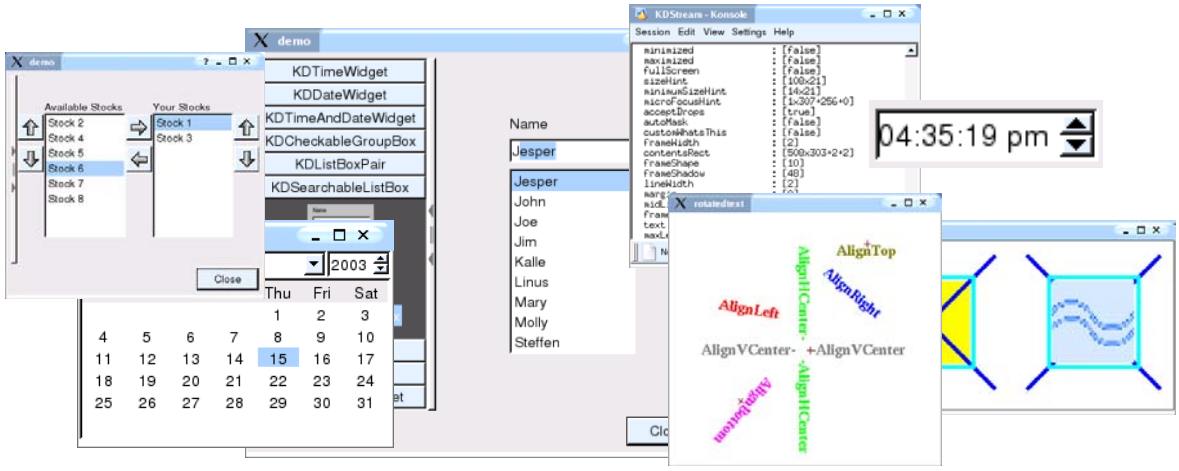
The Essential Add-on Library for Qt

KD Tools™ is an indispensable library of widgets, containers, drawing objects, and non-GUI classes that speed the creation of world class applications using the Qt® multiplatform framework from Qt Software.

Each object provided by KD Tools is designed to save days of development, making it easy to cost justify the use of KD Tools for your whole team. As with all ICS Qt products, the purchased version of KD Tools includes full source code, online reference documentation, a programmer's manual, and plug-ins for Qt Designer.

Key Features

- *ConfigWidget:* creates Microsoft Office style configuration dialogues
- *ListBoxPair:* move items between twin set of listboxes to select/deselect
- *SearchableListBox*: as the user types, it searches for a matching item in a list
- *DateWidget/DateTimeWidget*: a calendar widget to select dates graphically
- *ShowHideTableControl*: show/hide rows and columns in QTable by clicking on plus/minus buttons
- *CloseableWidget*: hides or closes a contained widget
- *MinimizeSplitter*: snap regions of a window open/closed with a single click
- *SizingControl*: hide/show/minimize a widget with a single click
- *Frame*: allows the drawing of highly configurable rectangular frames
- *DrawText*: adds the capability to draw rotated and circular text easily
- *DirMonitor*: tracks new or changed files in a directory
- *Stream*: a Qt equivalent to C++ cout that knows how to handle Qt objects
- *Logger*: sends output from your program to one or more logging devices



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www.ics.com
info@ics.com

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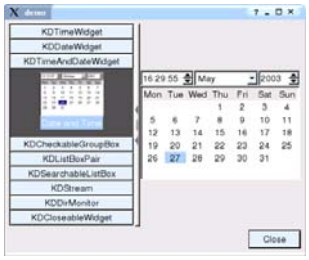
Widgets, Containers, and Drawing Objects

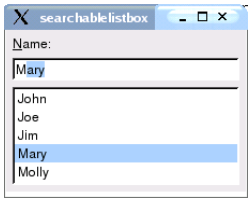
Configuration Widget

KDConfigWidget is a Microsoft Office style configuration widget that provides a group of icons (or labels or both) along the side of the widget and by clicking on one, you display the corresponding page of information. The opening and closing of groups is animated to maximize the end user experience. KD Tools also includes a dialog version of this widget—KDConfigDialog—that encapsulates a KDConfigWidget in a QDialog. It provides up to five buttons at the bottom, which are by default labeled *Default*, *Apply*, *Cancel*, *OK*, and *Help*.



