

ABout Time Linux - Eric's dep engine notes

Eric D. Schabell

erics@abtlinux.org

September 9, 2005

1 Introduction

A few things they need to do:

1. get to know abtlinux.org and wiki.abtlinux.org.
2. become members.
3. obtain email address for abtlinux.org, mail me!
4. use forum topic for questions, comments.
5. irc on freenode.net for comments (low, erics).
6. in english, use latex, see template for doc, cases en scenarios.

A few requirements I have:

- dependency will specify a version (or use default?)
- dependencies will be ordered for a correct build process (dep engine!)
- support build-time and run-time dependencies:
 - a buildDep is a dependency needed to build some package.
 - RELIES ON (RO) - 'A' RO 'B'; then 'A' will be rebuilt if 'B' config changes.
 - DEPENDS ON (DO) - 'A' DO 'B'; then 'A' will be rebuilt anytime 'B' is rebuilt.
 - leads to several types of depends:
 - * permanently relies on
 - * permanently depends on
 - * optionally relies on
 - * optionally depends on
- prevent removal of packages with DEPENDS ON (DO) dependencies.
- auto add packages with RELIES ON (RO) dependencies to build queue if user rebuilds a package that relies on it.

- check for possible dependency breakage for a package, both up and down the dependency tree.
- generate the dependency tree for given package, both up and down.
- provide count of packages dependent on a given package.
- provide count of packages a given package is dependent on.
- provide list of packages installed w/o any dependencies.
- log dependency engine actions.