

The KAlarm Handbook

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The KAlarm Handbook

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Abstract

KAlarm is a personal alarm message, command and email scheduler for KDE.

Chapter 1

Introduction

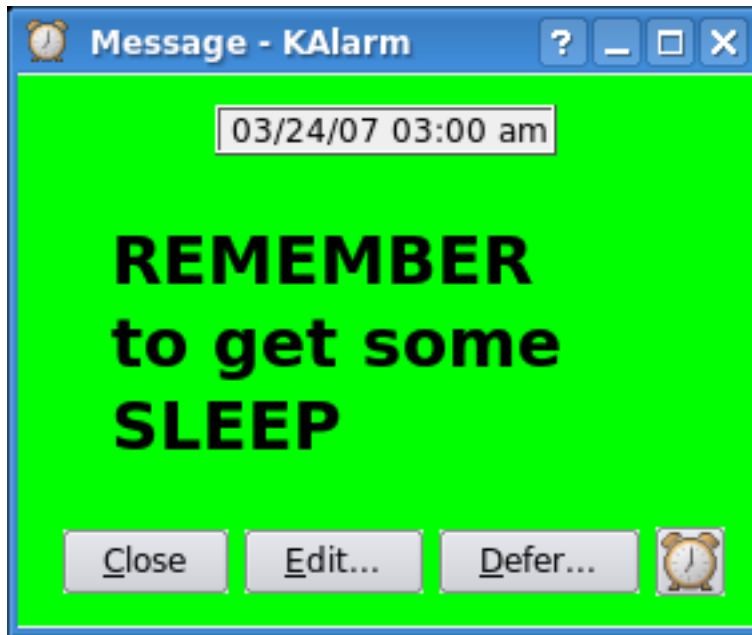
KAlarm lets you schedule the display of personal alarm messages, the playing of sound files, the execution of commands and the sending of emails.

In its default graphical mode, KAlarm displays the list of pending alarms, showing their times and details. You can create new alarms, or you can select existing alarms for modification or deletion. You can also optionally view expired alarms.

When configuring an alarm, you may either type in the alarm message text, specify a text or image file to display, specify a command to execute, or enter an email to send. You can also choose the color of the alarm message, whether to play a sound or speak the message, whether it should repeat, and whether the alarm should be canceled if it cannot be triggered at its scheduled time.

Alarms may also be scheduled from the command line, or via DCOP calls from programs.

When an alarm message is due, it is displayed on each KDE desktop to ensure that you don't miss it. The message window shows the time for which the alarm was scheduled. It usually has a defer option to ask for the alarm to be displayed again later. An example of an alarm message:



When the alarm specifies a command to execute or an email to send, KAlarm displays nothing.

KAlarm can run in either of two modes: 'continuous' (the default) where it runs from the system tray, or 'on-demand' where it runs as and when required (with the option of displaying an independent system tray icon).

This document makes various references to the alarm daemon. This is an application which runs in the background, checking pending alarms and telling KAlarm to display them when they become due.

Chapter 2

Using KAlarm

When it is run with no command line parameters, KAlarm starts in graphical mode, and displays the current list of outstanding alarms.

When KAlarm starts in graphical mode, it checks whether the alarm daemon is running. If it is not already running, KAlarm starts it.

TIP

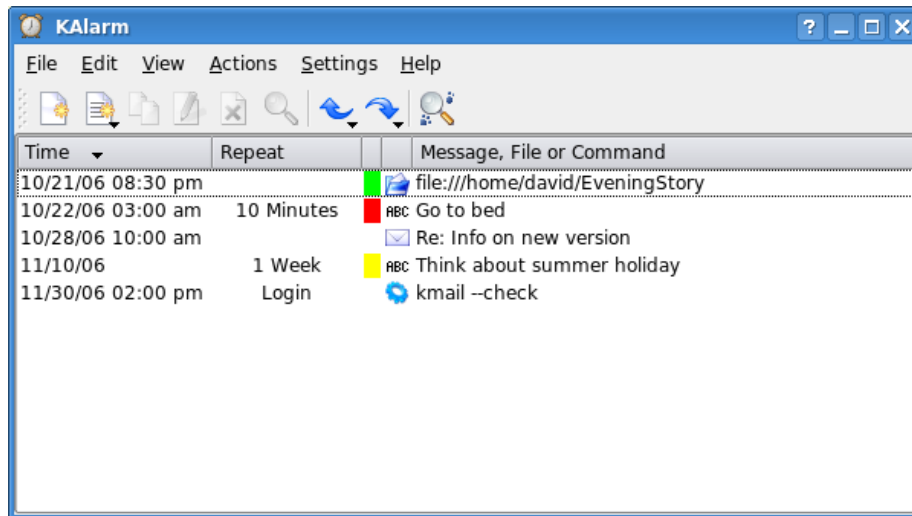
All spin boxes in KAlarm have an acceleration facility. To make the value change by larger steps, hold down the **Shift** key while you click on the spin arrow buttons.



2.1 Alarm list

The main KAlarm window displays the current list of pending alarms, showing their times, repetition intervals, colors, and message texts, names of files to display, commands to execute or email subjects. (For a recurring alarm, the time shown is its next scheduled trigger time. For an alarm with a reminder, the time shown is the time of the alarm proper, not the reminder time.) An icon at the left of each alarm text/file/command/email subject indicates the type of alarm.

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For a repeated alarm, the list shows its next scheduled trigger time and its basic repetition interval (e.g. '1 Day' for a daily recurrence, '3 Weeks' for a recurrence which triggers on Monday and Wednesday every third week, 'Login' for a repeat-at-login alarm).

The alarms may be ordered by date/time, repeat interval, color, type or text by clicking on the titlebar for the appropriate column. To reverse the sort order, click the column titlebar again.

You can optionally show the remaining time until each alarm is due, together with, or instead of, the alarm's scheduled time. To show or hide the alarm time column, select View → Show Alarm Times. To show or hide the time-to-alarm column, select View → Show Time To Alarms. At least one of these columns is always shown. You can use the [Preferences dialog](#) to change the default columns to display.

2.1.1 Expired alarms

By default, KAlarm stores alarms for a limited period once they have expired or been deleted. (But note that alarms which you delete are stored only if they have already triggered at least once.) You can control whether KAlarm stores expired alarms, and for how long, in the [Preferences dialog](#).

Expired alarms may be shown in the alarm list by selecting View → Show Expired Alarms. To hide them again, repeat the action. You can use the [Preferences dialog](#) to show expired alarms by default.

2.1.2 Searching the alarm list

You can search through the alarm list to find alarms containing a search text. To invoke this, select Edit → Find. In the search dialog, select the alarm types

which you wish to search. To continue searching for more alarms which match, use Edit → Find Next or Edit → Find Previous.

Searching is performed as follows:

- Text alarms: the message text is searched.
- File alarms: the file path/URL is searched.
- Command alarms: the command line or command script is searched.
- Email alarms: in addition to the subject and body of the email, the recipients and the URLs of attachments are searched.

NOTE

Only alarms currently shown in the alarm list can be selected for searching. So if you want to search expired alarms, you must first display them as described in the section above.

2.2 Creating and manipulating alarms

2.2.1 Creating a new alarm

To create a new alarm, do one of the following. This displays the [alarm edit dialog](#) through which you configure the alarm.

- Select Actions → New.
- Right click on the system tray icon and choose New from the context menu.
- Click the Middle mouse button on the system tray icon.
- Right click in the alarm list and choose New from the context menu.
- Double click on empty space below the last entry in the alarm list.

Alternatively, you can create new alarms preconfigured from various sources:

- To base your new alarm on an alarm template, follow the instructions in the [Alarm templates](#) section.
- To base your new alarm on an existing one, highlight the existing alarm in the list and select Actions → Copy. This opens the [alarm edit dialog](#) already filled in with a copy of the selected alarm's details.
- To create a new alarm which displays an existing email message, drag the email from KMail onto KAlarm's main window or system tray icon. This opens the [alarm edit dialog](#) with the entire email message (including sender, recipient, etc.) as the alarm text.

- To create a new email alarm to send a copy of an existing email message, drag the email from KMail onto KAlarm's main window or system tray icon. Then select the Email option. The [alarm edit dialog](#) is preset with the entire email message except sender.
- Dragging any piece of text onto KAlarm's main window or system tray icon opens the [alarm edit dialog](#) and sets the alarm text.
- To create a file display alarm, drag a file URL onto KAlarm's main window or system tray icon. This opens the [alarm edit dialog](#) and sets the file name.
- You can automatically create birthday alarms for people in KAddressBook as described in [Importing birthdays from KAddressBook](#).

2.2.2 Modifying an existing alarm

To modify an existing pending alarm (expired alarms cannot be amended), do one of the following:

- Double click on its entry in the alarm list.
- Select it by clicking on its entry in the alarm list. Then choose Actions → Edit.
- Right click on its entry in the alarm list and choose Edit from the context menu.

This displays the [alarm edit dialog](#).

2.2.3 Deleting/reactivating an alarm

To delete existing alarms, do one of the following:

- Select one or more alarms by clicking on their entries in the alarm list. Then choose Actions → Delete.
- Right click on the desired entries in the alarm list and choose Delete from the context menu.

When you delete an active alarm, it is stored as an expired alarm, provided that it has triggered at least once before being deleted, and provided that expired alarms are stored at all. (Use the [Preferences dialog](#) to control whether and for how long expired alarms are stored.) When you delete an expired alarm, or an active alarm which has not yet triggered, it is removed permanently.

You can reactivate a deleted alarm from the expired alarms list, provided that it has not yet expired. To do this, first display expired alarms, as described in [Expired alarms](#). Then:

- Select one or more appropriate expired alarms by clicking on their entries in the alarm list. Then choose Actions → Reactivate.
- Right click on the desired entries in the expired alarm list and choose Reactivate from the context menu.

2.2.4 Enabling/disabling an alarm

See [Enabling and disabling alarms](#) for how to enable and disable alarms, either individually or as a whole.

2.2.5 Viewing an alarm

To view an existing alarm without the ability to modify it, do one of the following:

- Select it by clicking on its entry in the alarm list. Then choose Actions → View.
- Right click on its entry in the alarm list and choose View from the context menu.

This displays the [alarm edit dialog](#) in read-only mode.

2.2.6 Acknowledging an alarm

See [Alarm message window](#) for how to acknowledge alarms.

2.2.7 Alarm templates

If you frequently want to set up similar alarms, you can create an alarm template to avoid having to enter all the details from scratch each time. A template can contain all the details which an alarm can contain, apart from the start date.

As an example, you may regularly want to set an alarm to remind you about a television program whose time varies from week to week. The template would contain all the alarm details (message text, whether to play a sound, etc.) except for the time and date. Now, to create the alarm, all you need to do is open the alarm edit dialog with that template and then enter the time and date.

