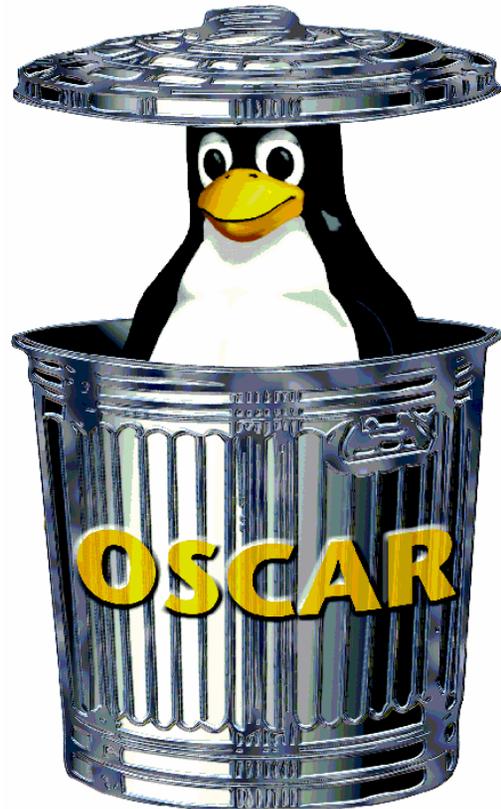


OSCAR Meta-Package System (v4.x)

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OSCAR

Open Source Cluster Application Resources



Introduction

- What is an OSCAR Meta-package?
- What types of changes are we making to the OSCAR Meta-package system in 4.x?
- “Spin off” projects: HA-OSCAR, SSS-OSCAR, Thin-OSCAR
- Extensibility and portability pay dividends

Overview of Current OSCAR Infrastructure

- Cluster configuration database (ODA)
- Installation system (SIS)
- Cluster environment management system (switcher)
- Remote operation mechanism
- Graphical user interface (GUI) wizard
- Meta-packaging system
- Testing framework

Oscar Packages

Have a defined directory structure consisting of the following files/dirs:

config.xml

RPMS/

SRPMS/

testing/

doc/

scripts/

Oscar package script phases

1. Setup
2. Configurator
3. Rpm-install
4. Post-clients
5. Post-install
6. Post-uninstall

OSCAR Meta-Package System Services

- Information storage/retrieval in a central database (ODA)
- OPM: OSCAR Package Manager
- Test harness
- Configurator
- DepMan/PackMan or an interface to installing and removing system level packages (RPMS)

Oscar Package Library (LibOPKG)

- A library that offers an OSCAR package author the ability to modify the cluster operating environment and account for the modifications
- File system modifications
- OS environment modifications
- Un-installation issues

DepMan/PackMan

- An abstraction layer to working with native packaging systems like RPMS
- Decouples an OSCAR Package from an underlying native packaging system
- Resolves dependencies in the underlying system packages so the developer does not have to

OSCAR Package Manager(OPM)

- A piece of software that reads from the database and installs or uninstalls software across the cluster
- SIS currently handles this by installing all selected software in the initial image.
- Installation and Un-installation is currently handled by a separate mechanism and the image is updated
- Minimal image

Package Sets

- A way to logically group a collection of OSCAR packages
- Gives the ability to express a relationship between groups of packages
- Increase OSCAR's viability as an installation framework for multiple projects

Conclusion

- The OSCAR Meta-Package system is being actively improved to provide OSCAR package authors high quality API's and services
- OSCAR's portability is increasing
- The extensibility of the OSCAR framework to other projects can be improved through the packaging system

More OSCAR Information...

Open Cluster Group

www.openclustergroup.org/

OSCAR Home Page

oscar.openclustergroup.org/

OSCAR on Sourceforge

sourceforge.net/projects/oscar/

Mailing Lists

oscar-users@lists.sourceforge.net

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