

DockingFrames 1.0.4 - Transition

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Abstract

This document describes the most important changes between versions, and how developers should change their application in order to use new features. This document does not make any distinction between the core-library and the common-project. Not all changes are listed up in this document, only those enhancements which might be interesting for the majority of developers.

1 Version 1.0.3

Version 1.0.3 emphasizes on background enhancements. The API remains unchanged for most parts.

1.1 Incompatibilities

These changes break with the API from 1.0.2, clients must change their interfaces in order to work properly.

1.1.1 DefaultKeyboardController

Short The class `DefaultkeyBoardController` has been renamed to `DefaultKeyboardController`

Reason The new name looks better

Clients Replace any occurrence of `DefaultkeyBoardController` to `DefaultKeyboardController`

1.1.2 DefaultDockable/DefaultCDockable

Short `DefaultDockable` and `DefaultCDockable` now have `BorderLayout` set as default `LayoutManager`

Reason `BorderLayout` is the most often used `LayoutManager`.

Clients If another `LayoutManager` than `BorderLayout` is needed, set it up.

1.1.3 CDockableListener

Short `CDockableListener` divided into `CDockableStateListener` and `CDockablePropertyListener`

Reason `CDockableListener` was too big. Most clients either need information about the state, or about the properties of a `CDockable`. The case that both informations are needed is seldom.

Clients Need to decide which listener they implement. Note that `CDockableAdapter` implements both listeners, but not all methods get invoked when the adapter is registered only as one kind of listener.

1.1.4 FlapDockStation

Short FlapDockStations layout is stored in a new format. The xml format will do the transition automatically, but the `DataInput/OutputStream` will not work properly.

Reason the old format did not carry enough information

Clients Store the layout in xml-format and load it again to do the transition.

1.1.5 XML

Short `XElement` now extends `XContainer`, and no longer `XAttribute`. `XAttribute` extends `XContainer` as well.

Reason An element of a xml file is not an attribute, that is now reflected in the class structure

Clients May need to replace some occurrences of `XAttribute` by `XContainer`

1.1.6 DockTheme

Short The common-project uses its own set of `DockThemes`. Each theme `XTheme` gets replaced by `CXTheme`

Reason The new themes make use of the new `ColorMap`

Clients Should use the new themes when possible. The old themes will work, but the user will see less features.

1.1.7 DockFactory

Short `DockFactories` can now create any `Object` they want, and are no longer required to create `DockLayouts`. `DockLayout` has been converted into a class that wraps the `Object` that was created by a `DockFactory`

Reason All `DockLayouts` need to do the same things, hence clients would need to write the same code over and over again. Clients have now more freedom in how to implement `DockFactory`

Clients Should remove all occurrences of `implements DockLayout` and the methods `set/getFactoryId` that were defined in `DockLayout`

1.2 Features

This is the set of new features.

1.2.1 SplitDockStation

Short The tree of elements of a `SplitDockStation` is now accessible from outside and can be modified directly

Reason It is more intuitive to work directly with the tree, some new algorithms work on the tree and are easier to implement that way.

1.2.2 SplitLayoutManager

Short New `SplitLayoutManager` calculates where to drop, and how to divide, elements of a `SplitDockStation`

Reason New features, like the locked size of `CDockable`, were only possible if the behavior of a `SplitDockStation` can be changed on runtime.

1.2.3 CDockable resize lock

Short The size of a `CDockable` can be locked during resize of its parent. See `setResizeLocked`, a method of `AbstractCDockable`.

Reason This was a request from a user

1.2.4 FlapLayoutManager

Short `FlapDockStation` now uses `FlapLayoutManager` to arrange its children

Reason Exchangeable behavior was a requirement for new features in the common-project.

1.2.5 ColorManager/ColorScheme

Short Many graphical elements now use `ColorManager` and `ColorSchemes`

Reason Colors can now be exchanged by clients. The control goes deep, even the color of a single element can be exchanged without affecting other elements of the same kind.

1.2.6 ColorMap

Short `CDockable` uses a `ColorMap` to define special colors for tabs and titles that are related to the `CDockable`

Reason This was a request from a user

1.2.7 LookAndFeel

Short Changes of `LookAndFeel` noted by `DockController` and forwarded to all `UIListeners`.

Reason Because the `ColorManager` would not be informed of the new `LookAndFeel` otherwise

1.2.8 CDockable resize request

Short `CDockables` can now request a size they would like to have, and in most environments they will get this size. See the method `setResizeRequest` of `AbstractCDockable`.

Reason This was a request from a user

2 Version 1.0.4

Version 1.0.4 introduces a few new features that add customizability

2.1 Incompatibilities

These changes break with the API from 1.0.3, clients must change their interfaces in order to work properly.

