RPM and Yum

Nick Urbanik

at is RPM?

RPM Commands

RPM Command

Yum — Sounds delicious!

Updates

The "repos": repositories

Some Things to Read

License Of This

RPM and Yum

How to manage your packages without UPS

Nick Urbanik <nicku@nicku.org>
This document Licensed under GPL—see section 8

What is a Package? Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries Install Update Freshen Erasing

Verfying Checking Digital

Signatures

RPM Command Examples
A quick comparison with dpkq

Yum — Sounds delicious!

Why not stick with RPM? What's all this primative text stuff?

Updates

Why update? Why not update? How to update Setting http_proxy

The "repos": repositories

Adding extras
Digital signatures
Some Things to Read

License Of This Document

- RPM stands for The RPM Package Manager.
 - It used to stand for Red Hat Package Manage
- ▶ It is used to manage *packages*.
 - ► "Oh. I see."
 - ▶ no l don't

RPM and Yum

Nick Urbanik

What is RPM?

What is a Package?
Why should I have packages? Why not just zip files or something?
Advantages of RPM packages

RPM Command

RPM Command Examples

Yum — Sound delicious!

Update

e "repos":

Some Things to Read

- RPM stands for The RPM Package Manager.
 - It used to stand for Red Hat Package Manager
- ▶ It is used to manage *packages*.
 - ► "Oh. I see.
 - ▶ ... no I don'

RPM and Yum

Nick Urbanik

What is RPM?

What is a Package?
Why should I have packages? Why not just zip files or something?
Advantages of RPM packages

RPIVI Comman

RPM Command Examples

'um — Sound lelicious!

puales

he "repos":

omo Things to Boa

Some Things to Read

cense Of This ocument

- RPM stands for The RPM Package Manager.
 - ▶ It used to stand for Red Hat Package Manager
- It is used to manage packages.
 - ► "Oh, I see
 - no I don't

RPM and Yum

Nick Urbanik

What is RPM?

What is a Package?
Why should I have packages? Why not just zip files or something?
Advantages of RPM packages

RPIVI Command

RPM Comman Examples

Yum — Sound delicious!

Upuales

he "repos":

Some Things to Read

- RPM stands for The RPM Package Manager.
 - It used to stand for Red Hat Package Manager
- It is used to manage packages.
 - ► "Oh, I see."
 - ▶ ... no I don't...

RPM and Yum

Nick Urbanik

What is RPM?

What is a Package?
Why should I have packages? Why not just zig files or something?
Advantages of RPM packages

HPIVI Command

RPM Comman Examples

Yum — Sound delicious!

phoales

he "repos":

Some Things to Read

- RPM stands for The RPM Package Manager.
 - It used to stand for Red Hat Package Manager
- It is used to manage packages.
 - ► "Oh, I see."
 - ▶ ... no I don't...

RPM and Yum

Nick Urbanik

What is RPM?

What is a Package?
Why should I have
packages? Why not just zig
files or something?
Advantages of RPM
packages

RPIVI Comman

RPM Command Examples

Yum — Sound delicious!

puales

ne "repos": positories

Some Things to Read

What is RPM?

What is a Package?
Why should I have packages?
Why not just zin files or

something?

Advantages of RPM packages

RPM Command

Querie

Install

Update

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

/um — Sounds delicious!

What's all this primative text stuff?

Indates

Why update? Why not update?

How to update

Setting http_proxy

Adding extras

Digital signatures

Some Things to Read

icense Of This Document

RPM and Yum

Nick Hrhanik

hat is RPM?

What is a Package?

Why should I have packages? Why not just a files or something? Advantages of RPM

RPM Command

Examples

um — Sounds elicious!

Updates

he "repos": epositories

Some Things to Read

icense Of This locument

What is an RPM Package?

- It's a piece of software, all put in one RPM file
- ► For example, I am using the... let's see...

```
$ rpm -q evince \leftarrow evince-0.5.1-3
```

... software package to display these notes.

- ▶ The *name* of the package is evince.
- ► The *version* of the package is 0.5.1
- ► The *release* is 3.

RPM and Yum

Nick Urbanik

hat is RPM?

What is a Package?

Why should I have packages? Why not just zig files or something?