To create an alarm based on a template, open the [alarm edit dialog](#) preset with the template details:

- Select the Actions → New From Template menu item, and then select the desired template.
- Right click on the system tray icon and choose New Alarm From Template from the context menu. Then select the desired template.
- Open the [alarm edit dialog](#) in the usual way, and click the Load Template... button to select a template to preset the dialog with.

2.2.7.1 Configuring templates

You can create, modify or delete templates using the Alarm Templates dialog, or you can create a new alarm template based on an existing alarm.

To create a new alarm template, do one of the following:

- Display the Alarm Templates dialog by selecting the File → Templates... menu item, and click New. This displays a blank template edit dialog.
- Display the Alarm Templates dialog by selecting the File → Templates... menu item, select an existing template from the list and click Copy. This opens the template edit dialog already filled in with a copy of the existing template's details.
- Highlight an alarm in the alarm list and select Actions → Create template. This opens the template edit dialog already filled in with a copy of the selected alarm's details.

To modify an existing template, display the Alarm Templates dialog by selecting the File → Templates... menu item and click Edit. This displays the template edit dialog which is described below.

To delete existing templates, display the Alarm Templates dialog by selecting the File → Templates... menu item, select one or more templates and click Delete. A confirmation prompt is issued to prevent accidental deletions.

2.2.7.2 Template edit dialog

The template edit dialog is similar to the [alarm edit dialog](#). The following controls are different:

- Enter the template's name in Template name. It is the template's name which is displayed in template selection lists, so it is best to choose a name which will remind you of its function. Each template's name must be unique.
- In the Time group box, select one of:
 - Default time if you do not wish to specify any trigger time. Alarms based on this template will initially use the normal default trigger time for new alarms.
 - Time to enter a time when the alarm is to be triggered.
 - Any time to specify that the alarm should only have a date, not a time.
 - Time from now to enter how long (in hours and minutes) after the alarm is created, that it should be triggered.
- In the Recurrence Rule group box in the Recurrence tab, no day or month need be selected for weekly or yearly recurrences, respectively.

2.2.8 Importing alarms from external calendars

You can import alarms from other calendar files into KAlarm, by File → Import Alarms.... The import function scans the selected calendar file for events containing alarms, and copies them (with new unique IDs) into KAlarm's calendar. Events without alarms, and calendar entries other than events, are ignored.

WARNING

If you import alarms from calendar files which were created by applications other than KAlarm, the alarms may be changed by the import process – even alarm times may change. This depends on the data storage conventions used by the other application, and is unavoidable if those conventions differ from what KAlarm expects. Always check imported alarms for unexpected changes, and adjust them as necessary.

2.2.9 Importing birthdays from KAddressBook

You can set up display alarms for birthdays stored in KAddressBook, by File → Import Birthdays.... This displays a dialog which allows you to select which birthdays to create alarms for.

- In the Alarm Text group box, you can set up the text to be displayed in the birthday alarm messages. The message text is created by combining the Prefix text followed by the person's name followed by the Suffix text. No spaces are added, so remember to include any necessary trailing space in Prefix and leading space in Suffix.

NOTE

If you change the alarm text, the birthday selection list will be re-evaluated.

- In the Select Birthdays list, select the birthdays which you want to create alarms for. Note that the list shows only those entries in KAddressBook which contain a birthday and which do not already have a birthday alarm in the format currently defined in the Alarm Text group box.
- The remaining controls are the same as for Text alarms in the [Alarm Edit dialog](#).

2.2.10 Undo / redo

You can undo and redo the most recent changes which you have made during the current session of KAlarm. Most actions can be undone, including creation, edit and deletion of alarms and alarm templates, and reactivation of alarms. To prevent excessive resources being used by the undo history, the number of changes stored is limited to the last 12.

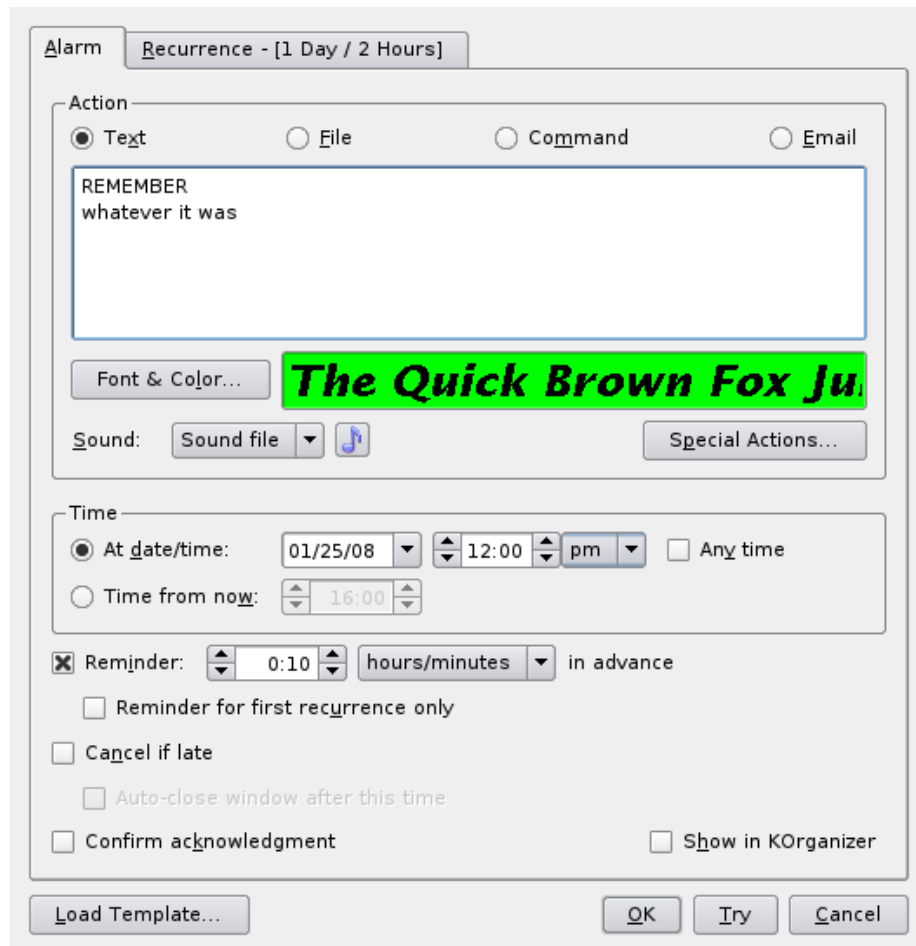
To undo the last change, select Edit → Undo. To redo the last change which was undone, select Edit → Redo.

To undo a change other than the last one, click on the Undo button in the toolbar and hold the mouse button down. A list of actions will be displayed from which you can choose the one to undo. If you don't see the action which you are looking for, remember that you may need to undo more recent changes first, which the desired change depends on. For example, if you edited an alarm and then deleted it, you cannot undo the edit until you have first undone the deletion.

Redoing a change other than the last one can be done in a similar manner, using the Redo toolbar button.

2.3 The alarm edit dialog

The alarm edit dialog enables you to view and edit an alarm.



2.3.1 Alarm action

In the Action group box, select the type of alarm:

- Text in order to enter an alarm message text (which may include newlines) in the edit box. Set the following options:
 - The Sound option allows you to select whether an audible alarm should sound when the alarm message is displayed. Choose:
 - * None to display the alarm silently.
 - * Beep to sound a beep.
 - * Speak to have the alarm message spoken as well as being displayed. This option is only available if you have KTTSD (from the kdeaccessibility package) installed and configured, together with a compatible speech synthesizer, e.g. Festival.
 - * Sound file to play an audio file. Use the button on the right to display the Sound File dialog which lets you select a file to play and set volume and repetition options. If you hover the mouse over the selector, a tooltip will display the audio file currently selected.

NOTE

KAlarm uses the aRts sound server for repetition and volume control. If KAlarm has been built without aRts support, repetition and volume options will not be available and a simple sound file selector will appear in place of the full Sound File dialog.

In the Sound File dialog:

- Enter the sound file path, or use the button beside the edit box to display a file selection dialog. You can listen to the selected file by clicking the play button to the left of the edit field. That button then changes function to allow you to stop playing when you have heard enough.
- Check Repeat to continually repeat the audio file for as long as the alarm is displayed. (The alarm message window contains a button to stop playing the sound should you need silence but still want to display the alarm.)
- Check Volume and adjust the slider control if you want to adjust the volume at which the audio file is played.
- If you wish, you can fade the volume. Fading means to start playing the audio file at one volume and gradually change to the final volume, over a specified time interval. The final volume is that entered in Volume above. To enable fade, check Fade, and then enter the fade period in seconds in the Fade time field, and adjust the Initial volume slider.

NOTE

When possible, KMix is used to set volumes. This ensures that the volume at which the alarm is played is unaffected by any changes in the computer's sound level. If KMix is not installed (or is older than KDE 3.1), the volume is set relative to the sound level current at the time the alarm triggers. So in this case, the volume at which the alarm is played will vary depending on any changes in the computer's sound level.

TIP

You can use the Try button to test out the selected sound levels.

- Use the Font & Color... button to select a font, and foreground and background colors, for the alarm message. In the Choose Alarm Font & Color dialog, check Use default font to display the message in whatever font is configured as the default at the time the message is displayed. To choose a specific font for the message, uncheck Use default font. (The default font, and the colors shown in the color selection lists, can be set in the [Preferences dialog](#).)

The selected font and colors are shown in a sample text alongside the button. You can edit this text to show special characters.

- Use the Special Actions... button to specify shell commands to execute before or after displaying the alarm. In the Special Alarm Actions dialog:
 - * In the Pre-alarm action field, enter a shell command to execute before the alarm is displayed. Note that KAlarm will wait for the command to complete before displaying the alarm.
A pre-alarm action is only executed once when the alarm message is initially displayed, including when a reminder message is replaced by the actual alarm message. It is *not* executed in any of the following circumstances:
 - When a reminder message is displayed.
 - When the message is redisplayed after deferring the alarm.
 - When the message was displaying at the time you logged off and is then restored when you log back in.
 - When a recurring alarm triggers but the alarm message (or a deferred alarm message) from a previous occurrence of the alarm is still visible; in other words, when the previous occurrence of the alarm has not yet been acknowledged.
 - * In the Post-alarm action field, enter a shell command to execute when the alarm is acknowledged (whether by clicking Close or by using the close button in the window's titlebar). It is *not* executed in any of the following circumstances:
 - When a reminder message is closed.
 - When you defer the alarm, except when the deferred alarm is finally acknowledged.
 - When the alarm message is closed due to logging out.

