

The KTimetracker Handbook

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Abstract

KTimetracker tracks time spent on various tasks.

Chapter 1

Introduction

KTimeTracker tracks time spent on various tasks. It is useful for tracking billable hours and can report the hours logged by task and day.

This time history can be exported to a comma-delimited text file for import into other billing and/or project management tools.

KTimeTracker detects when your keyboard and mouse are idle and can associate different tasks with different desktops, two tools that can help keep the timer running on the correct task.

KTimeTracker was originally written by Sirtaj Singh Kang. Its home page is <http://userbase.kde.org/ktimeTracker>.

Chapter 2

Using KTimeTracker

2.1 Starting KTimeTracker

Type **ktimeTracker** at a command prompt or select Personal Time Tracker from the Applications → Utilities group in the KDE start menu. The standard Qt™ and KDE command options are available, and can be listed by entering **ktimeTracker --help** at the command line.

KTimeTracker provides an additional command option that allows you to enter the name of the iCalendar file that is used to store your labor history. You enter a remote iCalendar file by using http or ftp as part of the file name; for example, `http://www.mysite.com/mydata/mylabor.ics`.

2.2 Tasks

Problem: You are a free software consultant with many clients. Some clients have multiple projects. During the course of a day, you switch back and forth between different projects. You need to track your time to generate monthly invoices.

Solution: Create one top-level task for each client and a subtask for each client project. For projects that require more detailed tracking, create a list of project subtasks. Track time by double-clicking on task you are currently working on.

KTimeTracker provides great flexibility in tracking your time, allowing unlimited tasks and task depth. Time may be logged to any task, and more than one task can be active at any given time.

KTimeTracker allows you to edit your task's history and to put a comment for every event that you have stopped.

To create a top-level task, select Task → New Task... (**Ctrl+T**) To create a subtask, pick the parent task and select Task → New Subtask... (**Ctrl+Alt+N**)

When KTimetracker exits, the task list is saved to a file on your disk. When it next opens, it reloads the task list from the same file.

KTimetracker can import and export tasks to minimize your work. See [Other Systems](#).

2.3 Timers

Problem: To remain solvent, you must bill an average of five hours a day. To stay on track, you watch your daily and weekly totals.

Solution: Reset the session timer at the beginning of each work day and reset all timers at the beginning of each week.

KTimetracker makes tracking time simple. To start logging time against a task, double-click on the task. To stop logging time, double-click the task again. Active tasks display a small clock in the Session Time column.

Another visual clue of logging activity is the KTimetracker system tray icon. When a task is active, the second hand in the icon moves. If you rest the mouse pointer over this icon, the name of the active task will display in a tooltip. If more than one task is active, the task names in the tooltip are separated by commas.

KTimetracker maintains two timers for each task: one for the session time and one for the total time. In the default configuration, KTimetracker displays two columns for each timer, resulting in a total of four columns for each task:

Session Time The time spent on the task since the session began.

Total Session Time The time spent on the task and all its subtasks since the session began.

Time The time spent on the task since all times were reset.

Total Time The time spent on the task and all its subtasks since all times were reset.

To start a new session, select File → Start New Session

To reset all times, select File → Reset All Times

2.3.1 Desktop Tracking

Problem: You have two main projects that you switch between each day. To help organize your work, you keep your project 1 files on Desktop 1 and your project 2 files on Desktop 2.

Solution: Associate project 1 task with Desktop 1 and the project 2 task with Desktop 2. When you switch from Desktop 2 to Desktop 1 active, KTimetracker automatically stops the project 2 task and starts the project 1 task.