Advantages of RPM

RPM Comma

RPM Comma

Yum — Sound

Jpdates

ne "repos": positories

Some Things to Read

An RPM Package usually contains files

► My evince package has files inside:

```
$ rpm -ql evince ←
/etc/gconf/schemas/evince-thumbnailer.schemas
/etc/gconf/schemas/evince.schemas
/usr/bin/evince
...
/usr/share/omf/evince/evince-sr.omf
/usr/share/omf/evince/evince-uk.omf
```

RPM and Yum

Nick Hrhanik

What is RPM?

What is a Package?

Why should I have packages? Why not just zij files or something? Advantages of RPM

RPM Command

RPM Comma Examples

'um — Sound Jelicious!

Jpdates

ne "repos":

Some Things to Read

What is RPM?

Why should I have packages? Why not just zip files or something?

A quick comparison with dpkg

RPM and Yum

Nick Hrhanik

Why should I have packages? Why not just zip files or something?

Why should I have packages? Why not just zip files or something?

► We could just have zip files, or tar balls, or something like that, with just the files inside?

- It could work.
- ► So why have RPM packages?

RPM and Yum

Nick Urbanik

What is RPM?

What is a Package?
Why should I have

Why should I have packages? Why not just zip files or something?

Advantages of RPN packages

RPM Commar Examples

> um — Sound elicious!

Updates

he "renne":

ie "repos": positories

Some Things to Read

What is RPM?

What is a Package? Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Querie Install Update Freshe

Erasing Verfvind

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

/um — Sounds delicious!

What's all this primative text stuff?

Jodates

Why update? Why not update?

How to update

The "repos": repositorie

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Hrhanik

hat is RPM?

What is a Package?
Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

HPM Commar

xamples

ım — Sounds elicious!

Update:

he "repos": positories

Some Things to Read

Advantages of RPM packages

- You can install a new package easily with one operation
- You can uninstall a package just as easily
- the package can contain information about what else it needs to work properly
- RPM won't clobber configuration files, and does sensible things with them
- ➤ The RPM system includes a database with lots of information about how the files should be installed, their size, owner, type,...

RPM and Yum

Nick Urbanik

Vhat is RPM?

What is a Package?
Why should I have
backages? Why not just z
iles or something?

Advantages of RPM packages

RPM Command

um — Sounds

Updates

ne "repos":

Some Things to Read

RPM Commands

RPM and Yum
Nick Urbanik

THOR O'DU'III

RPM Commands

Queries

Install

Fresher

Erasing

Vertying

Examples

delicious!

odates

'he "repos": epositories

Some Things to Read

iconeo Of This

License Of This

There are seven main RPM operations:

- For installing software packages:
 - update, install, freshen
- ► For making *queries*
- ► for *erasing* packages
- for verifying that a software package is correctly installed
- for checking signatures verifying that an RPM package file is really from the people you trust, and not from Joe Trojan Cracker

RPM Commands

Queries

A quick comparison with dpkg

RPM and Yum

Nick Hrhanik

Queries

Queries

► You saw above that I can list the files with

\$ rpm -ql evince ←

- ▶ I can also see information about the package with
- \$ rpm -qi evince \hookleftarrow
- ► Try it now!

RPM and Yum

Nick Urbanik

Vhat is RPM?

RPM Commands

Queries

Install

Freshen

Erasing

Chacking Digital Sign

Examples

Yum — Sounds

Updates

The "repo

Some Things to Rea

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or
something?
Advantages of BPM packages

RPM Commands

Oueries

Install

Update Freshen Frasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

What's all this primative text stuff

Indates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositorie

Adding extras
Digital signature

Some Things to Read

License Of This Document

RPM and Yum

Nick Hrhanik

Vhat is RPM?

RPM Command

Install

Update

Fresher

Erasing

Checking Digital Signature

Examples

Yum — Sounds delicious!

Updates

The "repos epositorie:

Some Things to Rea

Install

- ► This will install a software package, regardless of whether there is a previous version installed
- ► This is always the right thing to do for kernels.

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Commands

Install

Lindata

Fresher

Erasing

Checking Digital Sign

RPM Command Examples

Yum — Sound

Undates

he "repos

Como Things to Rose

onle mings to near

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or
something?

RPM Commands

Queries Install Update

Freshen

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

What's all this primative text stuff?