See the description of Command alarms below for details of how shell commands are executed.

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- File to enter the path or URL of a text or image file whose contents are to be displayed in the alarm message. Use the button beside the edit box to display a file selection dialog. Set options as for text alarms above, but note that the Speak option is not available.
- Command to enter a command to execute.

NOTE

This option is not available if KDE is running in kiosk mode.

- The Enter a script checkbox lets you choose whether to enter a shell command line or a script.
If this option is unchecked, you can enter a shell command line to execute. The command is passed straight to the default shell (defined by the `SHELL` environment variable), and may include whatever options, parameters, piped commands, etc. are permitted by the shell in a single line command. If this option is checked, you can enter the text of a script to execute. Remember to include a first line such as `#!/bin/bash` to ensure that the correct command interpreter is invoked.
- Use the Command Output group box to specify what you want to be done with any terminal output which the command produces when it executes.
 - * Check Execute in terminal window to cause the command to be executed in a terminal window. You can choose which type of terminal window should be used in the [Preferences dialog](#).
 - * Check Log to file to save the command's output in a file. The output, prefixed by a heading showing the time at which the command was scheduled to run, will be appended to any existing contents of the file. Enter the file name in the edit box, or use the button beside the edit box to display a file selection dialog.
 - * Check Discard to throw away the command's output.
- Email to enter an email message to send. Fill in the recipients' addresses, the email subject line and the message body in the three edit fields. Use the button beside the addressee edit box to display your KDE address book from which you can select email recipients. Attachments may be added using the Add... button. Note that attached files must still exist when the alarm is triggered; no copy is stored at the time the alarm is configured. To remove an attachment, highlight it in the drop-down list and click the Remove button.

Set the following options:

- The From combo box allows you to select which KMail identity to use as your email address for sending the email. This option only appears if your From email address in the [Preferences dialog](#) is set to Use KMail identities. Otherwise your email address is preset in the [Preferences dialog](#), rendering this option inapplicable.
- Check Copy email to self to send a blind copy of the email to yourself when the alarm is triggered. The email address to which the copy will be sent may be set in the [Preferences dialog](#), the default being your email address set in the KDE Control Center.

2.3.2 Deferral

If the alarm is a recurring alarm and it was deferred after it was last displayed, the Deferred Alarm group box shows the time the alarm was deferred to. Change... displays a dialog which allows you to change the deferred time or to cancel the deferral.

2.3.3 Time

In the Time group box, select either

- At date/time to enter the date and time when the alarm is to be triggered. Check Any time if you want to specify only a date for the alarm: in this case the alarm will be displayed at the first opportunity on or after the configured start-of-day time, on the specified date. ([Configuring KAlarm](#) describes how to set the start-of-day time.)
For a non-recurring alarm, the date/time which you enter must be in the future, or if you enter only a date it must be today or later. For a recurring alarm, there are no such restrictions since the start date/time will be automatically adjusted to the first recurrence due after the current time.
- Time from now to enter how long after now (in hours and minutes) the alarm should be triggered.

2.3.4 Reminder

For a display alarm, check Reminder if you want to display a reminder in advance of the main alarm and of each of its recurrences (if any). Enter how long in advance using the edit controls beside the checkbox.

NOTE

Reminders are not displayed for sub-repetitions within a recurrence. Reminders are only shown before each main recurrence of the alarm.

If the alarm recurs, check Reminder for first recurrence only if you only want a reminder before the alarm's first recurrence. If this is not checked, the reminder period is limited to being less than the recurrence interval.

2.3.5 Cancellation

The late-cancellation options determine how an alarm is treated after its scheduled time:

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- The Cancel if late checkbox determines what happens if the alarm cannot be triggered at its scheduled time.

Check this box to cancel the alarm if it cannot be triggered within a specified time period after the right time. The time period is selected using controls which appear when you check the box. For example, if you enter a time period of 1 hour, the alarm will be triggered at the first opportunity up to an hour after it is due, but if it cannot be triggered within an hour its activation will be canceled.

NOTE

The lateness of date-only alarms, i.e. ones for which the Any time option is selected, is calculated from the start-of-day time on the alarm's scheduled date.

Leave the box unchecked to trigger the alarm at the first opportunity starting at the scheduled time, regardless of how late it is.

NOTE

An alarm can only be triggered while you are logged in, and while both X and the alarm daemon are running.

- Check Auto-close window after this time if you want the alarm window to be automatically closed if it is still showing at the expiry of the late-cancellation time.

2.3.6 Recurrence

Specify whether or how the alarm should be repeated using the Recurrence tab.

NOTE

The alarm's basic repetition characteristics are displayed for convenience in the title of the Recurrence tab. The recurrence interval is shown first, followed by any sub-repetition interval set up using the Sub-Repetition button.

In the Recurrence Rule group box, set the recurrence type or time period as follows:

- To trigger the alarm once only, select No recurrence.
- Select At login to trigger the alarm whenever you log in, until its scheduled end time. Then, at its scheduled end time it will finally be triggered one last time. (Note that an alarm repeated at login will also be triggered any time you enable alarms, or restart or reset the alarm daemon.)

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- To make the alarm recur at regular intervals, select one of the time period types and then enter in the Recur every box how many time periods should elapse between recurrences. For example, to repeat every fortnight, you could select Daily and enter a value of 14, or select Weekly and enter a value of 2. Depending on the time period type selected, you may have further options:
 - For a weekly recurrence, check each day in the week on which you wish to trigger the alarm.
 - For a monthly recurrence, you may select either a fixed date, or a position (e.g. the second Tuesday).
 - For a yearly recurrence, you may select either a fixed day in the month, or a position in a month (e.g. the last Saturday in May). Check each month of the year in which you wish to trigger the alarm.

TIP

To set a daily alarm to occur only on weekdays, use a weekly recurrence and check each weekday.

In the Recurrence End group box, set the overall recurrence time span as follows:

- Select No end to continue the repetitions indefinitely.
- Select End after to specify the total number of occurrences of the alarm.
- Select End by to specify the date/time until which the alarm will be repeated.

If you wish to exclude certain date/times from the recurrence which you have set up, specify them in the Exceptions group box. The list of exceptions (i.e. excluded date/times) is shown on the left. To add a new exception, enter a date on the right and press Add. To change an exception, highlight it in the list, enter the new date on the right and press Change. To delete an exception, highlight it in the list and press Delete.

2.3.6.1 Sub-Repetition

You can use the Sub-Repetition button to set up a repetition within a repetition. In this case, each time the alarm is due as specified in the main recurrence, instead of being triggered just once it is triggered repeatedly in accordance with your sub-repetition specification. For example, to set up an alarm which repeats every hour from noon to 6 pm each Thursday, you would set up a weekly recurrence on Thursday at 12:00, and use the Sub-Repetition dialog to specify an interval of 1 hour and either a count of 6 or a duration of 6 hours.

In the Sub-Repetition dialog which is displayed when you click the Sub-Repetition button, check Repeat every to set up a repetition, or uncheck it to remove the repetition. If Repeat every is checked, set up the repetition as follows:

- Enter the time interval between repetitions in the controls beside Repeat every. Select the desired time units (e.g. days) and then enter the number of units.
- Specify either the repetition count or its duration:
 - Select Number of times to enter how many times the alarm should be triggered after the main recurrence. So, for example, to make the alarm occur 4 times at each main recurrence, i.e. 3 additional times, you should enter 3 here.
 - Select Duration to enter the total time period during which the alarm should be repeated. This need not be an exact multiple of the repetition interval; it will automatically be rounded down when you click OK.

NOTE

To prevent overlapping sub-repetitions for the same alarm, a sub-repetition's duration is restricted to be less than the longest interval between main recurrences. Each time the alarm recurs as specified in the main recurrence, any still active sub-repetition which started at the previous recurrence is automatically cancelled.

2.3.7 Other controls

For display alarms, the Confirm acknowledgment checkbox lets you specify whether you will be prompted for confirmation when you close the alarm message window. This may be used as a safeguard against accidental acknowledgment of alarms.

Select Show in KOrganizer to add the alarm to KOrganizer's active calendar, where it will appear as an event without an alarm. This option allows you to track alarms in KOrganizer while still making use of KAlarm's functions.

NOTE

If you later modify or delete the alarm in KAlarm, the KOrganizer event will be modified or deleted correspondingly. But if you change the event in KOrganizer, the alarm in KAlarm will not be affected.

Press the Load Template button to select a template to preset the dialog with, as described in [Creating and manipulating alarms](#).

Press the Try button to test the alarm and check whether it works correctly. The alarm is executed just as if it had been scheduled in the normal way.

Press the OK button when all details are correct, to add the alarm to the scheduled list.

2.4 Alarm message window

When an alarm message is due, it is displayed on each KDE desktop and cannot be covered by ordinary windows, to ensure that you see it. The message window shows the time for which the alarm was scheduled, so that you can see when it popped up if you were away from the computer at the time. (For reminder messages, however, the date/time shown is that for the main alarm or its recurrence, not the reminder message time, and the window title is 'Reminder').

Alarm message windows remain visible until you acknowledge them, unless Auto-close window after late-cancellation time was checked in the [Alarm Edit dialog](#). In the case of a recurring alarm, if an unacknowledged message window remains from a previous occurrence of the alarm, the existing window is simply popped up when the alarm recurs. This avoids having to acknowledge multiple copies of the same message should you not wish, or be unable, to acknowledge a message at the time it appears.

The alarm message window provides whichever of the following options are applicable to the displayed alarm:

- Acknowledge the alarm by clicking the Close button. This closes the window (after a prompt for confirmation, if you selected Confirm acknowledgment).
- Edit the alarm by clicking the Edit... button. This displays the [alarm edit dialog](#).
- Display options to defer the alarm until later by clicking the Defer... button. Then select Defer to date/time to enter the date and time when the message is to be redisplayed, or select Defer for time interval to enter how long after now (in hours and minutes) the message should be redisplayed. Then click Defer to defer the alarm message and close its window.

NOTE

The time the alarm is deferred to must be earlier than its next scheduled occurrence or next reminder. For this reason, the Defer... button in the alarm message window and the OK button in the deferral dialog are disabled one minute before the next occurrence or reminder.

NOTE

The Defer... button is not available for alarms which are displayed at login due to the Repeat at login option having been selected.

- Stop playing the alarm's sound file by clicking the button showing the 'stop playing' symbol.
- If the alarm message was created by dragging an email from KMail, you can directly access the email in KMail by clicking the button showing the KMail icon. This will select and highlight the email in KMail's folder list.

WARNING

If KMail's indexes are regenerated, the link to the email in KMail will be lost.

- The button showing the KAlarm icon provides a convenient way to activate KAlarm.

The alarm message window may be displayed in two different modes, depending on your preferences. You can choose the mode in the [Preferences dialog](#).

