



Datagrid Software Repository Presentation

CVS, packages, automatic building and release list
definitions

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- ◆ Current status of Autobuild (RH6.2)
- ◆ Current questions

Module Name	CVS tag	Customized	README	Build Method	Autotools	Configure	Make	Make install	Make RPM
edg-java-tools	v1_0_0	NO	SUCCESS	Unknown	FAILED	FAILED	FAILED	FAILED	FAILED
edg-java-security	v1_2_1	NO	SUCCESS	Ant	NA	NA	SUCCESS	SUCCESS	SUCCESS
edg-java-soap-example	v1_0_0	NO	SUCCESS	Ant	NA	NA	SUCCESS	SUCCESS	SUCCESS
gdmf	v3_2_2	NO	SUCCESS	AutoTools-	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
edg-replica-manager	v2_0_2	NO	SUCCESS	AutoTools-	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
edg-spitfire-server	v2_0_1	NO	SUCCESS	Ant	NA	NA	SUCCESS	SUCCESS	SUCCESS
edg-spitfire-browser	v2_0_1	NO	SUCCESS	Ant	NA	NA	SUCCESS	SUCCESS	FAILED
edg-rls-server	v1_0_1	NO	SUCCESS	Ant	NA	NA	SUCCESS	SUCCESS	SUCCESS
edg-rls-client	v1_0_1	NO	SUCCESS	Ant	NA	NA	SUCCESS	SUCCESS	FAILED
Workload	v1_2_15	YES	SUCCESS	AutoTools+	SUCCESS	SUCCESS	FAILED	FAILED	FAILED
edg-info-main	v2_0_1-0	NO	SUCCESS	Makefile	NA	NA	SUCCESS	SUCCESS	SUCCESS
gma	v2_2_7	NO	SUCCESS	Ant	NA	NA	SUCCESS	SUCCESS	WARNING
grm	v1_1_0	NO	SUCCESS	Makefile	NA	NA	SUCCESS	SUCCESS	SUCCESS
fault-tolerance	HEAD	NO	SUCCESS	Makefile	NA	NA	SUCCESS	SUCCESS	SUCCESS
monitoring	v2_2_2	YES	SUCCESS	Makefile	NA	NA	SUCCESS	SUCCESS	SUCCESS
lcas	v1_1_6	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	WARNING	SUCCESS	SUCCESS
rms	v2_0_2	NO	SUCCESS	Makefile	NA	NA	WARNING	SUCCESS	SUCCESS
information_providers	v2_0_8	NO	SUCCESS	Makefile	NA	NA	SUCCESS	SUCCESS	SUCCESS
edg-lcfg	v1_4_10	NO	SUCCESS	Makefile	NA	NA	SUCCESS	SUCCESS	SUCCESS
edg-se-query	v1_0_2	NO	SUCCESS	AutoTools	SUCCESS	FAILED	FAILED	FAILED	FAILED
edg-se-libstringextra	v1_2_1	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
edg-se-libhandler	v1_4_0	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	FAILED	FAILED	FAILED
edg-se-getSECosts	HEAD	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
edg-se-housekeeper	v0_1_0	NO	SUCCESS	Configure	NA	SUCCESS	FAILED	FAILED	FAILED
edg-mkgridmap	v1_0_10	NO	SUCCESS	Configure	NA	SUCCESS	SUCCESS	SUCCESS	SUCCESS
edg-utils	v1_2_5	NO	SUCCESS	AutoTools-	SUCCESS	SUCCESS	SUCCESS	FAILED	SUCCESS
edg-docs	v1_2_2	NO	SUCCESS	AutoTools-	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
edg-example	v1_4_2	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
edg-build	v0_9_2	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	FAILED	FAILED	FAILED
iperf	v1_0_4	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
pinger	v1_0_3	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
udpmon	v1_0_3	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
netmon	v1_0_8	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
rtpf	v1_0_5	NO	SUCCESS	Makefile	NA	NA	SUCCESS	SUCCESS	SUCCESS
netconf	v1_0_0	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	FAILED	SUCCESS
netagent	v1_0_1	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	SUCCESS	SUCCESS
netmon2rgma	v1_0_0	NO	SUCCESS	AutoTools	SUCCESS	SUCCESS	SUCCESS	FAILED	SUCCESS
netmon-rgma-info	HEAD	NO	SUCCESS	AutoTools	SUCCESS	FAILED	FAILED	FAILED	FAILED
netmon-archiver	v1_0_1	NO	SUCCESS	Ant	NA	NA	FAILED	FAILED	FAILED
ftlog2rgma	v1_0_0	NO	SUCCESS	AutoTools	SUCCESS	FAILED	FAILED	FAILED	FAILED