Updates

Why update? Why not update

How to update

The "renos": renositorie

Adding extras
Digital signature

Some Things to Read

License Of This Document

RPM and Yum

Nick Hrbanik

hat is RPM?

RPM Command

Queries

Install Update

Freshen

Erasing

Checking Digital Signatures

Examples

Yum — Sounds delicious!

Updates

The "repos repositorie

Some Things to Read

Update

RPM and Yum Nick Urbanik

Nick Urbanik

Vhat is RPM?

RPM Commands

Querie

Update

Freshen

Verfying

Checking Digital Signature

RPM Command Examples

delicious!

Updates

The "repos

Some Things to Read

- Install a package if it is not installed, or
- install a newer version if there is a newer version available...
- ... otherwise, do nothing.
- Let's use this command to install the wonderful Planet Penguin Racer game:
- ▶ \$ cd ~/mnt ←
- \blacktriangleright \$ ls -1 \hookleftarrow
- ightharpoonup \$ sudo rpm -Uhv \$(ls|grep -v kernel) \hookleftarrow

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or
something?
Advantages of RPM packages

RPM Commands

Querie Install Update

Freshen

Erasing Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

/um — Sounds delicious!

What's all this primative text stuff?

Updates

Why update? Why not update?

Setting http_proxy

The "repos": repositories

Adding extras
Digital signatures
Some Things to Read

License Of This Document

RPM and Yum

Nick Hrhanik

/hat is RPM?

RPM Command

Install

Update

Freshen

Verfying

Checking Digital Signatures

Examples

Yum — Sounds delicious!

Updates

The "repos epositorie:

Some Things to Read

Freshen

Install a new version of a package only if an older one is already installed, otherwise do nothing. RPM and Yum

Nick Urbanik

hat is RPM?

DDM Commands

Queries Install

Freshen

Eracina

Verfying

Checking Digital Signal

Examples

Yum — Sounds

Updates

he "repos

·

Some mings to Read

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or
something?
Advantages of RPM packages

RPM Commands

Queries Install Update Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with ${\tt dpkg}$

Yum — Sounds delicious!

What's all this primative text stuff'

Undates

Why update? Why not update

How to update

The "renos": renositorie

Adding extras
Digital signature

Some Things to Read

License Of This Document

RPM and Yum

Nick Hrbanik

hat is RPM?

RPM Command

Queries

Update

Erasing

erfying

Examples

Yum — Sounds

Updates

The "repos epositorie

Some Things to Read

Erasing

► Remove a package:

```
$ sudo rpm -e ppracer ←
```

RPM and Yum

Nick Urbanik

hat is RPM?

DBM Common

Queries

Install

Freshe

Erasing

Checking Digital

Examples

Yum — Sounds delicious!

Updates

The "repos

Some Things to Read

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or
something?
Advantages of BPM packages

RPM Commands

Queries Install Update Fresher Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

'um — Sounds delicious!

What's all this primative text streff

Updates

Why update? Why not update?

How to update

The "renos": renositorie

Adding extras

Some Things to Read

License Of This Document

RPM and Yum

Nick Hrhanik

hat is RPM?

RPM Command

Queries Install

Update

Erasing

Verfying

Gnecking Digital Signatures

Examples

Yum — Sounds delicious!

Updates

The "repos repositorie

Some Things to Rea

Verfying

- Checking the files in a package all match the original data
- If it doesn't match, then flags show this:

flag	what it means
S	file Size differs
M	Mode differs (includes permissions and file type)
5	MD5 sum differs
D	Device major/minor number mismatch
L	symbolic Link points to wrong place
U	<i>U</i> ser ownership differs
G	Group ownership differs
Τ	m Time differs
С	selinux security Context differs

```
$ rpm -V setup ←
S.5....T. c /etc/aliases
S.5....TC c /etc/bashrc
......C c /etc/exports
S.5....T. c /etc/printcap
S.5....TC c /etc/profile
S.?....T. c /etc/securetty
```

RPM Commands

Querie

Install

Update

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

Yum — Sounds

Indates

he "repos"

Somo Things to Poor

License Of T Document

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or something?

RPM Commands

Queries Install Update Freshen Erasing

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

'um — Sounds delicious!