- As a normal window. In this mode, the keyboard focus is taken by the alarm message window when it appears, so if you are typing at the time your keystrokes will be diverted to it rather than your original application.
- As a non-modal window. In this mode, the keyboard focus is unaffected when the alarm message window appears, so it will not interfere with your typing. However in this mode the window has no titlebar or frame, so you cannot move it or resize it.

2.5 System tray operation

KAlarm may be run as an icon in the system tray. This icon allows one-click activation of KAlarm, and provides both control and status indication of alarm monitoring. A normal KAlarm icon indicates that alarms are being monitored, while a gray icon indicates that alarms are not being monitored.

If you hover the mouse cursor over the system tray icon, a summary of the first few message alarms due in the next 24 hours are displayed as a tooltip. You can switch this feature off, or configure the number of alarms to display and their format, in the [Preferences dialog](#).

Left click on the system tray icon to toggle between displaying and hiding the KAlarm main window.

Right click on the system tray icon to display its context menu:

Enable Alarms Enables monitoring of alarms. This option only appears if alarms are currently disabled.

See [Enabling and disabling alarms](#) for details.

Disable Alarms Disables monitoring of alarms. This option only appears if alarms are currently enabled.

See [Enabling and disabling alarms](#) for details.

New Alarm... Opens the alarm edit dialog to create a new alarm.

New Alarm From Template Displays the list of alarm templates in a menu. When you select one, the alarm edit dialog is opened, preset with that template's details.

Configure KAlarm... Displays the KAlarm preferences dialog.

The preferences dialog is described in [Configuring KAlarm](#). It includes options relating to the KAlarm system tray icon.

Restore / Minimize Restores or minimizes the main KAlarm window.

This option is only available if the run mode is 'continuous'. (See [Configuring KAlarm](#) for a description of run modes.)

Quit Closes the KAlarm system tray icon.

In 'continuous' run mode only, it also closes all KAlarm main windows. It has no effect on the monitoring of alarms by the alarm daemon, if you have deselected Disable alarms while not running in the Preferences dialog.

2.5.1 Displaying KAlarm in the system tray

You must be running the KDE desktop or another suitable window manager in order to display KAlarm in the system tray. If KAlarm is running in 'continuous' mode, the system tray icon is always displayed. These instructions apply only to 'on-demand' mode. (See [Configuring KAlarm](#) for a description of run modes.)

To display KAlarm in the system tray, select View → Show in System Tray.

To remove KAlarm from the system tray, do one of the following:

- Select View → Hide from System Tray.
- Right click on the system tray icon and choose Quit from the context menu.

2.6 Refreshing alarms

If in the unlikely event that any alarm was not triggered when it should have been, you can refresh the alarm list and trigger any missed alarms by selecting Actions → Refresh Alarms.

KAlarm retriggers missed alarms by resetting the alarm daemon, which is discussed in the [Alarm daemon](#) section.

2.7 Enabling and disabling alarms

Alarms may be enabled and disabled either as a whole or individually:

- ‘Alarm monitoring’ applies to alarms as a whole. When alarm monitoring is disabled, the alarm daemon ceases to check alarms and therefore no alarms will trigger at all. When alarm monitoring is enabled (the normal situation), all alarms which are not individually disabled will trigger at the appropriate times.
- Alarms may be individually enabled and disabled, independently of the alarm monitoring status. So the enabled/disabled status of individual alarms will be unchanged by disabling and then re-enabling alarm monitoring. Unlike alarm monitoring which could potentially be disabled due to KAlarm not running or the alarm daemon not functioning, individual alarms can only be disabled if you use menu commands to do so.

An alarm’s individual enabled/disabled status is indicated by its color in the alarm list (the color being configurable in the [Font & Color](#) tab of the Preferences dialog).

For an alarm to trigger, it must be individually enabled as well as alarm monitoring being enabled.

2.7.1 Enabling alarm monitoring

If KAlarm’s run mode is ‘continuous’ and you have selected Disable alarms while not running in the Preferences dialog, you must first ensure that KAlarm is running in order for alarm monitoring to take place.

Then if alarm monitoring is currently disabled, do one of the following to enable alarms:

- Select Actions → Enable Alarms.
- Right click on the system tray icon and choose Enable Alarms from the context menu.

The alarm daemon is started if necessary and alarms will be monitored for when they become due.

2.7.2 Disabling alarm monitoring

There are several ways to disable alarm monitoring, which prevents KAlarm from displaying any further alarms either until you re-enable alarms, or – assuming that the alarm daemon is configured to start at login – until the next time you log in.

To disable alarms without stopping the alarm daemon, do one of the following:

- Select Actions → Disable Alarms.
- Right click on the system tray icon and choose Disable Alarms from the context menu.

- If KAlarm's run mode is 'continuous' and you have selected Disable alarms while not running in the Preferences dialog, quit KAlarm.

To disable alarms by stopping the alarm daemon:

- Select Settings → Control Alarm Daemon.... This displays the Service Manager dialog which enables you to stop the alarm daemon.

2.7.3 Enabling and disabling individual alarms

To enable individual alarms which are currently disabled, do one of the following:

- Select one or more alarms by clicking on their entries in the alarm list. Then choose Actions → Enable.
- Right click on the desired entries in the alarm list and choose Enable from the context menu.

To disable individual alarms which are currently enabled, do one of the following:

- Select one or more alarms by clicking on their entries in the alarm list. Then choose Actions → Disable.
- Right click on the desired entries in the alarm list and choose Disable from the context menu.

2.8 Quitting the program

Quit KAlarm by closing all its windows and the system tray icon, or if it is running in 'continuous' mode, by closing any message windows and selecting File → Quit, or Quit in the system tray icon context menu.

The effect of File → Quit or of the system tray icon context menu item Quit depends on the run mode: in 'on-demand' mode it hides the system tray icon, while in 'continuous' mode it quits the program.

TIP

If you have deselected Disable alarms while not running in the Preferences dialog, quitting KAlarm has no effect on the alarm daemon which if already active will continue to monitor scheduled alarms and request their display when they become due.

Chapter 3

Configuring KAlarm

To configure KAlarm's operation to suit your system and your personal preferences, select Settings → Configure KAlarm.... This displays the configuration dialog.

3.1 General

The General section lets you control KAlarm's overall behavior:

- **Run Mode group box:** These options control KAlarm's system tray icon, and also allow some control over KAlarm's use of system resources by specifying whether or not to run it continuously. If system performance is of concern, running it on demand without displaying the system tray icon may be desirable; running it continuously in the system tray uses more system resources but gives the benefits of displaying an alarm-enabled indication and making the application more accessible. Running KAlarm on demand does not affect the execution of alarms, since it is the alarm daemon and not KAlarm which monitors the alarm list and triggers alarms.
 - **Run only on demand:** KAlarm is run only when an alarm is triggered, if you run it manually, or while its system tray icon is displayed. In this mode the system tray icon can still be displayed, but closing the system tray icon has no effect on any KAlarm windows.
 - **Run continuously in system tray:** KAlarm runs continuously and the system tray icon is always displayed while it is running. In this mode, closing the system tray icon closes all KAlarm main windows, and if no message windows are visible, quits the application. The options available in this mode are:
 - * **Disable alarms while not running:** Selecting this option has the effect that alarms will be disabled whenever KAlarm's system tray icon is not visible.

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- Warn before quitting: When alarms are disabled while KAlarm is not running, selecting this option prompts you for confirmation if you attempt to terminate KAlarm using the system tray icon's Quit option. This prevents accidental disabling of alarms. For safety, this option is automatically re-enabled by default whenever you change run mode.
- Autostart at login: In continuous mode, this starts KAlarm at KDE session login, ensuring that KAlarm runs at all times unless you manually quit.
- Autostart system tray icon at login: In on-demand mode, this displays KAlarm's system tray icon at login. KAlarm will run until the system tray icon is closed.
- Start alarm monitoring at login: This starts alarm monitoring at KDE session login, by starting the alarm daemon. Note that in order for alarms to be activated, you also need to select appropriate options in the Run Mode group box.

WARNING

This option should always be checked unless you intend to discontinue use of KAlarm.

NOTE

This option is automatically reselected whenever KAlarm is run. So if you have unchecked this option and want to continue to prevent the alarm daemon from running at login, you need to uncheck this option again each time you run KAlarm.

- Start of day for date-only alarms: Set the start-of-day time for the purposes of triggering date-only alarms, i.e. ones for which the Any time option was selected. On the date when they are due, such alarms will be output at the earliest opportunity during the 24 hours starting from the start-of-day time.
- If you set up yearly recurrences for February 29th, specify how these are to be handled in non-leap years by selecting one of the following options:
 - February 28th: the alarm will occur on February 29th in leap years, and on February 28th in non-leap years.
 - March 1st: the alarm will occur on February 29th in leap years, and on March 1st in non-leap years.
 - Do not repeat: the alarm will occur on February 29th in leap years, but will be suppressed in non-leap years.

NOTE

Changing this option will not cause the next scheduled recurrence of any existing alarms to be re-evaluated. It will only affect new alarms, or existing alarms after they are next triggered.

- Confirm alarm deletions: Specify whether you should be prompted for confirmation each time you delete an alarm.
- Expired Alarms group box: These options control the storage of expired alarms.
 - Keep alarms after expiry: Select this option to store expired and deleted alarms. Deselect it to keep no record of alarms once they cease to be active. Note that deleted alarms are only stored if they have previously been triggered. If you delete an alarm before it ever triggers, it is discarded.
 - Discard expired alarms after: Set the number of days to store expired and deleted alarms, after which they are permanently deleted.
 - Clear expired alarms: This button discards all currently stored expired alarms. This has no effect on alarms which subsequently expire; they will continue to be stored according to the selected options.
- Terminal for Command Alarms: Here, you can select which type of terminal window should be used for command alarms which are executed in a terminal window. Some of the most common terminal window applications are preconfigured, e.g. xterm, Konsole, although only those which are installed on your system will be shown here. You can view the actual command options used for each application by displaying the context help for its radio button.

If you want to use another application, or want to use one of those listed but with different command options, select Other and enter the command to invoke the terminal window. By default, the alarm's command string will be appended to what you specify. Alternatively, you may specify where the alarm's command string should be inserted, by use of the following codes:

- %c** The alarm's command string will be substituted.
- %w** The alarm's command string will be substituted, with a `sleep` appended.
- %C** A temporary command file containing the alarm's command string will be created, and the command to execute the file will be substituted.
- %W** A temporary command file containing the alarm's command string will be created with a `sleep` appended, and the command to execute the file will be substituted.

When the command alarm is triggered, its command string will be quoted before being inserted into the terminal window command.