Questions and progress : Autobuild

◆ 1.1 Build machine(s)

- Define an 'application' and a 'development' machine ?

◆ 1.2 Packages dependencies

- Packages are build in order, don't mix any more HEAD and TAGGED.

◆ 1.3 Informing about build errors

- Emails ?
- Error parsing ?

◆ 1.4 Dealings with build hanging

- Done with a timeout of 1000 seconds
- Report the actual time ?

◆ 1.5 Build On Demand

- Can be triggered by a tag
- Problem with remote modules (cvsup)

◆ 1.6 Build machine clones

- Everything has to be RPM (what with custom tricks? What with different build environment ?).



Questions and progress : package management

- ◆ 2.1 edg-release pages
 - Can they be improved ?
- ◆ 2.2 Dependency control
 - At which stage ? For what ?
- ◆ 2.3 Package list generation from dependency
 - Should I do that ?
 - I want to, because I expect to maintain the build machine rpm list with it.



Edg-release rpm lists

Release Versions	Beta Versions	Alpha Versions
edg-v1_2_0.html edg-v1_1_4.html edg- edg- edg-	edg-beta10 edg 1 2.html edg-beta9 edg 1 2.html edg-beta8 edg 1 2.html edg-beta7 edg 1 2.html	edg-HEAD.html edg-alpha11 edg1 2.html edg-alpha10 edg1 2.html edg-alpha9 edg1 2.html edg-alpha8 edg1 2.html edg-alpha7 edg1 2.html

EDG Software Release v1_2_0 - Fri Aug 30 05:59:24 2002

element name	All	ca	edg	globus	external	rh6.2	lcfg	appcommon	appwp8	appwp9	appwp10
CE	All (698)	ca (16)	edg (27)	globus (201)	external (43)	rh6.2 (345)	lcfg (28)	appcommon (4)	appwp8 (33)	appwp9 (1)	appwp10 (0)

