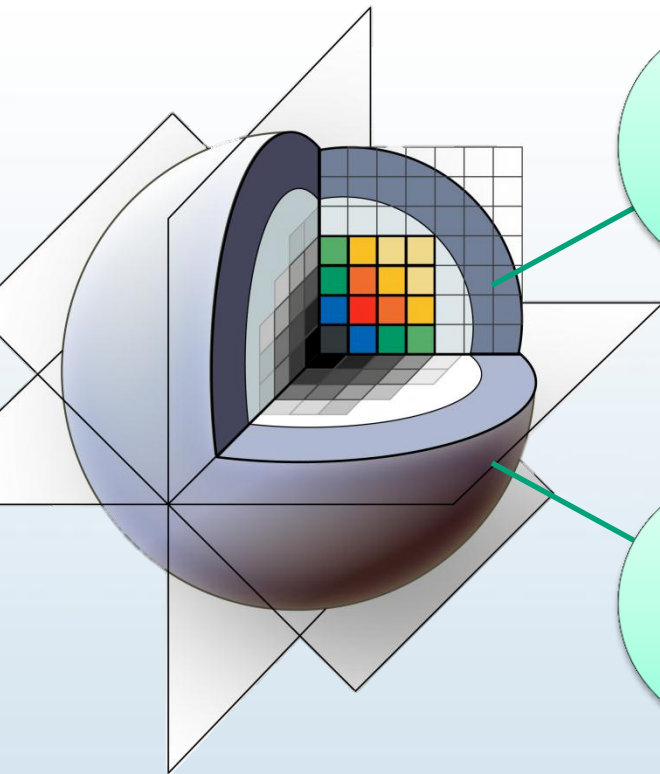




Slicer4 Extensions

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June 20th 2011

The landscape

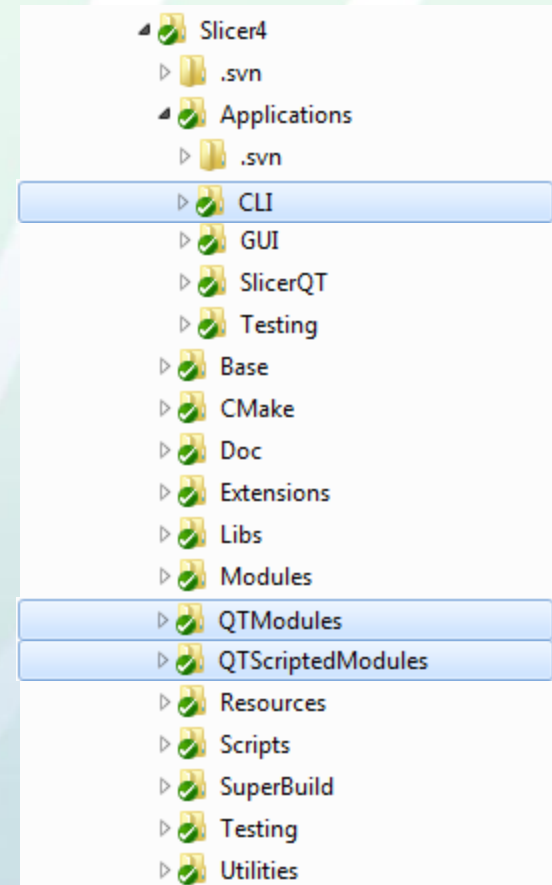


Command
line
modules

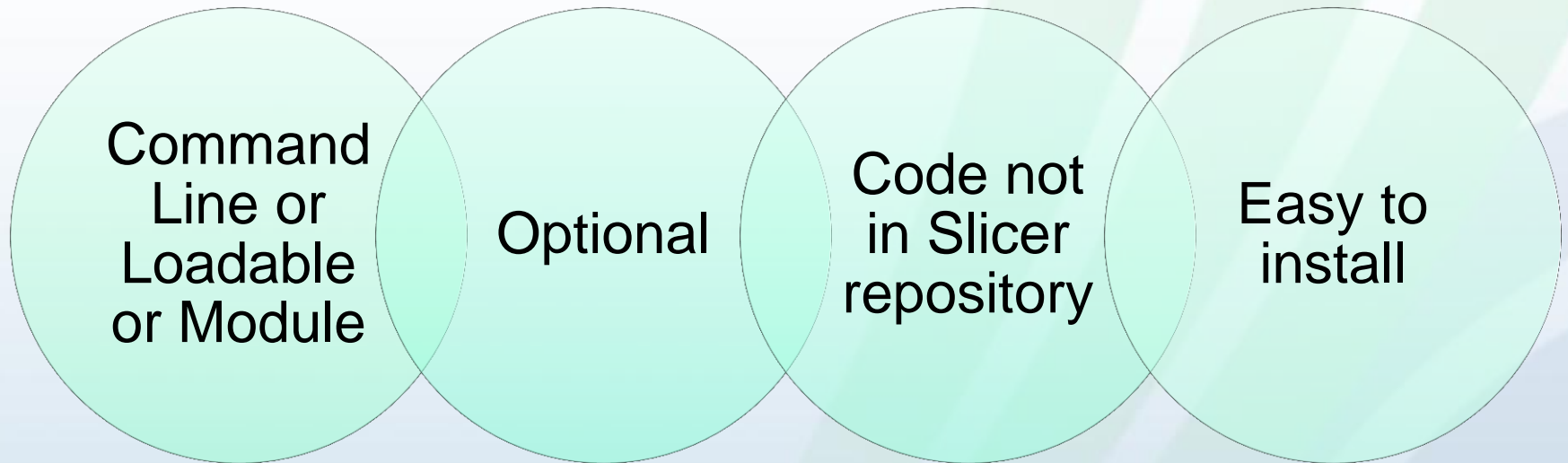
- Executables
- Shared libraries
- Python, Java, ...

Loadable
modules

- Qt plugins (c++)
- Scripted (python)



What is an extension ?



Life cycle



1 Where to start ?

- Slicer source

```
./Extensions/Testing/LoadableModuleTemplate
```

```
./Extensions/Testing/ScriptedLoadableModuleTemplate
```

- Generate your extension

```
python ./Scripts/ModuleWizard.py  
  --template ./Extensions/Testing/LoadableExtensionTemplate  
  --templateKey LoadableExtensionTemplate  
  --target ../MyExtensionSource  
  MyExtension
```

- Extension description

What is an Extensions Description ?

- Repository / revision (git, svn, local, cvs)
- Dependencies
 - Other extensions
 - External project
- Homepage
- Category
- Description
- Status





2

How do you publish an extension ?

- Your extension → CDash

```
$ make ExperimentalUpload
```

- Grouped under “Extension-Experimental” track

Extensions-Experimental														
Site	Build Name	Update		Configure			Build			Test				Build Time
