Dogtail: Taking your applications for a walk

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What is Dogtail?

- Automated test framework for GUI Applications

- Uses Rich data from the GTK+ accessibility layer

- A way of driving the GUI from the Script

- Written in Python
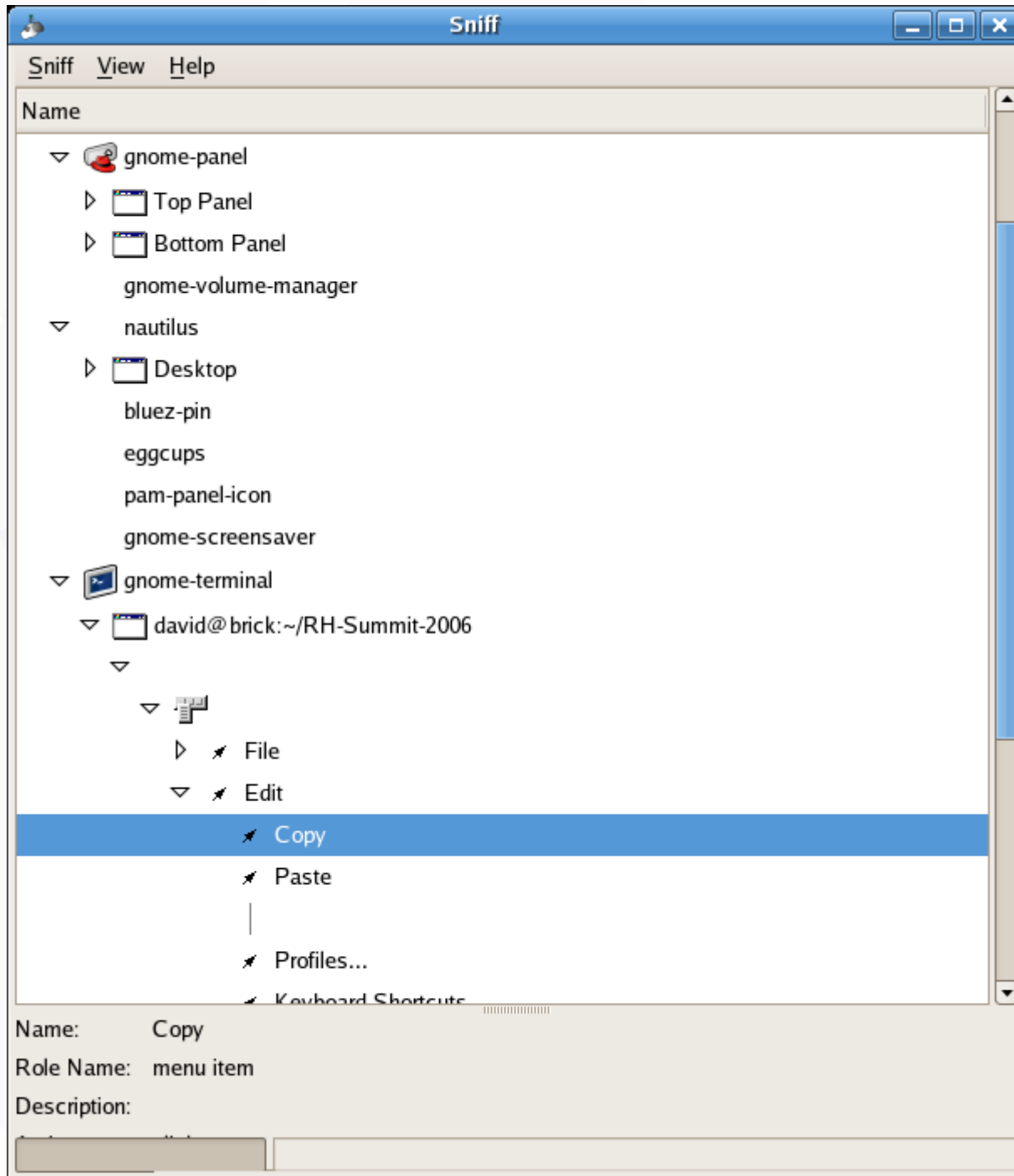
Why do I need Dogtail?

- Test Driven Development for Linux Desktop

- On a Typical Linux desktop Application... supporting more architectures... faster release cycle....makes it one of the fastest changing desktop environments

- Query based (Find me the "File" menu and the "Open" menu below it)

- It uses Accessibility (A11Y) technology to communicate with the Desktop

- Its an opensource Project from Red Hat.

What's wrong with most UI Automation tools?

- Fragility
  - Embed hardcoded (x,y) coordinates
  - "App maps"
- Vendor lock-in
  - Custom scripting languages
  - expensive/proprietary

The Dogtail APIs

- The Accessibilityl API

- The Procedural API

A dogtail script looks like...

```python
#!/usr/bin/env python
from dogtail.tree import root

evo = root.application('evolution-2.6')
while True:
    for c in ['Mail', 'Contacts',
              'Calendars', 'Tasks']:
        submenu = evo.menu('View').menu('Window')
        submenu.menuItem(c).click()
```

Using Dogtail:: Step by Step

- Install Dogtail

- Set up the Accessibility

- Identify the GUI elements in your application.

  - The 'sn iff''util ity

  - Directly call the introspection methods

- Write and run your test scripts

Dogtail Modules

- The Core Framework
- The Helper Libraries

Coming soon in Dogtail...

- A recording and playback mechanism, GUI automation features such as logging, screen capture and analysis. (prototype available)

- Web support –AJAX te sting.

How to get involved?

- It's an Open source project

- Test it with your Application

- Download the latest from
  http://people.redhat.com/zcerza/dogtail/downloads.html

- Mailing list ::
  http://mail.gnome.org/mailman/listinfo/dogtail-devel-list

References

- http://www.gnome.org/~jamesh/jhbuild.html

- http://www.redhat.com/magazine/021jul06/features/dogtail

- http://www.redhat.com/magazine/020jun06/features/dogtail

- CREDIT :: I would like to thank the folks from the QE team Ed Rousseau, Zack Cerza, David Malcom, and also Len DiMaggio for his excellent work for documenting it.

Thank you!

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