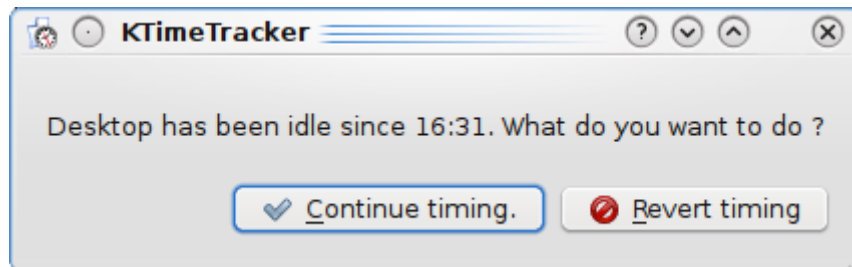
To associate a task with a one or more desktops, select Task → Edit... (**Ctrl+E**). Turn on Auto Tracking and select the desktop or desktops to associate with this task. When any of the selected desktops becomes active, after a short delay KTimeTracker will be automatically start logging time against that task.

2.3.2 Idle Detection

Problem: You leave work early on Friday to run an errand and forget to stop the timer. When you return on Monday, the timer is still running.

Solution: Turn on idle detection.

KTimeTracker can be configured to detect when the mouse and keyboard become idle. If the mouse and keyboard are idle for longer than the specified number of minutes, KTimeTracker displays the following dialog:



Continue timing Apply the idle time to all active timers and keep them running.

You were working on the task(s) while your computer was idle and still are.

Revert timing Subtract the amount of idle time from all active timers and stop them.

You were not working on the task(s) while you computer was idle and you are still are not.

2.4 Other Systems

2.4.1 KOrganizer

KTimeTracker, like KOrganizer and Apple's iCal, uses the industry standard [iCalendar](#) format for its data. KTimeTracker can read and write the to do lists created by these two applications.

WARNING

If both KTimeTracker and KOrganizer have the same file open, if you edit the file with KOrganizer, you risk losing data. To be safe, only edit the file with one application or the other.

2.4.2 Planner

As a typical usecase, you might want to plan a project with the project management tool Imendio Planner (from planner.imendio.org) and import its tasks to KTimeTracker with File Import Import Tasks From Planner..., to have them in the industry standard [iCalendar](#) format. Having done so, you are able to schedule the tasks in KOrganizer, and account your time to them in KTimeTracker. That's one way to help ensure your project stays on time and under budget.

2.4.3 D-Bus

D-Bus is the mechanism KDE programs use to communicate with each other. A KDE program provides a list of functions that other programs (a Bash script, for example) can use.

Example 2.1 Bash script that echo's KTimeTracker's version

```
qdbus org.kde.ktimetracker /KTimeTracker version 2>/dev/null ↵  
|| echo "ktimetracker not running"
```

KTimeTracker's current D-Bus interface is currently used mainly for automated testing, so it is very limited. For the full interface definition, see [D-Bus Interface Appendix](#).

To see the full D-Bus interface of the KTimeTracker version installed on your system, run the following Bash script:

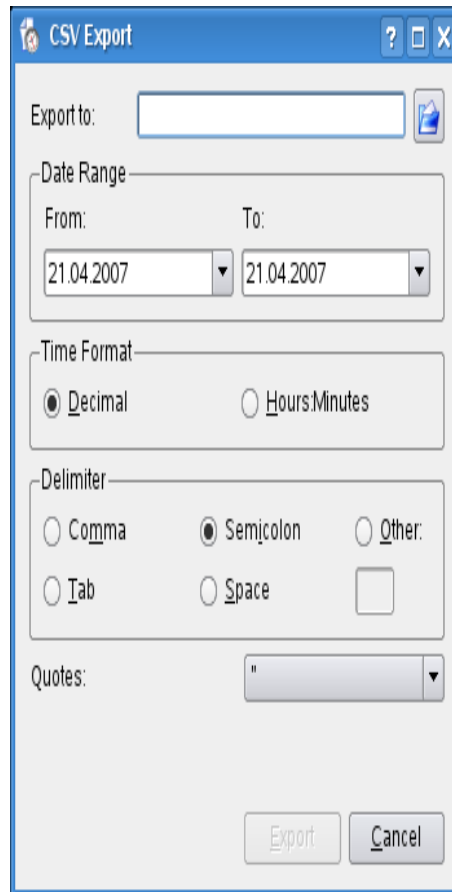
Example 2.2 List KTimeTracker's D-Bus interface to console

```
qdbus org.kde.ktimetracker /KTimeTracker 2>/dev/null || echo ↵  
"ktimetracker not running"
```

2.4.4 Export Totals to CSV

KTimeTracker can export both totals and history to a comma-delimited file format. To export totals, select File → Export → Export Times... and KTimeTracker displays the following export dialog:

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Enter the file you would like to export the data to, and modify the other dialog defaults if necessary. Click Export and KTimetracker exports the totals for all tasks to the file you selected.