3.2 Email

The Email section lets you choose options for sending and addressing email alarms:

- Email client: Specify the email client to be used to send email alarms:
 - KMail: When an email alarm is triggered, the email is sent using KMail (which is started first if necessary) as follows:

- * If KMail is version 1.7 or later, the email is sent automatically.
- * If KMail is an older version, the email is added to KMail's `outbox` folder for later transmission.
- Sendmail: When an email alarm is triggered, the email is sent automatically using sendmail. This option will only work if your system is configured to use sendmail, or a sendmail compatible mail transport agent such as postfix or qmail.
- Copy sent emails into KMail's sent-items folder: Select this option if, every time an email alarm is triggered, you want a copy of the transmitted email to be stored in KMail's `sent-items` folder.

NOTE

This option is not available when KMail is selected as the email client, since KMail automatically does this.

- Select your email address to be used as the sender's address in email alarms:
 - Select From to enter an email address.
 - Select Use address from Control Center to use the email address which is configured in the KDE Control Center.
 - Select Use KMail identities to be able to choose at the time you configure an email alarm which of KMail's email identities to use. KMail's default identity will be used for alarms which were already configured before you selected this option.
- Select your email address to be used for sending blind copies of email alarms to yourself when the Copy email to self option is selected:
 - Select Bcc to enter an email address. If blind copies are to be sent to your account on the computer which KAlarm runs on, you could simply enter your user login name here.
 - Select Use address from Control Center to use the email address which is configured in the KDE Control Center.
- Notify when remote emails are queued: Select this option to display a notification whenever an email alarm queues an email for sending to a remote system. This may be useful if, for example, you have a dial-up connection, or email is queued in KMail's `outbox` folder, so that you can ensure that you do whatever is needed to actually transmit the email.

3.3 View

The View section lets you control some aspects of KAlarm's appearance:

- System Tray Tooltip group box: These options control what information is shown in the tooltip which appears when the mouse cursor hovers over KAlarm's system tray icon.

- Show next 24 hours' alarms: When selected, a summary of the first few alarms due in the next 24 hours is displayed.
- Maximum number of alarms to show: Deselect this option to display all of the next 24 hours' alarms. Select it to set the maximum number of alarms which will be displayed.
- Show alarm time: Select this option to show the time at which each alarm is scheduled.
- Show time until alarm: Select this option to show the length of time remaining before each alarm's next scheduled occurrence. The length of time is shown in hours and minutes.
 - * Prefix: Specify a symbol or text to show in front of the length of time until the alarm, to distinguish it from the time at which the alarm is scheduled.
- Message windows have a title bar and take keyboard focus: This option controls whether alarm message windows are modal or not, i.e. whether they grab the keyboard focus when they appear. See the [Alarm message window](#) section for details.
- System tray icon update interval: Set the frequency at which the KAlarm system tray icon is updated to reflect whether alarms are currently being monitored. This involves checking whether the alarm daemon is running.

3.4 Font & Color

The Font & Color section lets you set the default appearance of alarm messages, and the colors to be used in the alarm list:

- Select the default font and background color to use for alarm message display.
- Edit the color selection list which is displayed when you click on the background color combo box:
 - Add color...: Displays a color selection dialog which lets you choose a color to add to the list.
 - Remove color: Removes the color currently displayed in the Background color combo box from the list. The Custom color item cannot be removed from the list, and when it is displayed, this button is disabled.
- Select the color to be used in the alarm list to show disabled alarms.
- Select the color to be used in the alarm list to show expired alarms.

3.5 Edit

The Edit section lets you choose default values for the options in the [alarm edit dialog](#):

For display alarms:

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- Set the default states for the Cancel if late, Auto-close window after this time and Confirm acknowledgment checkboxes.
- Set the default reminder period units.
- Set the default special display alarm actions.
- Set the default sound options. Note that a default sound file may be specified even if the sound type is not set to Sound file.

For command alarms:

- Set the default states for the Enter a script and Execute in terminal window checkboxes.

For email alarms:

- Set the default state for the Copy email to self checkbox.

For all alarm types:

- Set the default recurrence type.

Chapter 4

Command line operation

When command line parameters are supplied, KAlarm does not display the list of scheduled alarms as described in [Using KAlarm](#) above. Command line options specific to KAlarm may be used to perform the following operations:

- schedule a new alarm
- control the alarm daemon
- control KAlarm's display mode
- obtain help

Additional command line options are provided primarily to enable other programs to interface to KAlarm. They are described in the chapter [Developer's Guide to KAlarm](#).

The command line must only contain options applicable to one KAlarm operation. If you want to perform multiple operations, you must invoke KAlarm multiple times with a single set of options each time.

4.1 Schedule a new alarm

The following options are used to schedule a new alarm:

Option	Description
-a, --ack-confirm	Prompt for confirmation when the alarm message is acknowledged.
-A, --attach <i>URL</i>	Specify the path or URL of a file which is to be attached to the email. This option may be repeated as necessary. --mail must be specified with this option.

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<code>--auto-close</code>	Automatically close the alarm window after the expiry of the <code>--late-cancel</code> period. <code>--late-cancel</code> must be specified with this option.
<code>-b, --beep</code>	Make an audible beep when the message is displayed. <code>--speak</code> , <code>--play</code> and <code>--play-repeat</code> cannot be specified with this option.
<code>--bcc</code>	Blind copy the email to yourself. <code>--mail</code> must be specified with this option.
<code>-c, --color, --colour <i>color</i></code>	Set the message background color to the specified Qt™ color name or hex code 0xRRGGBB.
<code>-C, --colorfg, --colourfg <i>color</i></code>	Set the message foreground color to the specified Qt™ color name or hex code 0xRRGGBB.
<code>-d, --disable</code>	Disable the alarm. It will not trigger until it has been manually enabled.
<code>-e, --exec <i>commandline</i></code>	Specify a shell command to execute. If specified, this option must be the last KAlarm option in KAlarm's command line. All subsequent command parameters and options are interpreted as forming the command line to execute. <code>--file</code> and <code>--mail</code> cannot be specified with this option. <code>--ack-confirm</code> , <code>--beep</code> , <code>--color</code> and <code>--colorfg</code> are ignored with this option.
<code>-f, --file <i>URL</i></code>	Specify the path or URL of a text or image file whose contents are to form the alarm message. <code>--exec</code> and <code>--mail</code> cannot be specified, and <code>message</code> must not be present with this option.
<code>-F, --from-id <i>ID</i></code>	Use the specified KMail identity as the sender of the email. <code>--mail</code> must be specified with this option.

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<p><code>-i, --interval <i>period</i></code></p>	<p>Set the interval between repetitions of the alarm. Hours/minutes are specified in the format <i>nHnM</i>, where <i>n</i> is a number, e.g. 3H30M. Other time periods are specified in the format <i>nX</i>, where <i>n</i> is a number and <i>X</i> is one of the following letters: Y (years), M (months), W (weeks), D (days). If <code>--recurrence</code> is also specified, Y (years) and M (months) are not allowed. Mandatory if <code>--repeat</code> or <code>--until</code> is specified.</p>
<p><code>-k, --korganizer</code></p>	<p>Show the alarm as an event in KOrganizer's active calendar.</p>
<p><code>-l, --late-cancel <i>period</i></code></p>	<p>Cancel the alarm if it cannot be triggered within the specified <i>period</i> after the correct time. The <i>period</i> period is specified in the same format as described for <code>--reminder</code>. The default value of <i>period</i> is 1 minute.</p>
<p><code>-L, --login</code></p>	<p>Trigger the alarm every time you log in. <code>--interval</code>, <code>--repeat</code> and <code>--until</code> cannot be specified with this option.</p>
<p><code>-m, --mail <i>address</i></code></p>	<p>Send an email to the specified address. This option may be repeated as necessary. <code>--exec</code> and <code>--file</code> cannot be specified with this option. <code>--ack-confirm</code>, <code>--beep</code>, <code>--color</code> and <code>--colorfg</code> are ignored with this option.</p>
<p><code>-p, --play <i>URL</i></code></p>	<p>Specify the path or URL of an audio file to be played once when the alarm message is displayed. <code>--play-repeat</code>, <code>--beep</code> and <code>--speak</code> cannot be specified with this option.</p>
<p><code>-P, --play-repeat <i>URL</i></code></p>	<p>Specify the path or URL of an audio file to be played repeatedly for as long as the alarm message is displayed. <code>--play</code>, <code>--beep</code> and <code>--speak</code> cannot be specified with this option.</p>

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<pre>--recurrence <i>spec</i></pre>	<p>Set the alarm to recur. Specify the recurrence using iCalendar syntax (defined in RFC2445), e.g. 'FREQ=MONTHLY;COUNT=-4;INTERVAL=3;BYDAY=-1MO'. --until cannot be specified with this option.</p>
<pre>-r, --repeat <i>count</i></pre>	<p>Set the number of times the alarm should be triggered, or if a recurrence is specified with --recurrence, the number of times the alarm should be triggered each time --recurrence activates it (i.e. a repetition within a recurrence). If --recurrence is not present, specify -1 to repeat the alarm indefinitely. --interval must be, and --until cannot be, specified with this option.</p>
<pre>-R, --reminder <i>period</i></pre>	<p>Output a reminder alarm the specified length of time before the main alarm and each of its recurrences (if any). Hours/minutes are specified in the format <i>nHnM</i>, where <i>n</i> is a number, e.g. 3H30M. Other time periods are specified in the format <i>nX</i>, where <i>n</i> is a number and <i>X</i> is one of the following letters: W (weeks), D (days). This option cannot be specified with --exec, --mail or --reminder-once.</p>
<pre>--reminder-once <i>period</i></pre>	<p>Output a reminder alarm once, the specified length of time before the first recurrence of the alarm. No reminder will be displayed before subsequent recurrences (if any). This option cannot be specified with --exec, --mail or --reminder.</p>

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<code>-s, --speak</code>	Speak the message when it is displayed. This option requires KTTSD to be installed and configured, together with a compatible speech synthesizer. <code>--beep</code> , <code>--play</code> and <code>--play-repeat</code> cannot be specified with this option.
<code>-S, --subject <i>subject</i></code>	The subject line of the email. <code>--mail</code> must be specified with this option.
<code>-t, --time <i>date/time</i></code>	Trigger alarm on the date or at the date/time specified. Specify a date without a time in the format <code>yyyy-mm-dd</code> ; specify a date and time by <code>[[[yyyy-]mm-]dd-]hh:mm</code> (where omitted, date fields default to the values for today).
<code>-v, --volume <i>percentage</i></code>	Set the audio volume for playing the audio file. This option can only be used when <code>--play</code> or <code>--play-repeat</code> is specified.
<code>-u, --until <i>date/time</i></code>	Repeat the alarm until the date or date/time specified. Specify a date without a time in the same format as for <code>--time</code> . <code>--interval</code> must be, and <code>--repeat</code> and <code>--recurrence</code> cannot be, specified with this option.
<code><i>message</i></code>	Message text to display or, if <code>--mail</code> is specified, the body of the email message.