What's all this primative text stuff

Updates

Why update? Why not update

Setting http://page

The "renos": renositories

Adding extras

Some Things to Read

License Of This Document

RPM and Yum

Nick Hrhanik

Vhat is RPM?

RPM Command

Install

Freshen

Erasing

Checking Digital Signatures

Examples

Yum — Sound: delicious!

Updates

The "repos repositorie

Some Things to Rea

Checking Digital Signatures

First, you need to import the public keys that are provided by Fedora:

```
$ sudo rpm --import
/etc/pki/rpm-qpg/RPM-GPG-KEY* ←
```

▶ \$ rpm -K ⟨package-file.rpm⟩ ←

RPM and Yum

Nick Urbanik

Vhat is RPM?

RPM Commands

Querie

Update

Fresher

erfying

Checking Digital Signatures

RPM Command Examples

Yum — Sounds

Updates

The "repo

- - -

Some Things to Read

icense Of This
Ocument

RPM Command Examples

command	effect
rpm -qa less	list all installed software packages
rpm -q httpd	show the version of the httpd package, if it is installed
rpm -qa grep httpd	show all installed packages that have httpd in their name
rpm -ql httpd	Iist all files in the httpd package
rpm -qd httpd	list all d ocumentation files in the httpd package
rpm -qc httpd	list all c onfiguration files in the httpd package
rpm -qi httpd	display information about the package
rpm -V httpd	verify that the httpd package is correctly installed
rpm -qf /etc/passwd	determine which package the /etc/passwd file belongs to

RPM and Yum

Nick Urbanik

/hat is RPM?

RPM Command

Examples
A quick comparison with

um — Sounds elicious!

Updates

he "repos": epositories

Some Things to Rea

License Of This Document

What is a Package?
Why should I have packages'
Why not just zip files or
something?

RPM Commands

Install Update Freshe Erasing

Checking Digital Signatures

RPM Command Examples A quick comparison with dpkg

um — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff'

Why update? Why not updat
How to update
Setting http_proxy
e "repos": repositories
Adding extras

Some Things to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

RPM Comman

A quick comparison with dpkg

Yum — Sound

Updates

The "repos": epositories

Some Things to Read

icense Of This
Ocument

A quick comparison with dpkg

command	effect
dpkg -list less	list all installed software packages
dpkg -l httpd	show the version of the httpd package, if it is installed
dpkg -list grep httpd	show all installed packages that have <i>httpd</i> in their name
dpkg -listfiles httpd	list all files in the httpd package
dpkg -print-avail httpd	display information about the package
dpkg -S /etc/passwd	determine which package the /etc/passwd file belongs to

RPM and Yum

Nick Urbanik

PM Commands

A quick comparison with dpkg

um — Sounds elicious!

Updates

ne "repos": epositories

Some Things to Read

ocument

Yum

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

RPM Commar

Yum — Sounds delicious!

Why not stick with RPM?
What's all this primative te stuff?

Jpdates

The "repos repositorie

Some Things to Read

icense Of This

Yum is a high level wrapper for RPM

- Uses the information in the RPM packages to figure out what things to install
- downloads the files you need, and installs them, lovingly taking care of which packages depend on what.

....

What is a Package? Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Command

Install
Update
Fresher
Erasing

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious! Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

now to upuate Setting http://prox

The "repos": repositorie

Adding extras
Digital signatures

Some Things to Read

License Of This Documer

RPM and Yum

Nick Hrhanik

hat is RPM?

RPM Command

RPM Command

Yum — Sound

Why not stick with RPM?
What's all this primative te

Undates

'he "repos" epositories

Some Things to Read

License Of Th Document

Why not stick with RPM?

- ► RPM is good, but it's too low level to easily manage all the packages on the system
- Yum uses the information in the RPM database, and the RPM files themselves to make sure that each software package has everything it needs.

RPM and Yum

Nick Urbanik

Vhat is RPM?

RPM Commands

RPM Command

Yum — Sound

Why not stick with RPM?
What's all this primative to

What's all this primative text stuff?

Opuales

he "repos"

Some Things to Read

A quick comparison with dpkg

Yum — Sounds delicious!

What's all this primative text stuff?

RPM and Yum Nick Hrhanik

What's all this primative text stuff?

What's all this primative text stuff?

