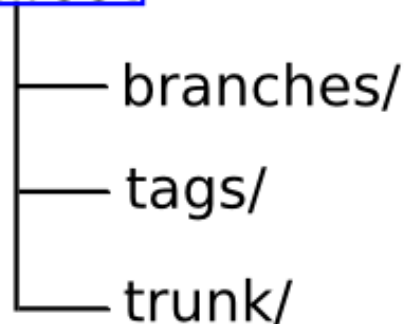




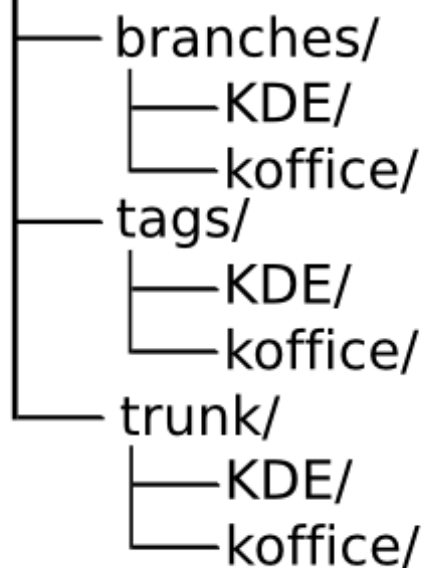
Version Control with Subversion

李世元 stanley@katdc.com

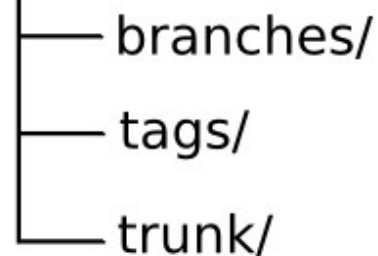
svn root



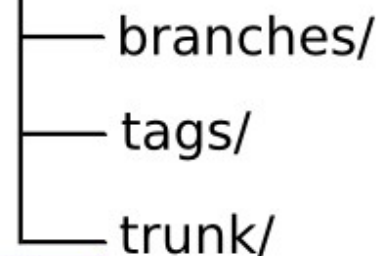
KDE



gimp



glib



gtk+



- 從不分支
- 總是分支
- 當需要時才分支

- Maintainer 專案維護者
 - 負責將分支底下的變更合併回主幹
 - 通知開發者主動合併主幹變更
 - 進行版本標記
 - 進行子專案的分支
- Developer 專案開發者
 - 負責自己分支底下的開發工作
 - 主動合併主幹變更並解決衝突發生
- Packager 專案打包者
 - 負責從主幹底下取出檔案進行編譯測試
 - 通知維護者進行版本標記