Either a message text, `--file` or `--exec` must be specified; except as noted above, all the options are optional.

Two alternative examples which display a multi-line message with a red background at 10 p.m. on the 27th of this month are:

```
% kalarm -c red -t 27-22:00 "Remember to\nSTOP"
% kalarm -c 0xFF0000 -t 27-22:00 "Remember to\nSTOP"
```

4.2 Other options

The following options are used to reset or halt the alarm daemon, to display the [alarm edit dialog](#), or to control KAlarm's display mode.

See the [Alarm daemon](#) section for a discussion about resetting and stopping the alarm daemon.

Option	Description
<code>--edit <i>eventID</i></code>	Display the alarm edit dialog to edit the alarm with the specified event ID.
<code>-n, --edit-new</code>	Display the alarm edit dialog, in order to edit a new alarm.
<code>--edit-new-preset <i>templateName</i></code>	Display the alarm edit dialog, preset with the alarm template of the specified name, in order to edit a new alarm.
<code>--reset</code>	Reset the alarm daemon.
<code>--stop</code>	Stop the alarm daemon.
<code>--tray</code>	Display KAlarm as an icon in the system tray.

For example, to reset the alarm daemon:

```
% kalarm --reset
```

4.3 Help options

The following help options are common to all KDE programs:

Option	Description
<code>--help</code>	Shows a brief options help text.
<code>--help-qt</code>	Shows numerous generic Qt™-specific options.
<code>--help-kde</code>	Shows numerous generic KDE-specific options.
<code>--help-all</code>	Shows all options.
<code>--author</code>	Shows the names and email addresses of KAlarm authors.
<code>-v, --version</code>	Shows the running versions of the Qt™ library, KDE and KAlarm.
<code>--license</code>	Show license information.

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Chapter 5

Alarm daemon

The alarm daemon, KAlarmd, monitors KAlarm's calendar file for alarms becoming due. When it determines that an alarm is due, it tells KAlarm to display or execute it, or to cancel it if it is late and late trigger was not selected for that alarm.

The alarm daemon runs in the background, with no user interface. It may be controlled as described below.

5.1 Starting, resetting and stopping the alarm daemon

The alarm daemon is normally started at KDE session login (unless you disable auto start in the [Preferences dialog](#) and then cease to use KAlarm), and runs continuously until logout. If for any reason it is not running, alarm monitoring will not occur and KAlarm will not display or execute any alarms.

5.1.1 Starting the alarm daemon

To start the alarm daemon, you can either run KAlarm in its default graphical mode (i.e. without any command line parameters other than `--tray`), enable alarms using KAlarm's system tray icon menu, reset the daemon as described [below](#), or you can run the alarm daemon directly from the command line:

```
% kalarmd
```

5.1.2 Resetting the alarm daemon

It is also possible to reset the alarm daemon without stopping it. Resetting causes the alarm daemon to re-read the list of scheduled messages from the calendar file and re-initialize its KAlarm-related data.

Why might you want to reset the alarm daemon? It isn't a very likely occurrence, but if for any reason KAlarm was not able to run when the alarm daemon told it to trigger an alarm, that alarm will never be displayed or executed until the alarm daemon is either reset or restarted.

TIP

Resetting starts the alarm daemon if it is not currently running.

To reset the alarm daemon, either use the menu command Actions → Refresh Alarms or type the following command:

```
% kalarm --reset
```

5.1.3 Stopping the alarm daemon

Stopping the alarm daemon will prevent any further monitoring of scheduled alarm messages until the daemon is restarted.

To stop the alarm daemon, type the following command:

```
% kalarm --stop
```

Chapter 6

Developer's Guide to KAlarm

KAlarm provides an interface to allow other applications to request the following functions:

- schedule a new alarm
- trigger or cancel an already scheduled alarm
- cancel an already scheduled alarm
- trigger an already scheduled alarm
- display the alarm edit dialog

Each of the above functions is implemented both by a DCOP call and by the command line. DCOP calls should be used in preference if KAlarm is already running.

6.1 DCOP interface

The DCOP calls described in this document are all implemented in KAlarm's request DCOP object. The interface is defined in the file `kalarmiface.h`.

NOTE

In KAlarm version 1.2, the DCOP interface was completely revised to allow easier calling of functions, and to conform better to the standard KDE DCOP configuration. The old DCOP interface is currently still usable for compatibility purposes, but will be removed at some future date.

6.1.1 `cancelEvent`

Name

`cancelEvent` – cancel an already scheduled alarm.

Synopsis

```
void cancelEvent(const QString& calendarFile,  
                const QString& eventID)
```

Parameters

calendarFile Specifies the URL (not path) of the calendar file containing the event to be canceled.

eventID Specifies the unique ID of the event to be canceled, as stored in *calendarFile*.

Description

`cancelEvent()` is a DCOP call to cancel the specified alarm. KAlarm deletes the alarm from the calendar file without displaying or executing it.

NOTE

The *calendarFile* parameter is only used for integrity checking: if the URL does not specify KAlarm's current default calendar file, the request will be ignored.

6.1.2 `triggerEvent`

Name

`triggerEvent` – trigger an already scheduled alarm.

Synopsis

```
void triggerEvent(const QString& calendarFile,  
                 const QString& eventID)
```

Parameters

calendarFile Specifies the URL (not path) of the calendar file containing the event to be triggered.

eventID Specifies the unique ID of the event to be triggered, as stored in *calendarFile*.

Description

`triggerEvent()` is a DCOP call to trigger the immediate display or execution of the specified alarm (regardless of what time it is scheduled for). KAlarm retrieves the alarm from the calendar file and then displays or executes it.

If the alarm is already due, KAlarm then deletes all scheduled occurrences of the alarm up to the current time, and if no repetitions of the alarm still remain, the alarm is deleted from the calendar file. If the alarm is not due yet, its scheduled occurrences are left unchanged.

NOTE

The *calendarFile* parameter is only used for integrity checking: if the URL does not specify KAlarm's current default calendar file, the request will be ignored.

6.1.3 `handleEvent`

Name

`handleEvent` – trigger or cancel an already scheduled alarm.

Synopsis

```
void handleEvent(const QString& calendarFile,  
                const QString& eventID)
```

Parameters

calendarFile Specifies the URL (not path) of the calendar file containing the event to be displayed/executed or canceled.

eventID Specifies the unique ID of the event to be displayed/executed or canceled, as stored in *calendarFile*.

Description

`handleEvent ()` is a DCOP call to display/execute or cancel the specified alarm. KAlarm retrieves the alarm from the calendar file and then determines what action to take depending on when the alarm is due.

- If the alarm is not yet due, nothing happens.
- If the alarm is due, it acts as follows. If a late-cancel value is set and the alarm is too late, i.e. the scheduled trigger time was longer than late-cancel minutes ago, KAlarm does not display or execute the alarm; otherwise, KAlarm displays or executes the alarm. If no repetitions of the alarm are still scheduled, KAlarm then deletes the alarm from the calendar file.

NOTE

The `calendarFile` parameter is only used for integrity checking: if the URL does not specify KAlarm's current default calendar file, the request will be ignored.

6.1.4 `scheduleMessage`

Name

`scheduleMessage` – schedule a new alarm message.

Synopsis

```
bool scheduleMessage(const QString& message,
                    const QString& dateTime,
                    int lateCancel,
                    int flags,
                    const QString& bgColor,
                    const QString& fgColor,
                    const QString& font,
                    const KURL& audioURL,
                    int reminder,
                    const QString& recurrence,
                    int subRepeatInterval,
                    int subRepeatCount)
```

```
bool scheduleMessage(const QString& message,
                    const QString& dateTime,
                    int lateCancel, int flags,
                    const QString& bgColor,
                    const QString& fgColor,
                    const QString& font,
                    const KURL& audioURL,
                    int reminder,
                    int recurType,
                    int recurInterval,
                    int recurCount)
```

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```
bool scheduleMessage(const QString& message,
                    const QString& dateTime,
                    int lateCancel,
                    int flags,
                    const QString& bgColor,
                    const QString& fgColor,
                    const QString& font,
                    const KURL& audioURL,
                    int reminder,
                    int recurType,
                    int recurInterval,
                    const QString& endDateTime)
```

Parameters

message Specifies the text of the message to be scheduled.

dateTime Specifies the scheduled date, or date and time, at which the message should be displayed. For a date-only alarm, the string should be in the format 'YYYY-MM-DD' (as returned by `QDate::toString(Qt::ISODate)`). For an alarm with a date and time, the string should be in the format 'YYYY-MM-DDTHH:MM[:SS]' (as returned by `QDateTime::toString(Qt::ISODate)`) or 'HH:MM[:SS]' (as returned by `QTime::toString(Qt::ISODate)`). If no date is specified, today's date is used. Note that any seconds value is ignored.

lateCancel Causes the alarm to be canceled if it cannot be triggered within the specified number of minutes after the alarm's scheduled time. If the value is 0, the alarm will not be canceled no matter how late it is triggered.

flags Specifies the logical OR of the desired alarm flags. The flag bits are those defined in class `KAlarmIface` in `kalarmiface.h`. Note that not all flag bits are applicable to message alarms.

bgColor Specifies the background color for displaying the message. The string may be in the format '#RRGGBB' (as returned by `QColor::name()`) where RR, GG and BB are two-digit hexadecimal values for red, green and blue. Alternatively the string may be in any of the other formats accepted by `QColor::setNamedColor()`, such as a name from the X color database (e.g. 'red' or 'steelblue'). Set the string to null to specify the current default background color.

fgColor Specifies the foreground color for displaying the message. The format of the string is the same as for *bgColor*, or alternatively set the string to null to specify the current default foreground color.

font Specifies the font for displaying the message. The format of the string is that output by `QFont::toString()`. Set the string to null to use the default message font current at the time the message is displayed.

audioURL Specifies the audio file which is to be played when the message is displayed. Set the value to null if no audio file is to be played.

reminder Specifies the number of minutes in advance of the main alarm and of each of its recurrences (if any) at which a reminder alarm should be displayed. Specify 0 if no reminder is required.

recurrence Specifies a regular recurrence for the alarm, using iCalendar syntax as defined in [RFC2445](#). For example, 'FREQ=MONTHLY;COUNT=4;INTERVAL=3;BYDAY=-1MO' would specify 4 repetitions at 3-monthly intervals on the last Monday of the month. For a non-recurring alarm, specify an empty string.

recurType Specifies the recurrence type for the alarm. The permissible values are MINUTELY, DAILY, WEEKLY, MONTHLY, YEARLY. These are defined in class `KAlarmIface` in `kalarmiface.h`. Monthly recurrences are of the day of the month type, and yearly recurrences are of the date in the year type, with the date in both cases taken from the `dateTime` parameter.

recurInterval Specifies the number of periods (minutes/days/weeks/months/years as specified by `recurType`) between recurrences of the alarm.

recurCount Specifies the number of times that the alarm should be repeated. Specify -1 to repeat the alarm indefinitely.

endDateTime Specifies the end date, or date and time, for recurrences of the alarm. If `dateTime` includes a time, this parameter must also include a time; if `dateTime` contains only a date, this parameter must also contain only a date.

subRepeatInterval Specifies the number of minutes between sub-repetitions of the alarm. Specify 0 for no sub-repetition. Ignored if no recurrence is specified.

subRepeatCount Specifies the number of sub-repetitions of the alarm, including the initial occurrence.

Description

`scheduleMessage()` is a DCOP call to schedule the specified alarm message for display at the specified date and time. It has three forms. The most general form allows an arbitrary recurrence to be specified – use this also for non-repeating alarms. The other forms provide convenient access to a restricted set of alarm recurrence types, one specifying a repetition count and the other an end time.

If the scheduled time (including any repetitions) has already passed, KAlarm immediately displays the message (unless the `lateCancel` value indicates that it is now too late to display the alarm, in which case KAlarm ignores the request). If the scheduled time (or a repetition) is in the future, KAlarm adds the alarm message to the calendar file for later display.

6.1.5 scheduleFile

Name

`scheduleFile` – schedule a new alarm which displays the contents of a text or image file.

Synopsis