- There are many GUI programs that use yum as their backend
- I have never used any of them, so your exercise is to Google for them!

RPM and Yum

Nick Urbanik

Vhat is RPM?

RPM Commands

RPM Comman

Yum — Sound

Why not stick with RPM?

What's all this primative text stuff?

Updates

The "reporter repositori

Some Things to Read

License Of This

Updates

RPM and Yum Nick Urbanik

hat is RPM2

RPM Commands

Examples

Yum — Sound delicious!

Updates

Why update? Why not update?

How to update

Setting http_proxy

he "repos": epositories

Some Things to Read

icense Of This

Software has bugs

- Fedora particularly has many new versions of software that are being made available, since it aims to provide the current version of most pieces of software.
- Fedora has more updates than any other stable distribution I know of.
- Only a few are for security reasons, most are for updates.

Outline

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or
something?

RPM Command

Install Update Fresher Erasing

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Why not stick with RPM?

What's all this primative text stuff

Updates

Why update? Why not update?

Setting http_proxy

Adding extras
Digital signatures
Some Things to Read

License Of This Docume

RPM and Yum

Nick Urbanik

Vhat is RPM?

RPM Command

RPM Command

Yum — Sounds delicious!

Update

Why update? Why not update?

How to update
Setting http_proxy

he "repos":

Pama Things to Boos

License Of Thi

Why update? Why not update?

Why update?

▶ The easiest systems to crack have no updates.

Why not update?

- Updating can break a working system
- But that doesn't stop me from keeping my systems updated!
- but not good if your business loses thousands of dollars per second of downtime.
 - In such cases, you have a test system where you test the updates first, check they don't stop your applications from working

RPM and Yum

Nick Urbanik

Vhat is RPM?

RPM Commands

RPM Command

Yum — Sour

Indatos

Why update? Why not update?

How to update
Setting http_prox

The "repo repositori

Some Things to Read

icense Of Th

Outline

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or
something?

RPM Command

Install
Update
Fresher
Erasing

verrying
Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

/um — Sounds delicious!

What's all this primative text stuff?

Updates

Why update? Why not update

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Some Things to Read

License Of This Documer

RPM and Yum

Nick Hrhanik

Vhat is RPM?

RPM Command

RPM Command

/um — Sounds lelicious!

Jpdates

update?

How to update

Setting http_proxy

repositories

Some Things to Read

License Of Th Document

How to update

Do this once only:

- ▶ Ensure your own account is in the sudoers file
 - ▶ see the sudo handout
- set your http_proxy environment variable
 - ▶ See the next section: 39 on page 44

Do this for each update:

- then do:
 - \$ sudo yum -y update ←
- and watch it go.

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Commands

RPM Commar Examples

Yum — Sound delicious!

Update:

Why update? Why r update?

How to update

Setting http_prox

epositories

Some Things to Read

icense Of This

Outline

A quick comparison with dpkg

Updates

Setting http_proxy

RPM and Yum

Nick Hrhanik

Setting http_proxy

- ▶ You need to set the http_proxy environment variable.
- ► The proxy server here has the DNS name "gw", and listens on port 5865 . . .
- ... so set the http_proxy like this: export http_proxy=http://gw:5865/
- ► The best thing to do is to edit your login script ~/.bash_profile and add it at the end: emacs ~/.bash_profile &
- ► Then log out and log in...
- You should be able to see the value now: \$ echo \$http_proxy ← http://gw:5865/

arivi Command

Examples

rum — Soun delicious!

pdates

Why update? Why not update? How to update Setting http_proxy

The "renos":

repositories

icense Of This

icense Of This

RPM Command

Yum — Sound

Jpdates

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

License Of This

- ► In the /etc/yum.repos.d directory are some files that end with ".repo"
- You can change these, add other repos (such as dag, freshrpms, atrpms, livna)
- You can also change the baseurl to a local Australian mirror (see http:

//fedora.redhat.com/Download/mirrors.html
for a list of Australian mirrors)

Outline

A quick comparison with dpkg

The "repos": repositories

Adding extras

RPM and Yum

Nick Hrhanik

Adding extras

Adding extras

Well, the fedora extras repository is already enabled, so nothing to do here.

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

RPM Commar

Yum — Sound delicious!

he "repos' epositories

Adding extras

Digital signatures

Some Things to Read

icense Of This

Outline

What is RPM?