- 目錄結構

branches/

bugs/

9527/

children/

developers/

asho/

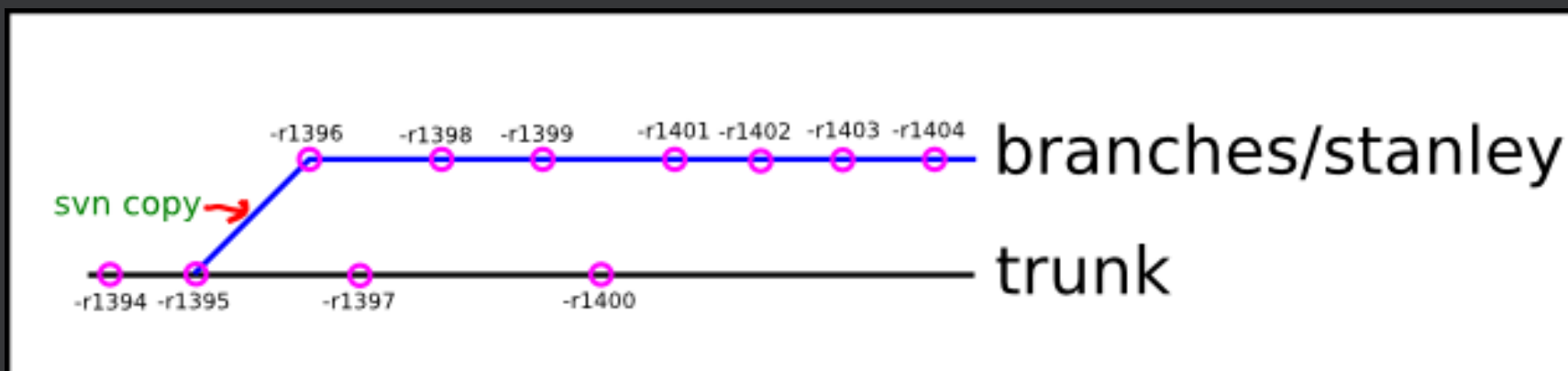
stanley/

tags/

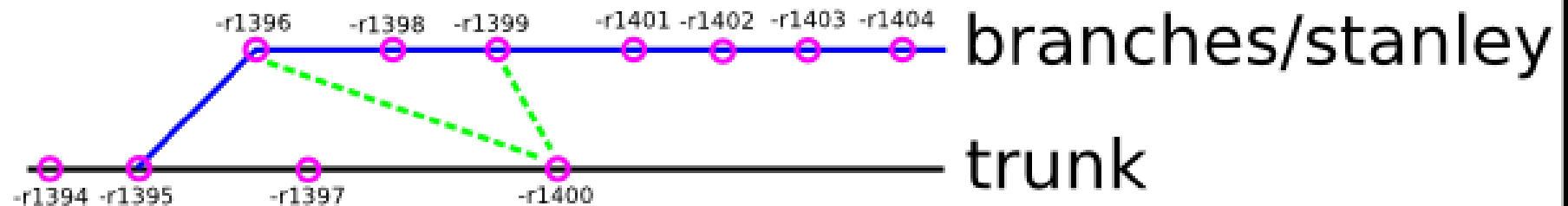
trunk/

- bugs 底下是放需要修正的問題
- children 底下放的是子專案
- developers 底下放的是每位開發者的目錄

```
$ svn copy http://repos/trunk http://repos/branches/stanley
$ svn checkout http://repos/svn/branches/stanley branch_wc
$ cd branch_wc
$ hack! hack! hack!
$ svn commit -m "Add media library."
$ hack! hack! hack!
$ svn commit -m "Turn on back light."
```



```
$ svn checkout http://repos/trunk trunk_wc
$ cd trunk_wc
$ svn merge -r1396:1399 http://repos/branches/stanley
$ svn status
$ svn diff
$ svn commit -m "Merge changes from 1396 to 1399"
```



- <http://www.orcaware.com/svn/wiki/Svnmerge.py>
 - 使用 Python 所寫成的 Subversion 外掛
 - 追蹤合併記錄
- Debian/Ubuntu
 - \$ sudo aptitude install subversion-tools
- 接下來將介紹如何將分支上的變更合併回主幹上 ...



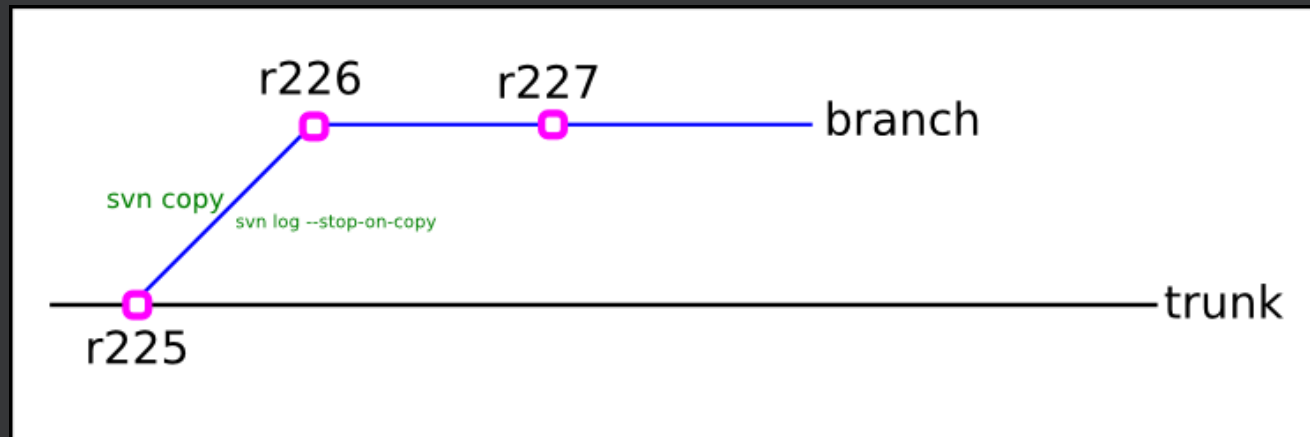
- 找出分支的根

```
$ cd trunk
```

```
$ svn log --stop-on-copy ../branches/developers/stanley/
```

```
r226 | stanley | 2008-03-17 11:59:27 +0800 (Mon, 17 Mar 2008) | 1 line
```

```
Copy KatAPI working trunk to /branches/developers/stanley
```



- svnmerge 初始化

```
$ svnmerge init ../branches/developers/stanley -r1-226
```

```
property 'svnmerge-integrated' set on '.'
```

```
$ svn diff
```

```
Property changes on: .
```

