



KDE Frameworks - Buildsystem News

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Find-modules

kdelibs 4:

- **all Find-modules collected in kdelibs**
- **> 100 Find-modules**

KDE Frameworks:

- **new package extra-cmake-modules**
- **find_package(ECM 0.0.4 REQUIRED NO_MODULE)**
- **no KDE dependencies**
- **usable by any projects**
- **no releases yet**
- **will have the same strict compat. requirements**



find_package(KDE4)

kdelibs 4:

- **CMake settings, RPATH etc.**
- **Compiler settings**
- **KDE4_FOO_LIBS, KDE4_INCLUDES etc. variables**
- **kde4_add_executable(), kde4_add_library() etc. macros**

KDE Frameworks:

- **find_package(KF5 COMPONENTS
[CMake] [Compiler] [InstallDirs] [solid kcore kwidgets ..])**
or
- **find_package(solid NO_MODULE)**



automoc

kdelibs 4:

- **separate package automoc4**
- **wrapped in kde4_add_executable() macros etc.**
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KDE Frameworks:

- **automoc integrated in CMake 2.8.6**
- **set(CMAKE_AUTOMOC TRUE)**
- **no KDE dependencies**
- **usable by any Qt project**



Helpermacros

kdelibs 4:

- **e.g. macro_optional_find_package(),
macro_optional_add_subdirectory(),
macro_push_required_vars()**

KDE Frameworks:

- **some went into extra-cmake-modules**
- **some were merged into CMake**
- **all changes documented:**
http://techbase.kde.org/Development/ECM_SourceIncompatChanges



Install dirs

kdelibs 4:

- **`BIN_INSTALL_DIR`, `LIB_INSTALL_DIR`, etc. coming with `find_package(KDE4)`**
- **Inherit values from `kdelibs` if installed to the same prefix**

KDE Frameworks:

- **`find_package(ECM 0.0.4 REQUIRED NO_MODULE)`**
- **`find_package(KF5 COMPONENTS InstallDirs)`**

or

- **`include(KDEInstallDirs)`**
- **No KDE dependencies**
- **Does not inherit values anymore**



Installing Libs with CMake Config files

- **Library “foo” installs FooConfig.cmake**
- **into `${PREFIX}/lib/cmake/Foo/`**
- **`find_package(Foo [NO_MODULE])` finds it automatically**
- **contains “exported” library targets**
- **sets `FOO_LIBRARY` and `FOO_INCLUDE_DIRS` variables**
- **can contain arbitrary additional information about the installed library**
- **CMake 2.8.8: helper macros `CONFIGURE_PACKAGE_CONFIG_FILE()` and `WRITE_BASIC_PACKAGE_VERSION_FILE()`**



CMake Source Compatibility

kdelibs 4 vs. KDE Frameworks:

- **...will be broken !**
- http://techbase.kde.org/Development/ECM_SourceIncompatChanges
- **There will be some compatibility wrapper...**