What is a Package?
Why should I have packages?
Why not just zip files or

Advantages of RPM packages

RPM Command

Install Update Fresher

Erasing

Checking Digital Signature

RPM Command Examples

A quick comparison with dpkg

um — Sounds delicious!

What's all this primative text stuff?

Indates

Why update? Why not update

Setting http_prox

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read License Of This Documer

RPM and Yum

Nick Hrhanik

Vhat is RPM?

RPM Command

PM Command

/um — Sounds lelicious!

Updates

e "repos": positories

Adding extras

Digital signatures

Digital digitatores

Some Things to Head

icense Of This locument

Digital signatures

name=Dag RPM Repository for Fedora Core baseurl=http://apt.sw.be/fedora/\$releasever/en/\$basearc enabled=1

▶ If you add the dag, freshrpms, atrpms or livna repositories, you should import their public keys, and enable checking the GPG signatures of the packages.

/etc/yum.repos.d/dag.repos file: [dag]

qpqcheck=1

For example, here is my

Resources



Dr. Peter Salus.

The Daemon, the GNU & the Penguin.

Grocklaw 2006.

http://www.groklaw.net/staticpages/index.php?page=20051013231901859.

Eric Foster-Johnson.

RPM Guide.

http://fedora.redhat.com/docs/drafts/
rpm-guide-en/

The RPM Package Manager.
http://rpm.org/

Wikipedia entry. Yellow dog Updater, Modified.

http://en.wikipedia.org/wiki/Yellow_dog_ Updater,_Modified RPM and Yum

Nick Urbanik

nat is RPM?

RPM Command

Examples

'um — Sounds lelicious!

he "repos": epositories

Some Things to Read

License Of Thi Document

What is a Package?

Why should I have packages? Why not just zip files or something

Advantages of RPIVI packages

RPM Command

Querie

Install

Freshen

Erasing

Checking Digital Signature

RPM Command Example

A quick comparison with dpk

um — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff

Upda

slide 47/48

Why update? Why not update

How to update

Setting http proxy

he "repos": repositories

Adding extras

Digital signature

Some mings to Read

RPM and Yum Nick Urbanik

hat is RPM?

RPM Commands

RPM Command

m — Sounds

pdates

"repos": ositories

Some Things to Read

License Of This

ocument

What is a Package?

Why should I have packages? Why not just zip files or something

RPM Command

Querie

Instal

Freshe

Erasing

Verfying

Checking Digital Signatures

RPM Command Example

A quick comparison with dpl

Yum — Sounds delicious!

Why not stick with RPM'

What's all this primative text stuff

Upda

Why update? Why not update

Setting b++n nnovy

he "repos": repositories

Adding extras

Some Things to Read

Nick Urbanik hat is RPM?

RPM and Yum

RPM Commands

RPM Command

mples

ım — Sounds elicious!

Juaies

ositories

Some Things to Read

Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Nick Hrhanik

/h-+:- DDMO

RPM Command

RPM Command Examples

pdates

epositories

Some Things to Read

License Of This

Topics Covered

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries

Undat

Fresher

Erasing

Verfying

Checking Digital Signatures

RPM Command Example

A quick comparison with dpkg

Yum — Sounds delicious

Why not stick with RPM

What's all this primative text stuff

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Digital signatu

ome Things to Read

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries

install

Freshe

Erasing

Verfying

Checking Digital Signatures

RPM Command Example

A quick comparison with dpk

Yum — Sounds delicious

Why not stick with RPM

What's all this primative text stuff

Undates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Hrbanik

/hat is RPM?

RPM Command

PM Command

um — Sounds

pdates

e "repos":

Some Things to Read

icense Of This

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries

Hodoi

Freshe

Erasin

Verfying

Checking Digital Signatures

RPM Command Example

A quick comparison with dpk

Yum — Sounds delicious

Why not stick with RPM

What's all this primative text stuff

Undates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositorie

Adding extras

Digital signatures

License Of This Document

RPM and Yum

Nick Urbanik

/hat is RPM?

RPM Command

PM Command

um — Sounds

. . .