```
bool scheduleFile(const KURL& URL,
                  const QString& dateTime,
                  int lateCancel,
                  int flags,
                  const QString& bgColor,
                  const KURL& audioURL,
                  int reminder,
                  const QString& recurrence,
                  int subRepeatInterval,
                  int subRepeatCount)
```

```
bool scheduleFile(const KURL& URL,
                  const QString& dateTime,
                  int lateCancel,
                  int flags,
                  const QString& bgColor,
                  const KURL& audioURL,
                  int reminder,
                  int recurType,
                  int recurInterval,
                  int recurCount)
```

```
bool scheduleFile(const KURL& URL,
                  const QString& dateTime,
                  int lateCancel,
                  int flags,
                  const QString& bgColor,
                  const KURL& audioURL,
                  int reminder,
                  int recurType,
                  int recurInterval,
                  const QString& endDateTime)
```

Parameters

URL Specifies the text or image file whose contents are to be displayed in the message to be scheduled.

dateTime Specifies the scheduled date, or date and time, at which the file should be displayed. For a date-only alarm, the string should be in the format 'YYYY-MM-DD' (as returned by `QDate::toString(Qt::ISODate-)`). For an alarm with a date and time, the string should be in the format

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'YYYY-MM-DDTHH:MM[:SS]' (as returned by `QDateTime::toString(Qt::ISODate)`) or 'HH:MM[:SS]' (as returned by `QTime::toString(Qt::ISODate)`). If no date is specified, today's date is used. Note that any seconds value is ignored.

lateCancel Causes the alarm to be canceled if it cannot be triggered within the specified number of minutes after the alarm's scheduled time. If the value is 0, the alarm will not be canceled no matter how late it is triggered.

flags Specifies the logical OR of the desired alarm flags. The flag bits are those defined in class `KAlarmIface` in `kalarmiface.h`. Note that not all flag bits are applicable to file alarms.

bgColor Specifies the background color for displaying the file. The string may be in the format '#RRGGBB' (as returned by `QColor::name()`) where RR, GG and BB are two-digit hexadecimal values for red, green and blue. Alternatively the string may be in any of the other formats accepted by `QColor::setNamedColor()`, such as a name from the X color database (e.g. 'red' or 'steelblue'). Set the string to null to specify the current default background color.

audioURL Specifies the audio file which is to be played when the message is displayed. Set the value to null if no audio file is to be played.

reminder Specifies the number of minutes in advance of the main alarm and of each of its recurrences (if any) at which a reminder alarm should be displayed. Specify 0 if no reminder is required.

recurrence Specifies a regular recurrence for the alarm, using iCalendar syntax as defined in [RFC2445](#). For example, 'FREQ=MONTHLY;COUNT=4;INTERVAL=3;BYDAY=-1MO' would specify 4 repetitions at 3-monthly intervals on the last Monday of the month. For a non-recurring alarm, specify an empty string.

recurType Specifies the recurrence type for the alarm. The permissible values are MINUTELY, DAILY, WEEKLY, MONTHLY, YEARLY. These are defined in class `KAlarmIface` in `kalarmiface.h`. Monthly recurrences are of the day of the month type, and yearly recurrences are of the date in the year type, with the date in both cases taken from the `dateTime` parameter.

recurInterval Specifies the number of periods (minutes/days/weeks/months/years as specified by `recurType`) between recurrences of the alarm.

recurCount Specifies the number of times that the alarm should be repeated. Specify -1 to repeat the alarm indefinitely.

endDateTime Specifies the end date, or date and time, for recurrences of the alarm. If `dateTime` includes a time, this parameter must also include a time; if `dateTime` contains only a date, this parameter must also contain only a date.

subRepeatInterval Specifies the number of minutes between sub-repetitions of the alarm. Specify 0 for no sub-repetition. Ignored if no recurrence is specified.

subRepeatCount Specifies the number of sub-repetitions of the alarm, including the initial occurrence.

Description

`scheduleFile()` is a DCOP call to schedule the specified text or image file for display at the specified date and time. Apart from specifying a file path or URL and omitting the foreground color and font, its usage is identical to `scheduleMessage` - see the description of that function for further details.

6.1.6 `scheduleCommand`

Name

`scheduleCommand` – schedule a new alarm which executes a shell command.

Synopsis

```
bool scheduleCommand(const QString& commandLine,  
                    const QString& dateTime,  
                    int lateCancel,  
                    int flags,  
                    const QString& recurrence,  
                    int subRepeatInterval,  
                    int subRepeatCount)
```

```
bool scheduleCommand(const QString& commandLine,  
                    const QString& dateTime,  
                    int lateCancel,  
                    int flags,  
                    int recurType,  
                    int recurInterval,  
                    int recurCount)
```

```
bool scheduleCommand(const QString& commandLine,  
                    const QString& dateTime,  
                    int lateCancel,  
                    int flags,  
                    int recurType,  
                    int recurInterval,  
                    const QString& endDateTime)
```

Parameters

commandLine Specifies the command whose execution is to be scheduled. The *flags* parameter indicates whether this parameter contains a shell command line or a command script.

dateTime Specifies the scheduled date, or date and time, at which the command should be executed. For a date-only alarm, the string should be in the format 'YYYY-MM-DD' (as returned by `QDate::toString(Qt::ISODate)`). For an alarm with a date and time, the string should be in the format 'YYYY-MM-DDTHH:MM[:SS]' (as returned by `QDateTime::toString(Qt::ISODate)`) or 'HH:MM[:SS]' (as returned by `QTime::toString(Qt::ISODate)`). If no date is specified, today's date is used. Note that any seconds value is ignored.

lateCancel Causes the alarm to be canceled if it cannot be triggered within the specified number of minutes after the alarm's scheduled time. If the value is 0, the alarm will not be canceled no matter how late it is triggered.

flags Specifies the logical OR of the desired alarm flags. The flag bits are those defined in class `KAlarmIface` in `kalarmiface.h`. Note that not all flag bits are applicable to command alarms.

recurrence Specifies a regular recurrence for the alarm, using iCalendar syntax as defined in [RFC2445](#). For example, 'FREQ=MONTHLY;COUNT=4;INTERVAL=3;BYDAY=-1MO' would specify 4 repetitions at 3-monthly intervals on the last Monday of the month. For a non-recurring alarm, specify an empty string.

recurType Specifies the recurrence type for the alarm. The permissible values are MINUTELY, DAILY, WEEKLY, MONTHLY, YEARLY. These are defined in class `KAlarmIface` in `kalarmiface.h`. Monthly recurrences are of the day of the month type, and yearly recurrences are of the date in the year type, with the date in both cases taken from the *dateTime* parameter.

recurInterval Specifies the number of periods (minutes/days/weeks/months/years as specified by *recurType*) between recurrences of the alarm.

recurCount Specifies the number of times that the alarm should be repeated. Specify -1 to repeat the alarm indefinitely.

endDateTime Specifies the end date, or date and time, for recurrences of the alarm. If *dateTime* includes a time, this parameter must also include a time; if *dateTime* contains only a date, this parameter must also contain only a date.

subRepeatInterval Specifies the number of minutes between sub-repetitions of the alarm. Specify 0 for no sub-repetition. Ignored if no recurrence is specified.

subRepeatCount Specifies the number of sub-repetitions of the alarm, including the initial occurrence.

Description

`scheduleCommand()` is a DCOP call to schedule the specified shell command line, or command script, for execution at the specified date and time. Apart

from specifying a command and omitting the message color, font and audio file parameters, its usage is identical to [scheduleMessage](#) - see the description of that function for further details.

6.1.7 scheduleEmail

Name

scheduleEmail – schedule a new alarm which sends an email.

Synopsis

```
bool scheduleEmail(const QString& fromID,
                  const QString& addresses,
                  const QString& subject,
                  const QString& message,
                  const QString& attachments,
                  const QString& dateTime,
                  int lateCancel,
                  int flags,
                  const QString& recurrence,
                  int subRepeatInterval,
                  int subRepeatCount)
```

```
bool scheduleEmail(const QString& fromID,
                  const QString& addresses,
                  const QString& subject,
                  const QString& message,
                  const QString& attachments,
                  const QString& dateTime,
                  int lateCancel,
                  int flags,
                  int recurType,
                  int recurInterval,
                  int recurCount)
```

