Get to know the Qt Installer Framework

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Qt SDK

- Multitude of packages and dependencies
- Online and offline installers
- Common cross-platform experience
- Only minimal steps required to "Hello World"
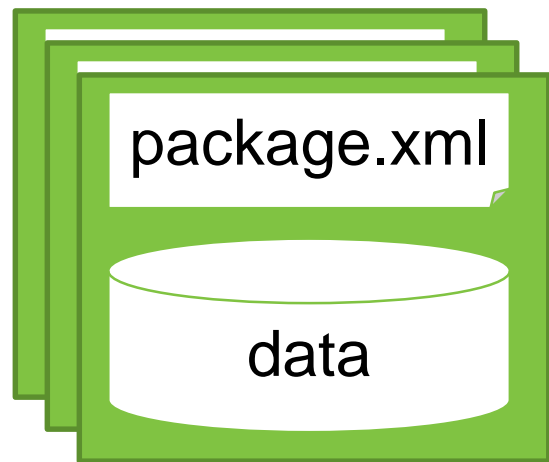- Administrative rights must be optional

Meet the Qt Installer Framework

- Set of tools to generate and maintain installers
- Allows installation, updating, and removal of *packages*
- Windows, Linux, OS X

Offline Installer

config.xml

package.xml

data

`binarycreator` ⟹ installer

Online Installer

config.xml

binarycreator →

installer

package.xml

data

repogen →

Updates.xml

meta.7z

data.7z

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Package Metadata

Static Metadata   `config.xml`

> `DisplayName, Description, Version, ReleaseDate`
>
> `Default, Virtual, Forced, Essential, SortingPriority`
>
> `Dependencies, AutoDependOn, Replaces`
>
> `UserInterfaces, Translations, Script`

Metadata can be changed by JavaScript code

Operations

Operations are executed at installation time

```
Extract, License

Execute

Copy, Move, Delete, MkDir, RmDir, ...

AppendFile, PrependFile, Replace, LineReplace

GlobalConfig, Settings, EnvironmentVariable

CreateShortcut, CreateDesktopEntry, InstallIcons,
RegisterFileType

…
```

Package Scripting

- Schedule operations

- Change package metadata

- Insert additional pages

- Execute applications (e.g. on final page)

- …

Control Script

Adapt and automate installations

- JavaScript callbacks for every page

- Unattended installation (together with -platform minimal)

- Alter pages

- Insert custom pages

Summary

A generic framework for cross-platform package managing
- Offline and online installers, updates
- Automatic dependency resolution
- Logic can be scripted

Building blocks:
- Components (Static metadata, scripts, and payload)
- Operations
- Control script

Thank you!

http://doc.qt.io/qtinstallerframework/

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Shipping Applications

- Archives
- Package Management Systems
- Application Stores
- Installers
- Containers