Dependancies for CE version v1_2_0 - Thu Aug 29 19:26:03 2002

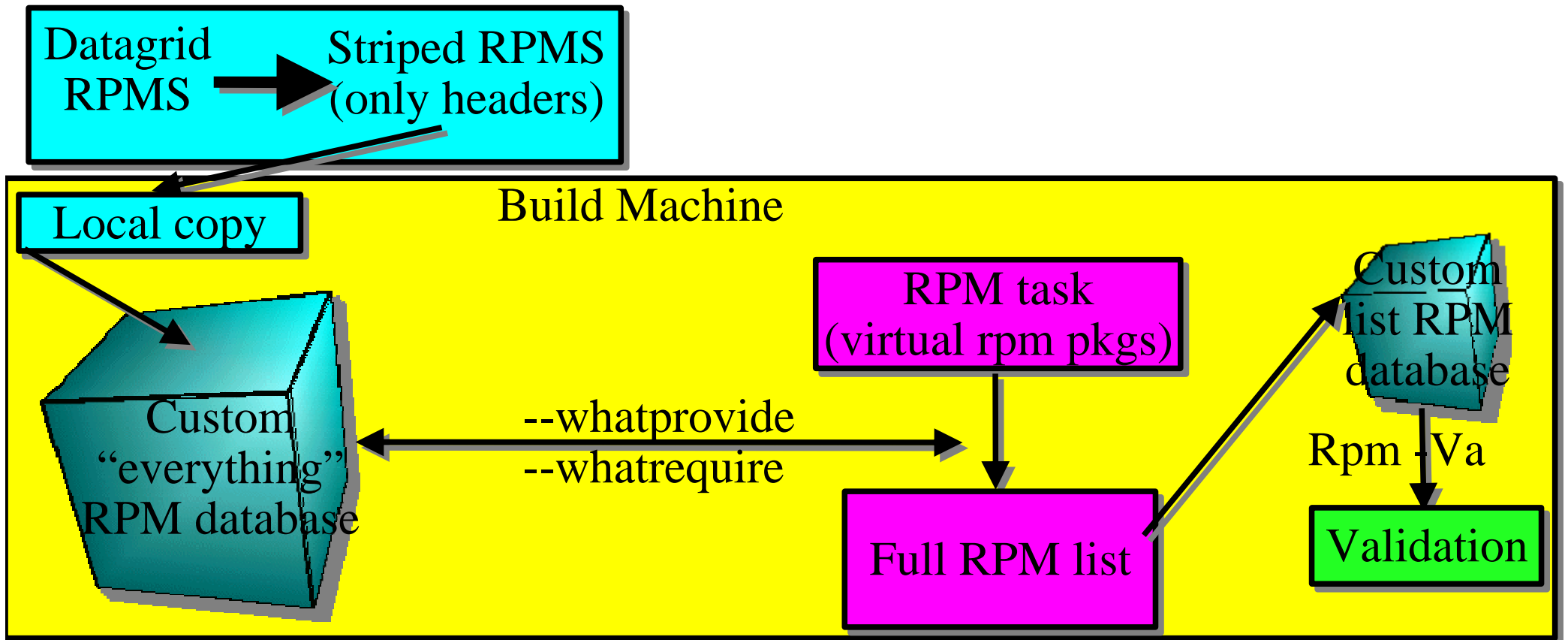
WN	All (50)	<pre>\$ rpm --dbpath /scratch/BuildSpace/tmp/rpmDB/var/lib/rpm -Va --nofiles</pre>
UI	All (51)	<pre>Unsatisfied dependencies for usermode-1.37-1.6: util-linux Unsatisfied dependencies for XFree86-3.3.6-29: util-linux Unsatisfied dependencies for obj-afs-0.9-10.edg: openafs-client</pre>
NM	All (43)	<pre>\$ rpm --dbpath /scratch/BuildSpace/rpmDB/up2date/cache -q --whatprovides util-linux</pre>
P	All (43)	<pre>util-linux-2.10f-7 \$ rpm --dbpath /scratch/BuildSpace/rpmDB/up2date/cache -q --whatprovides openafs-client</pre>
RB	All (50)	no package provides openafs-client



Creating RPM lists from dependencies I (idea)

- ◆ Problem : Managing huge lists of RPM (edg-release) can be difficult.
- ◆ Idea : Creating them from the RPM inter-dependencies

Practical implementation





Creating RPM List from Dependencies II (example)

Redhat-base-edg-0.0.1-1.i386.rpm
redhat-kernel-edg-0.0.1-1.i386.rpm
task-build-wp6-0.0.1-1.i386.rpm

- task-build-wp6-0.0.1-1
 - libtool-1.3.5-8
 - info-4.0-5
 - autoconf-2.13-5
 - info-4.0-5
 - gawk-3.0.4-2
 - m4-1.4.1-4
 - info-4.0-5
 - bash-1.14.7-23.6x
 - glibc-2.1.3-22
 - glibc-2.1.3-22
 - glibc-2.1.3-22
 - glibc-2.1.3-22
 - mktemp-1.5-2.1.6x
 - perl-5.00503-12
 - tcsh-6.10-0.6.x
 - no-package-provides
 - fileutils-4.0-21
 - grep-2.4-3
 - bash-1.14.7-23.6x
 - glibc-2.1.3-22

Name: task-build-wp6
[...]
This is for edg-example
Requires: libtool
Requires: automake
Requires: autoconf
Requires: make
Requires: c++
Requires: doxygen
Requires: sgml-tools
Requires: tetex-dvips
Requires: ghostscript
[...]

Full RPM List