```
bool scheduleEmail(const QString& fromID,
                  const QString& addresses,
                  const QString& subject,
                  const QString& message,
                  const QString& attachments,
                  const QString& dateTime,
                  int lateCancel,
                  int flags,
                  int recurType,
                  int recurInterval,
                  const QString& endTime)
```

Parameters

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fromID The KMail identity to use as the sender of the email. If empty, the sender's email address will be that configured in KAlarm's [Email preferences](#).

addresses A comma separated list of recipients' email addresses.

subject Specifies the subject line of the email.

message Specifies the email message body.

attachments A comma-separated list of paths or URLs of files to send as email attachments.

dateTime Specifies the scheduled date, or date and time, at which the email should be sent. For a date-only alarm, the string should be in the format 'YYYY-MM-DD' (as returned by `QDate::toString(Qt::ISODate)`). For an alarm with a date and time, the string should be in the format 'YYYY-MM-DDTHH:MM[:SS]' (as returned by `QDateTime::toString(Qt::ISODate)`) or 'HH:MM[:SS]' (as returned by `QTime::toString(Qt::ISODate)`). If no date is specified, today's date is used. Note that any seconds value is ignored.

lateCancel Causes the alarm to be canceled if it cannot be triggered within the specified number of minutes after the alarm's scheduled time. If the value is 0, the alarm will not be canceled no matter how late it is triggered.

flags Specifies the logical OR of the desired alarm flags. The flag bits are those defined in class `KAlarmIface` in `kalarmiface.h`. Note that not all flag bits are applicable to email alarms.

recurrence Specifies a regular recurrence for the alarm, using iCalendar syntax as defined in [RFC2445](#). For example, 'FREQ=MONTHLY;COUNT=4;INTERVAL=3;BYDAY=-1MO' would specify 4 repetitions at 3-monthly intervals on the last Monday of the month. For a non-recurring alarm, specify an empty string.

recurType Specifies the recurrence type for the alarm. The permissible values are MINUTELY, DAILY, WEEKLY, MONTHLY, YEARLY. These are defined in class `KAlarmIface` in `kalarmiface.h`. Monthly recurrences are of the day of the month type, and yearly recurrences are of the date in the year type, with the date in both cases taken from the `dateTime` parameter.

recurInterval Specifies the number of periods (minutes/days/weeks/months/years as specified by `recurType`) between recurrences of the alarm.

recurCount Specifies the number of times that the alarm should be repeated. Specify -1 to repeat the alarm indefinitely.

endDateTime Specifies the end date, or date and time, for recurrences of the alarm. If `dateTime` includes a time, this parameter must also include a time; if `dateTime` contains only a date, this parameter must also contain only a date.

subRepeatInterval Specifies the number of minutes between sub-repetitions of the alarm. Specify 0 for no sub-repetition. Ignored if no recurrence is specified.

subRepeatCount Specifies the number of sub-repetitions of the alarm, including the initial occurrence.

Description

`scheduleEmail()` is a DCOP call to schedule the specified email for sending at the specified date and time. Apart from specifying the email header and contents and omitting the message color, font and audio file parameters, its usage is identical to `scheduleMessage` - see the description of that function for further details.

6.1.8 edit

Name

`edit` – Display the [alarm edit dialog](#) to edit an alarm.

Synopsis

```
bool edit(const QString& eventID)
```

Parameters

eventID Specifies the unique ID of the event to be edited.

Return value

false if the specified alarm could not be found or is read-only, true otherwise.

Description

`edit()` is a DCOP call to display the [alarm edit dialog](#) to edit the specified alarm.

6.1.9 editNew

Name

`editNew` – Display the [alarm edit dialog](#) to edit a new alarm.

Synopsis

```
bool editNew(const QString& templateName)
```

Parameters

templateName Specifies the name of an alarm template to base the new alarm on, or empty if no template should be used.

Return value

false if *templateName* is non-empty but a template of that name cannot be found, true otherwise.

Description

`editNew()` is a DCOP call to display the [alarm edit dialog](#) to edit a new alarm. If an alarm template name is specified as a parameter, the dialog is preset with details from the template. If the specified template cannot be found, the [alarm edit dialog](#) is still displayed but is (obviously) not preset with the template.

6.2 Command line interface

Command line options are provided to enable other programs (such as the alarm daemon) to start up KAlarm if it is not already running, in order to trigger or cancel scheduled alarms, or schedule new alarms. The reason for using command line options for this purpose is that if KAlarm were started without any command line parameters and then sent DCOP requests, it would start in its default graphical mode, which is clearly undesirable for an inter-program request.

NOTE

Programs should first check whether KAlarm is already running; if it is, they should instead use DCOP calls to request these operations.

The command line options for scheduling a new alarm are as described in the chapter [Command line operation](#). The options for triggering and canceling scheduled alarms are as follows:

NOTE

Normal users may also if they wish use these command line options (assuming that they can supply the necessary parameter information).

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Option	Description
<code>--calendarURL url</code>	Use the calendar file with the specified URL. This option is only used for integrity checking: if the URL doesn't specify KAlarm's current default calendar file, the request will be ignored.
<code>--cancelEvent eventID</code>	Cancel the alarm with the specified event ID.
<code>--triggerEvent eventID</code>	Trigger the alarm with the specified event ID. The action taken is the same as for the triggerEvent()DCOP call.
<code>--handleEvent eventID</code>	Trigger or cancel the alarm with the specified event ID. KAlarm determines which action to take in the same way as for the handleEvent()DCOP call.

`--cancelEvent`, `--triggerEvent` and `--handleEvent` are mutually exclusive. `--calendarURL` is optional, but can only be used with one of the other three options.

Examples are:

```
% kalarm --triggerEvent KAlarm-387486299.702 --calendarURL ↔  
    file:/home/zaphod/hydra.ics  
% kalarm --cancelEvent KAlarm-388886299.793
```

Chapter 7

Questions and Answers

This document may have been updated since your installation. You can find the latest version at <http://docs.kde.org/development/en/kdepim/>.

1. *What is the alarm daemon?*

The alarm daemon is an application which runs in the background, monitoring alarms and telling KAlarm to trigger them when they become due.

2. *What configuration files does KAlarm use?*

The file `$KDEHOME/share/config/kalarmrc` holds your KAlarm preferences. The calendar file which stores your pending alarms is `$KDEHOME/share/apps/kalarm/calendar.ics`, unless a different calendar file is specified in the preferences file by a *Calendar* entry in the *General* section. The calendar file which stores your expired alarms is `$KDEHOME/share/apps/kalarm/expired.ics`, unless a different calendar file is specified in the preferences file by an *ExpiredCalendar* entry in the *General* section. The calendar file which stores your alarm templates is `$KDEHOME/share/apps/kalarm/template.ics`, unless a different calendar file is specified in the preferences file by a *TemplateCalendar* entry in the *General* section. Details of alarms currently being displayed are stored in the calendar file `$KDEHOME/share/apps/kalarm/displaying.ics`.

3. *What configuration files does the alarm daemon use?*

The file `$KDEHOME/share/config/kalarmdrc` holds your alarm daemon preferences, together with details of the KAlarm client application.

4. *What format are alarms stored in?*

The calendar files in which KAlarm stores its alarms are text files whose format is defined by the document [RFC2445 - Internet Calendaring and Scheduling Core Object Specification \(iCalendar\)](#). This is the standard format used by all kdepim applications. KAlarm uses certain non-standard properties in the Alarm component, in conformance with RFC2445: X-KDE-KALARM-NEXTRECUR, X-KDE-KALARM-REPEAT, X-KDE-KALARM-TYPE, X-KDE-KALARM-NEXTREPEAT, X-KDE-KALARM-FONTCOLOR, X-KDE-KALARM-VOLUME, X-KDE-KALARM-SPEAK, X-KDE-KALARM-EMAILID.

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5. *What are the application names of KAlarm and the alarm daemon?*

KAlarm's application name is `kalarm`, and the alarm daemon's application name is `kalarmd`.

Chapter 8

Credits and License

KAlarm

Program copyright 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 David Jarvie
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Documentation copyright 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 David Jarvie
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Thanks go to the author of the KDE 1 KAlarm application, Stefan Nikolaus stefan.nikolaus@stuco.uni-oldenburg.de, who kindly agreed to allow the name KAlarm to be used by this KDE 2 / KDE 3 application.

Appendix A

Installation

A.1 How to obtain KAlarm

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

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

KAlarm is available for KDE 2 and as a standalone package for KDE3 from <http://www.astrojar.org.uk/kalarm>

A.2 Requirements

KAlarm requires the standard KDE libraries to be installed (the `kdelibs` package). To compile from source, you also need the QtTM and `kdelibs` development packages. The X11 development package, if present, is used to improve KAlarm's ability to function under KDE without a system tray.

The following optional packages enhance KAlarm at runtime if they are installed:

- KMix (from `kdemultimedia` package): if installed, it allows KAlarm to set the absolute sound volume when playing audio files.
- KTTSD (from `kdeaccessibility` package): if installed and configured, together with a compatible speech synthesizer package, it allows KAlarm to speak alarm messages when they are displayed.

KAlarm uses about 12 Mb and the alarm daemon uses about 2.5 Mb of memory to run, but this may vary depending on your platform and configuration.

You can find a list of changes in the `ChangeLog` file, or at <http://www.astrojar.org.uk/-kalarm>.

A.3 Compilation and installation

If you cannot obtain a suitable precompiled binary package, you need to compile KAlarm yourself from source files. Get the source package file `kdepim-x.x.tar.bz2` or `kalarm-x.x.tar.bz2` (or similar), depending on whether you want to install `kdepim` or just KAlarm. Unpack it in a new folder using a command similar to `tar xvfj package.tar.bz2`, and change to the folder which has been created.

In order to compile and install KAlarm on your system, type the following in the base directory of the KAlarm distribution:

```
% ./configure
% make
% make install
```

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

NOTE

If you have more than one version of KDE installed (e.g. KDE 2 and KDE 3), this may possibly install KAlarm into the wrong KDE folder. If necessary, you can give the KDE folder as a parameter to `./configure`. For example, if your KDE is installed in `/opt/kde2`:

```
./configure --prefix=/opt/kde2
```

WARNING

If you install KAlarm into a folder different from where KDE is installed, it will not run correctly unless you make its location known to KDE. To do this, you must prefix the `KDEDIRS` environment variable with KAlarm's location, each time before you start KDE.

For example, if KDE is installed in `/opt/kde`, `KDEDIRS` might normally be set to `/etc/opt/kde:/opt/kde`. If you install KAlarm into `/usr/local`, you would need to set `KDEDIRS` to `/usr/local:/etc/opt/kde:/opt/kde` before starting KDE.

The standalone version of KAlarm has a special configuration option which allows you to select which languages documentation is to be installed for by specifying a language code, or a list of language codes, as a parameter to `./configure`. By default, documentation in all available languages is installed. A list of documentation languages included in the package, together with their codes, is in the `DOC-LANGUAGES` file. For example, to install only French and British English documentation:

```
./configure --enable-doc-language="fr en_GB"
```

Note that this option has no effect on which user interface translations are installed.

A.4 Configuration

No special configuration is required to set up KAlarm to run on the KDE desktop. Once you have run KAlarm for the first time, the alarm daemon will start every time you log in, in order to monitor scheduled alarms.

To run KAlarm on a non-KDE desktop, the main requirement is to ensure that the alarm daemon is run automatically whenever you log in. More detailed instructions are contained in the `INSTALL` file which is distributed with KAlarm.