Use the Export to Clipboard button to export the times to the clipboard

Here is an example of the output format:

```
"kde",,,,,,0.00,0.00,6.88,9.83
,"ktimetracker",,,,,6.88,8.70,6.88,9.83
,,,"3.2 feature plan",,,0.00,0.00,0.00,0.00
,,,"bugs",,,0.00,1.13,0.00,1.13
,,,"checkin changes - translation strings",,,0.00,0.00,0.00,0.00
,,,"time card report",,,0.00,0.00,0.00,0.00
,,,"kopete",,,,,0.00,0.00,0.00,0.00
,,,"promo",,,,,0.00,0.00,0.00,0.00
,,,"web stuff",,,,,0.00,0.00,0.00,0.00
```

Top-level tasks are output in the first column, sub-tasks in the second, and so on. The time data is output after the maximum task depth (five in this example). The first time column is Session Time, the second is Time, the third is Total Session Time and the fourth is the Total Time.

2.4.5 Export History to CSV

To export task history, select File → Export → Export History... and KTime-tracker displays the same export dialog as shown above.

Enter the file you would like to export the data to, and select a date range that you want the task history. Modify the other dialog defaults if necessary. Click Export and KTimetracker exports the task history for all tasks to the file you selected.

Use the Export to Clipboard button to export the history to the clipboard

Here is an example of the output format:

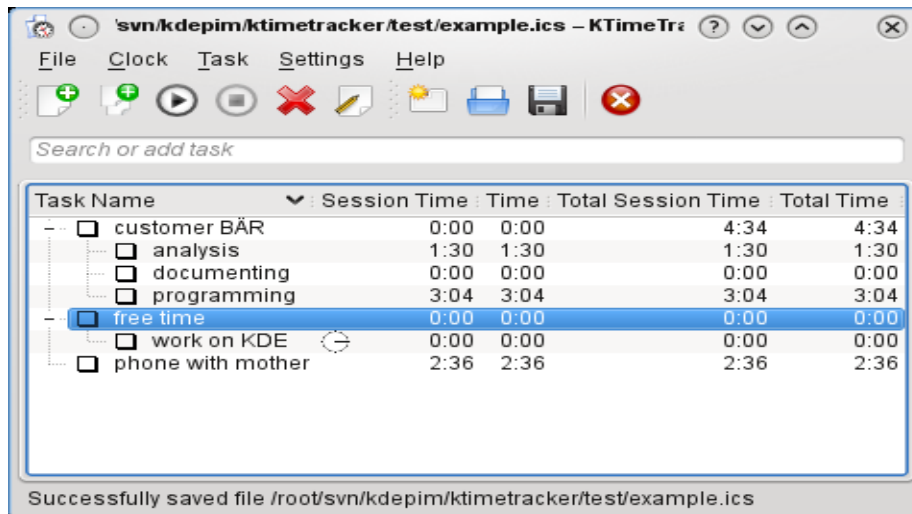
```
Task History
From Tuesday 06 July 2004 to Tuesday 13 July 2004
Printed on: 2004-07-13 18:10
2004-07-06,2004-07-07,2004-07-08,2004-07-09,2004-07-10,2004-07-11,2004-07-12,2004-07-13,
,,,,,,,,0.00,"kde"
,,1.77,3.23,1.73,,1.37,0.82,8.95,,,"ktimetracker"
,,,,,,,,0.00,,,"3.2 feature plan"
,1.13,,,,,,,,1.13,,,"bugs"
,,,,,,,,0.00,,,"checkin changes - translation strings"
,,,,,,,,0.00,,,"time card report"
,,,,,,,,0.00,,,"kopete"
,,,,,,,,0.00,,,"promo"
,,,,,,,,0.00,,,"web stuff"
```

The three lines identify when the report was generated and for which date range. The fourth row is a comma-delimited list of the dates in the date range, in ISO 8601 format (YYYY-MM-DD). All subsequent rows list the time logged against each task. The last numeric column is the row total across all days. The task name prints after the total column, and is indented to indicate the task/sub-task relationship. Top level task names appear in the first column after the total.

