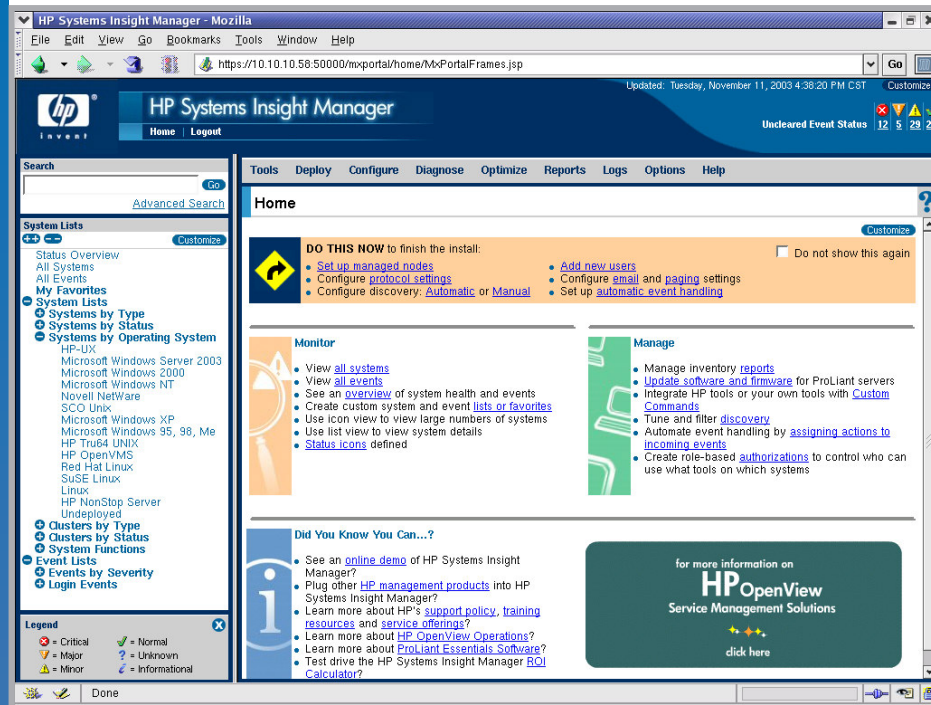
browser AND command line interfaces
Mozilla compatible

- Combines all of the features from Insight Manager 7 and Servicecontrol Manager

- Central management server installed on Linux host and addressed through web browser or command line

- Provides comprehensive status information and alerting for ProLiant, HP 9000 and Integrity servers

- Communicates using industry standard protocols like WBEM, SNMP and HTTP

- Distributed task functionality through secure shell (SSH) allows management and distribution of jobs to one or many systems

- Role-based security provides ability to allow/deny access to tools and systems based on individual users

CPQACUXE - HP Array Configuration Utility

- Online configuration utility for SmartArray controllers

- Local or remote browser access
  - when enabled remote only, will only respond to 127.0.0.1

- ACU can change stripe sizes, tune the accelerator, grow logical volumes, add additional drivers or arrays

- Command Line Interface can tune individual parameters or can be used to capture the entire configuration

- Configuration ini file can then be used to apply the configuration again to the same or a different drive

HP WORLD 2004
Solutions and Technology Conference & Expo

Co-produced by:

interex
shared knowledge • shared power

encompass
AN HP USER GROUP

RECOMMENDED TRAINING VENUE FOR THE
HP Certified Professional