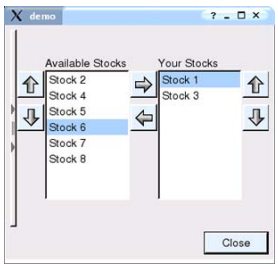
Searchable ListBox

This class combines a listbox with an editable field. The string typed into the editable field is continuously matched against the contents of the listbox. The first item matching the editable field will be highlighted. KDSearchableListBox is a very useful widget whenever there is a long list of items in the listbox and your users want to use the keyboard to speed selection.



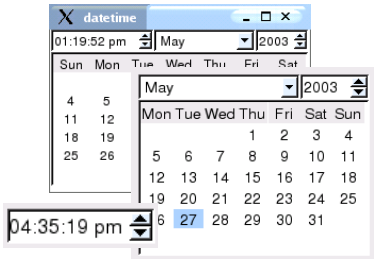
ListBox Pair

Many applications have a list of values from which a user might select and prioritize a subset. One common example is in the exporting of data. Often, the application needs to provide the end user with the list of possible fields to export, as well as allow the user to select and order fields for export. KDListBoxPair provides this commonly used widget. It includes a pair of listboxes and a set of buttons to control movement of data. Items can be moved between the listboxes and also reordered within one listbox.



Date Widget

This widget lets the user choose a date by selecting it on a calendar. In addition to being a much more user-friendly approach than using a spinbox, it also eliminates typing errors and provides a single way to select dates that is understandable worldwide. Companion time (KDTimeWidget) and a date/time combo widget (KDDateTimeWidget) are provided to enable complete selection of a specific point in time.



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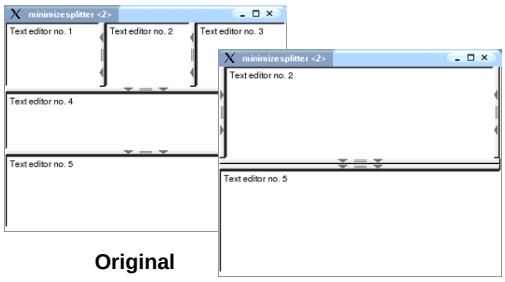
Minimize Splitter

This container widget allows the user to distribute the available space between its children. It is similar to QSplitter, but with an important addition: the horizontal or vertical splitter bar has a button that allows the user to “snap” the splitter bar top to the edge of the widget or back to the original position. Many application users prefer this incremental functionality provided by KDMinimizeSplitter because of the speed with which they can reconfigure the visible part of the application.

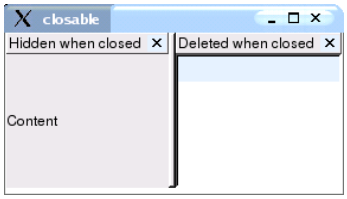


Original

After *Snap*

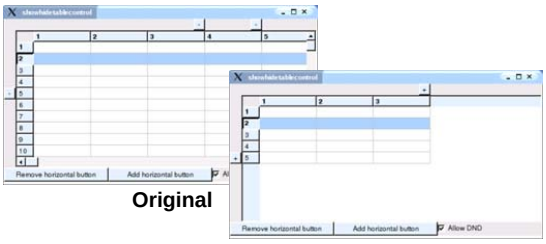
Closeable Widget

KDCloseableWidget is a container widget which offers a title and close button. Depending on the mode you choose, the contained widget can be either hidden or deleted when the user clicks the close button.