Chapter 3

The KTimeTracker interface

The main KTimeTracker window has the following components: menubar, toolbar, task/time window and status bar.



3.1 The Task/Time window

The various tasks are displayed in this window, along with the time accumulated for each in the current session and in total. Tasks being timed have a small clock icon next to the session time.

Subtasks can be created for each task. Clicking the plus sign and minus sign in front of the main task toggles the view of its associated subtasks. The total time accrued for a task includes the times for its subtasks, as well as its own accumulated time.

3.2 The Toolbar

The toolbar contains icons for the following commands:

<p>NOTE (All behave identically to the menu command.)</p>
--

- Start
- Stop
- New
- New Subtask
- Delete
- Edit

3.3 The Statusbar

Reports the name of the file where the data was saved.

Chapter 4

Credits and License

KTimetracker

Program copyright:

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- 2003-2004 Mark Bucciarelli mark@hubcapconsulting.com

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KTimetracker was inspired by Harald Tveit Alvestrand's very useful utility called titrax, the only failing of which is that it is based on the Xt toolkit.

Documentation copyright 2000-2004 Jonathan Singer jsinger@leeta.net and Sir-taj Singh Kang taj@kde.org.

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Chapter 5

Glossary

active task A task which has a timer running.

D-Bus The interprocess communication protocol used in KDE. Short for Desktop Bus.

desktop GNU/Linux®, FreeBSD and other systems that run X-Windows have multiple desktops. You typically have four different desktops installed by default. Each desktop can display its own set of programs and files. When KDE first starts up, the desktop you see is Desktop 1. If you press Ctrl+F2, you will see Desktop 2. Pressing Ctrl+F1 will bring back Desktop 1.

history If KTimetracker is configured to log history, it will record every start/stop timer event. This history is never cleared when times are reset cleared and remains on file until the task is deleted.

session A user-defined starting point for the session timers. A new session begins when you select File → Start New Session. Session data is not saved when you create a new session.

Session Time The time spent on the task since the session began.

system tray The system tray is in the bar that (by default) appears at the bot-



tom of the screen. In this system tray the KTimetracker icon is on the far right.

top level task A task with no parent tasks.

Total Session Time The time spent on the task and all its subtasks since the session began.

Time The time spent on the task since all times were reset.

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Total Time The time spent on the task and all its subtasks since all times were reset.

Appendix A

Installation

A.1 How to obtain KTimeTracker

KTimeTracker is part of the KDE project <http://www.kde.org/> .

KTimeTracker can be found in the kdepim package on <ftp://ftp.kde.org/pub/kde/> , the main FTP site of the KDE project.

For detailed information on how to compile and install KDE applications see [Building KDE4 From Source](#)

Since KDE uses **cmake** you should have no trouble compiling it. Should you run into problems please report them to the KDE mailing lists.

Appendix B

D-Bus Interface

B.0.0.0.0.1 version

Name

version – Return KTimetracker’s version.

Synopsis

```
QString version()
```

Description

`version()` is a D-Bus call that returns KTimetracker’s version number; for example 4.3.1. The version number is returned as a string in the typical GNU format of major.minor.bugfix.

B.0.0.0.0.2 quit

Name

quit – Return KTimetracker’s quit.

Synopsis

```
QString quit()
```

Description

`quit()` is a D-Bus call that provides a way that an external program can gracefully shutdown KTimetracker.

B.0.0.0.0.3 addtodo

Name

`addTask` – Add new task.

Synopsis

```
QString addTask(QString taskname)
```

Parameters

taskname The name of new task.

Description

`addTask(QString taskname)` is a D-Bus call that adds a new top-level to-do to the current storage. The UID of the new task is returned.