2.1.1 Binary file format

Short The binary file format has been changed

Reason The format now includes version numbers so that backwards compatibility should be possible in the next versions

Clients Need to delete all binary files. They might try to write their properties with the old version in xml, and then load the xml file with the new version. This should convert the files.

2.1.2 DockableListener

Short Has an additional method `titleExchanged`

Reason Allows to exchange a `DockTitle` while the `Dockable` is visible

Clients Need to update any class that implements `DockableListener`.

2.1.3 Title visibility on CDockables

Short Any `CDockable` can now hide its titles at any time

Reason user request

Clients Need to update any class implementing `CDockablePropertyListener` since that listener has an additional method `titleShownChanged`.

2.1.4 BasicDropDownButtonHandler

Short Requests now a `BasicDropDownButtonTrigger` instead of a `BasicTrigger`

Reason to allow steering any drop down action with the keyboard.

Clients unlikely to have an effect on any client

2.1.5 CDockable.getClose

Short Method has been moved into `CommonDockable`

Reason The action can now be replaced through `CDockable.getAction`. There is no need for any client to replace the action by replacing the whole `DockActionSource`

Clients should use `putAction`, a method of `AbstractCDockable` to exchange the close-action. No fix for clients which added additional elements to the close-source.

2.1.6 CLocation

Short Additional CLocations, some methods have been moved

Reason To allow the new CStation more flexible CLocations were needed.

Clients No general solution available, clients should recompile their project and check all compiler errors.

2.1.7 working area

Short Every CStation can now be a working area

Reason To allow more flexibility in grouping CDockables

Clients That should not be visible for any client using version 1.0.3

2.2 Features

This is the set of new features.

2.2.1 Border around BubbleDisplayer

Short BubbleDisplayer now shows a border if the title is not null, or if the dockable is not a station

Reason Looks better

2.2.2 Backup factories (core)

Short DockFrontend and PredefinedDockSituation can now use backup factories. These factories are used to load elements which should be in the cache, but are missing. In case of DockFrontend they are automatically added to the frontend.

Reason Removes the need to add all Dockables to a DockFrontend before loading a layout from a file.

2.2.3 Backup factories (common)

Short CControl now supports lazy initialisation of SingleCDockables through the SingleCDockableBackupFactory.

Reason saves memory

2.2.4 Unregister factories from DockFrontend

Short DockFactorys can now be unregistered from DockFrontend

Reason Was missing

2.2.5 Action support keyboard

Short DockActions are triggered by pressing SPACE on the focused button, DropDownActions pop up when the DOWN (non numpad) key is pressed

Reason Ongoing work to allow navigating in DF without the mouse.

2.2.6 FocusTraversalPolicies

Short New FocusTraversalPolicies allow to navigate within all elements of a DockableDisplayer (including title).

Reason Ongoing work to allow navigating in DF without the mouse.

2.2.7 override predefined actions

Short CDockable has an additional method `getAction` which is used by various modules to override their default actions.

Reason Answer to a user request

2.2.8 CBlank

Short New action CBlank, which does not show anything.

Reason As value for `CDockable.getAction` when a predefined action should be hidden

2.2.9 CStation

Short Additional interface CStation in common. Two new stations: CMinimizeArea and CGridArea.

Reason Allows clients to add their own DockStations to CControl, allows to create other layouts than the "one center, four minimize areas"-layout.

2.3 Bugfixes

These are the bugs that were fixed/

2.3.1 BubbleDisplayer.getDockableInsets

Short The method did not calculate its result correctly.

Reason A flaw in the design of BasicDockableDisplayer

2.3.2 IndexOutOfBoundsException from ButtonPanel

Short The exception was thrown when an invisible action was on the panel

Reason invisible actions were not considered when writing ButtonPanel

2.3.3 Mode change of CDockable

Short `CDockable` did not go into normalized-mode when externalized and never normalized before

Reason Properties were missing and could not be created automatically

2.3.4 Opening maximized CDockable

Short `CDockable` could not be opened maximized.

Reason framework got confused because `CDockable` did not have a parent.

2.3.5 Unbind of DockAction called to often

Short A `DockAction` could throw an exception "unbind called to often"

Reason When a `DockAction` was a child of a `MenuHandler`, its `unbind` method was called even if the action was not displayed. However the `bind` action was called only if the action was displayed, so the internal counter was no longer correct. Every time a menu with such an action was shown, the counter was decremented by one. When it reached a value below 0, an exception was thrown. Since an action could be bound by many elements, the exception occurred at random places.