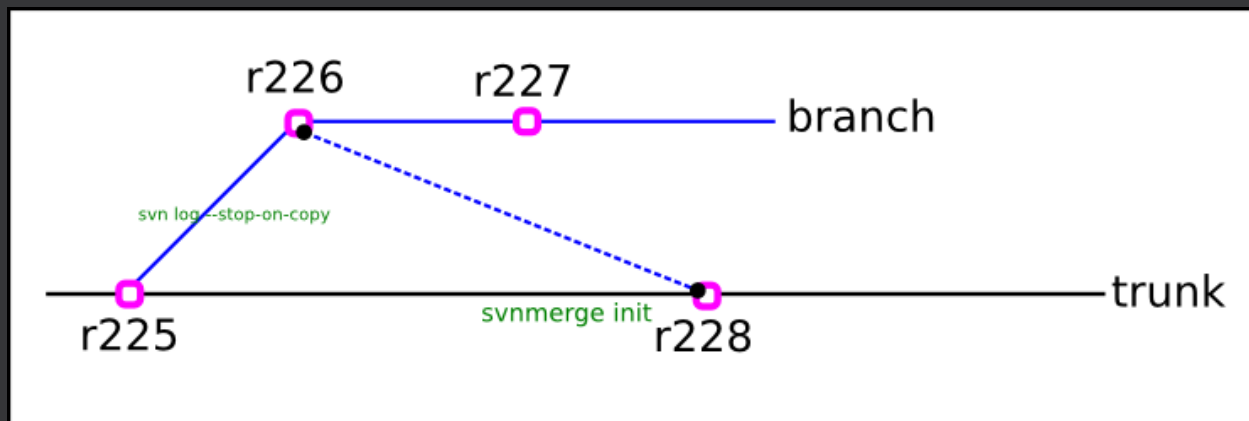
```
Name: svnmerge-integrated
```

```
+ /branches/developers/stanley:1-226
```

```
$ svn commit -F svnmerge-commit-message.txt
```

```
Sending trunk
```

```
Committed revision 229.
```

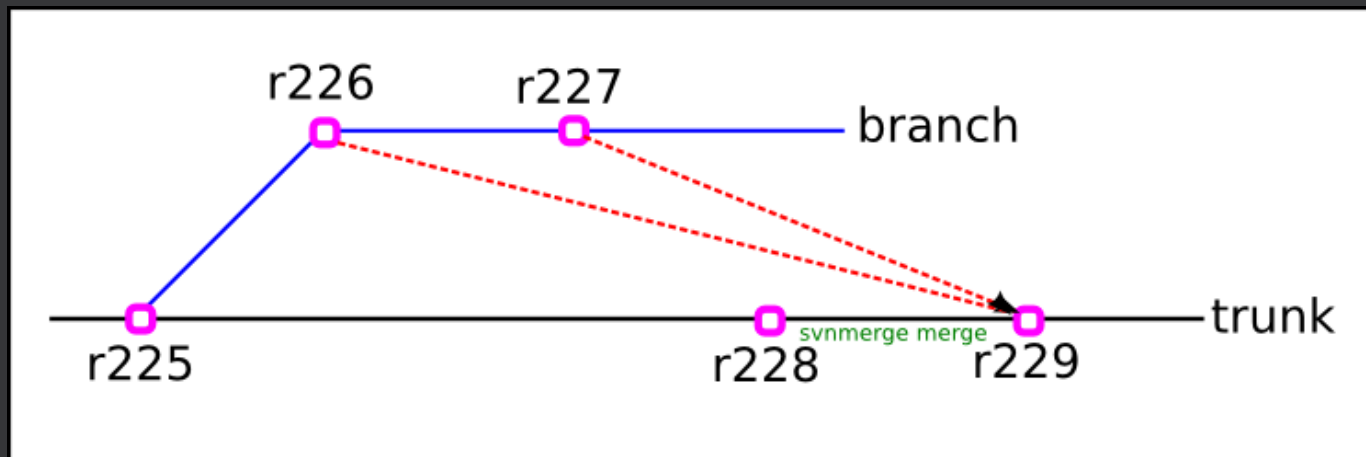


- 合併變更

```
$ svnmerge avail -b -S ../branches/developers/stanley/
228
```

```
$ svnmerge merge -b -S ../branches/developers/stanley/
property 'svnmerge-integrated' deleted from '.'.
U src/kayplay.c
U src/katplay.h
property 'svnmerge-integrated' set on '.'
```

```
$ svn commit -F svnmerge-commit-message.txt
```



- [Subversion 1.5 Release Notes]

- 從主幹合併變更回分支不再需要指定版修訂範圍，你只要這樣做：

```
$ cd BRANCH_WORKING_COPY
```

```
$ svn merge URL_TO_TRUNK
```

- Subversion 會從 URL_TO_TRUNK 找出還沒有被合併過的變更，並且只把那些變更拉進來，當需要從分支合併變更回主幹時，你只要這樣做：

```
$ cd TRUNK_WORKING_COPY
```

```
$ svn merge --reintegrate URL_TO_BRANCH
```

- <http://svn.gnome.org/>
- <http://websvn.kde.org/>
- <http://merge-tracking.open.collab.net/>
- Subversion Best Practices
- Subversion 最佳實務



See you !

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