		Files	Min	Error	Warn	Min	Error	Warn	Min	NotRun	Fail	Pass	Min	
ergo	17146-LoadableExtensionTemplate-vs9-32bits-Qt4.7-Debug  			0	0	0.4	0	1	0.5	0	0	0	0	2011-06-20T01:04:01 EDT
karakoram	17146-LoadableExtensionTemplate-g++-64bits-Qt4.7-Debug  			0	0	0	0	0	0.2	0	0	1	0.1	2011-06-19T23:35:32 EDT
Totals	2 Builds	0	0	0	0	0.4	0	1	0.7	0	0	1	0.1	

Trusted extension: “Nightlies”

- Daily dashboard submission
- Extensions are automatically ..
 - Configured, built and tested
 - Packaged and uploaded
 - Coverage and dynamic analysis computed
- Dashboard easy to setup
 - Option `WITH_EXTENSION = ON`
 - `SlicerDashboardScript.TEMPLATE.cmake`

Your extension → “Nightlies”

- Talk to the gatekeeper
- Check-in your extension description
 - Slicer/Extensions/YourExtension.s4ext

3

How do you install an extension ? (1/2)

**Extension
Manager**

- Download and Install

Settings

- Add “Additional module paths”

How do you install an extension ? (2/2)

- Command line option:
 - add-module-paths
 - remove-module-paths
- Manually edit Slicer.ini
- Copy/paste extension into:
 - Slicer/plugins
 - Slicer/qt-scripted-modules
 - Slicer/qt-loadable-modules

Coming soon ...

- Bundle extensions with Slicer package
- CDash → Package repository