ShowHideTable Control

Lets the user hide or show any number of columns or rows in a QTable object and thus reduces the amount of displayed information to what is needed at any time. If enabled by the application developer, KDShowHideTableControl also allows end users to drag-and-drop buttons on the table to specify what will be hidden/shown when the button is clicked.

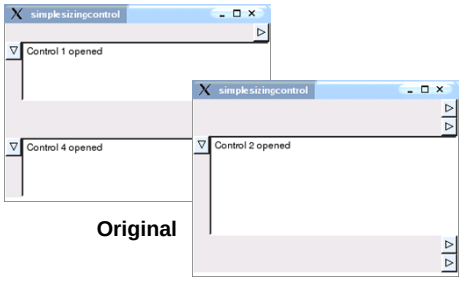


Original

After

SampleSizing Control

Allows the user to hide and show one child widget exactly by means of a little arrow button. When the child widget is hidden, the KDSimpleSizingControl will not take much more space than what is needed for the button.



Original

After clicking a couple of rows

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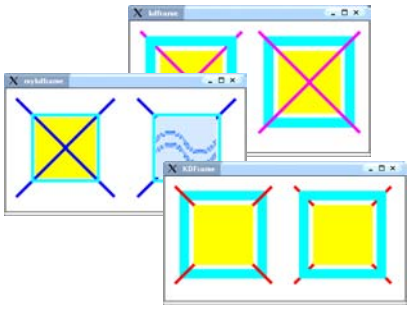
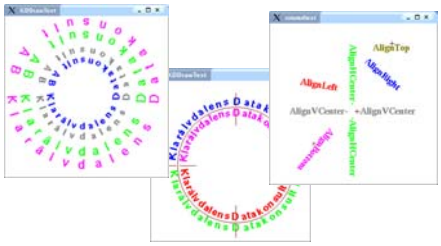
Frame

KDFrame lets the user draw highly configurable rectangular frames. The rectangle applies to the inner area of the frame, which is drawn around this area, touching it but not covering it. KDFrame allows the programmer to write and read the KDFrame object to/from an XML document. Single line frame borders and (scaled/stretched) background pictures are configurable. You may of course use a tiled background image too. A frame may consist of a border (optional) and/or a background. The frame can be painted using different combinations (border over, under, background over, etc.).



DrawText

KDDrawText lets the programmer draw rotated and circular text in a convenient way. Curved texts can be drawn inside or outside an invisible circular line, either viewed from the inside or the outside of the circle. KDDrawText can also draw straight texts rotated by a given angle. The color, font, alignment, etc. of the text drawn are, of course, configurable.



Non-GUI Components

Stream

KDStream offers streaming operators similar to the class cout in the C++ standard library. KDStream extends the concept of cout by providing built-in operators for the key Qt classes. The output goes to the same target as the output from qDebug(). The streaming operators in this class offer facilities for printing out values of a number of Qt classes. It can write to the following Qt objects to a stream: QStrList, QObject, QVariant, QKeySequence, QSizePolicy, QBrush, QRect, QSize, QPointValue, QPen, raw name of a QFont value, QTime, QDateTime, QDate, QCursor, QPalette, QColorGroup, QColor, QChar, QCString, and QString value. Includes support for writing base C/C++ types (including pointers) to the stream. Can run a stream-processing function on the stream.

DirMonitor

This class can be used to monitor for new or changed files in a directory. KDDirMonitor can be configured to either use a polling implementation or, on operating systems that support it (currently Linux and SGI IRIX, and MS-Windows for multi-threaded Qt), the kernel-based facilities to minimize system overhead. KDDirMonitor greatly simplifies a task that can be difficult to implement correctly across multiple operating systems.

Logger

This class allows applications to send logging output to a number of logging devices. Currently, four different levels of logging messages are supported (information, debugging, warning, error). Supported targets for logging include: standard error files, Qt signals, the system log, and any combination of these. You can also add your own logging device.

ICS Integrated Computer Solutions Incorporated

54 Middlesex Turnpike • Bedford, MA • 01730
www.ics.com • info@ics.com • 617.621.0060