Cray Product Installation and Configuration

Scott E. Grabow

CATS - Software Engineering Services

grabowc@cray.com



Topics Covered in the Presentation

- Changes made between UNICOS 9.0 and UNICOS 10.0/UNICOS/mk
- Common Installation Tool(CIT)
- Process similarities for initial and upgrade installation
- Insight and issues of the new process
- If problems are encountered
- Comparison between UNICOS 9.0 and UNICOS 10.0 manuals



Changes Requested by Customers

Provide

- an executable binary release for mainline systems
- a robust process for validating software installed
- complete replacement releases

Reduce the

- amount of time to perform an installation
- complexity of the UNICOS Installation Guide
- Ensure that relocatable and source files match
- Sharing a single source during OS upgrades



Changes to Improve Package Quality and Support

- Reduce
 - package complexity
 - the number of variances in packages
- Provide a fully populated root and usr file system
- Simplify the installation instructions
- Perform upgrade tests on all systems that a release supports
- Make USMID lines consistent



Changes made for Common Packaging and Installation Process

- UNICOS now has three package types
- UNICOS/mk now has two package types
- Unify the installation processes so they use the same tools
- Separation of old installation process into two separate processes



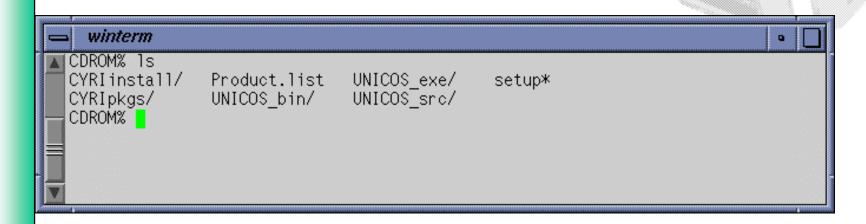
Common Installation Tool (CIT) Basics



- CIT is now the default installation tool
- CIT is a tasked based installation process with a wrapper
- Problems highlighted by CIT and may be caused by package or remote system issues



What is Present on the CD-ROM with CIT?



- Each CD-ROM shipped contains CIT and support software
- Use the CIT contained on the CD-ROM and not other versions



Things Not Recommended with CIT

- Usage of the Root Prefix in CIT's GUI mode or rootdev in CIT's interactive mode
- Modification of Verification Information files (vif) as they are checksumed during the installation



Similarities Between the Installation Process for UNICOS and UNICOS/mk

- UNICOS and UNICOS/mk software installation follow the same high level process:
 - Preparation
 - Installation of new software
 - Configuration tasks
- Documentation flow and text are similar
- Software is shipped in similar packages
- UNICOS and UNICOS/mk pre-installed on systems
- Asynchronous product installation is less complex



Upgrade Installation Process

- Preparation
- Installation of new software
 - install software on the mainframe
 - verify the software was loaded correctly
 - UNICOS.pstload or UNICOSmk.pstload
- List revision and update mods in this revision
- Apply local mods
- Configuration tasks



Issues with the New Process

- Need for PRIV_SU and NETW_RCMD_COMPAT active in the kernel
- A network connection is required between the workstation and the mainframe
- Sites with security concerns should now perform software installation during dedicated time



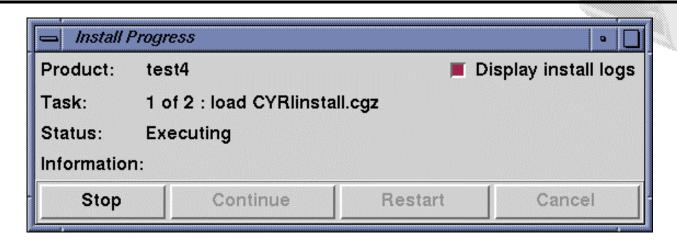
Issues with the New Process

(continued)

- Software being loaded can not reside on DFS file systems, file systems must be local
- A second source partition is needed for UNICOS 9.0 to UNICOS 10.0 upgrade.
- UNICOS 10.0 to future UNICOS 10.0 upgrades can be done with a single source filesystem



Where to Look if Problems Occur



- Click on the radio dialog 'Display Install logs' in the Install Progress Window to view CIT installation logs
- CIT installation logs are kept in /tmp/cit.username
- Important log files are:
 - PackageName.log, config.new
 - cit.log, cit.misc.log



If Problems are Experienced and an SPR is filed

- To quickly address installation problems from a site please provide:
 - Log files from /tmp/cit.username
 - System information from the sysinfo file
 - Whether an initial or upgrade Installation was performed
 - Going from release X to release Y
 - Was a single source upgrade being performed
 - Were backup copies of release X being updated
 - Options to commands given



Why the Manuals were Changed with the New Installation Process

- UNICOS 9.0 and early UNICOS/mk Installation Guides had installation and configuration steps intermixed
- The UNICOS 9.0 Installation Guide was poorly organized
- First time customers and users were unsure where to start when loading UNICOS 9.0



In Summary

- The new process provides features requested by customers
- Relocatable files and source files now match
- More upgrade installation tests are are now possible
- Installation time for a source release has been reduced from 9 hours for UNICOS 9.0 to 3 hours for UNICOS 10.0
- UNICOS and UNICOS/mk installation follow a similar process and use Common Installation Tool
- More focused manuals