- - - - - - -

e "repos": oositories

Some Things to Read

icense Of This

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries Install

Some Things to Read

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries Install

Update

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

RPM and Yum

Nick Hrhanik

Some Things to Read

RPM and Yum

Nick Hrhanik

Some Things to Read

Topics Covered

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries Install

Update

Freshen

Erasing

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

PM Command Example

A quick comparison with dpkg

Yum — Sounds delicious

Why not stick with RPM

What's all this primative text stuff

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some miligs to nead

RPM and Yum

Nick Hrhanik

hat is DDM2

RPM Command

PM Command

um — Sounds

. . .

o "ronos":

ositories

Some Things to Read

icense Of This
Ocument

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update Freshen

Erasina

Verfying

Checking Digital Signatures

PM Command Example

A quick comparison with dpkg

um — Sounds delicious

Why not stick with RPM

What's all this primative text stuff

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

PM Command

um — Sounds

Indates

repos":

Some Things to Read

icense Of This Occument

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

m — Sounds delicious!

Why not stick with RPM

What's all this primative text stuff

Undates

Why update? Why not update?

How to update

Setting http proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

nat is RPM?

RPM Command

PM Command

elicious!

paatos

e "repos": ositories

Some Things to Read

icense Of This ocument

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

m — Sounds delicious!

Why not stick with RPM

What's all this primative text stuff

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

nat is RPM?

RPM Command

PM Command

· ′um — Sound

elicious!

ositories

Some Things to Read

icense Of This locument

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen Erasing

Erasın

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM'

What's all this primative text stuff

Update:

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

PM Command

· ′um — Sound

elicious!

e "repos": ositories

Some Things to Read

license Of This Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff

Update

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Rea

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

PM Command

⁄um — Sound

. . .

e "repos":

Some Things to Read

License Of Th

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

PM Command

vallibles

elicious!

pautoo

e "repos": lositories

Some Things to Read

License Of Thi Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update Freshen

Erasina

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to updat

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some mings to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

PM Command

um Cound

elicious!

opuales

e "repos": ositories

Some Things to Read

License Of Thi Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update Freshen

Erasina

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to undate

Setting http_proxy

The "repos": repositorie

Adding extras

Digital signatures

License Of This Desumer

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

RPM Command

Yum — Sound

iciicioas:

ositories

Some Things to Read

License Of Th Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to update

Setting http_proxy

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

RPM Command

Yum — Sound

. .

e "repos":

oositories _____

Some Things to Read

License Of Thi Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

RPM Command

Yum — Sound

. . .

e "repos":

Some Things to Read

icense Of This

License Of Thi Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

PM Command

⁄um — Sound

elicious!

.

e "repos": lositories

Some Things to Read

_icense Of Thi Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

RPM Command

Yum — Sound

elicious!

Jpaate3

e "repos": ositories

Some Things to Read

License Of Thi Document

What is a Package?

Why should I have packages? Why not just zip files or something?

Advantages of RPM packages

RPM Commands

Queries

Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

License Of This Document

RPM and Yum

Nick Urbanik

hat is RPM?

RPM Command

RPM Command

Yum — Sound

elicious!

puales

e "repos": ositories

Some Things to Read

License Of Thi Document

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries

Install

Update Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read

Some Things to Read

What is a Package?

Why should I have packages? Why not just zip files or something? Advantages of RPM packages

RPM Commands

Queries Install

Update

Freshen

Erasing

Verfying

Checking Digital Signatures

RPM Command Examples

A quick comparison with dpkg

Yum — Sounds delicious!

Why not stick with RPM?

What's all this primative text stuff?

Updates

Why update? Why not update?

How to update

Setting http_proxy

The "repos": repositories

Adding extras

Digital signatures

Some Things to Read License Of This Document

◆□ ▶ ◆□ ▶ ◆ □ ▶ ◆ □ ◆ ◆ ○ ◆

License Of This Document

Copyright © 2006 Nick Urbanik <nicku@nicku.org>
You can redistribute modified or unmodified copies of this
document provided that this copyright notice and this
permission notice are preserved on all copies under the terms
of the GNU General Public License as published by the Free
Software Foundation—either version 2 of the License or (at
your option) any later version.

RPM and Yum

Nick Urbanik

/hat is RPM?

RPM Commands

RPM Comman

Yum — Sound

Jpdates

he "repos":

Some Things to Read

License Of This