

etm cheat sheet

Data

Data items begin with a data type character and continue on one or more lines either until the end of the file is reached or another line is found that begins with a type character. The beginning type character for each item is followed by the item summary and then, perhaps, by one or more **@key value** options.

action	Begins with ~ (tilde). A record of time spent in an activity.
event	Begins with * (asterick). Happens on a particular day and time.
occasion	Begins with ^ (caret sign). Marks a date such as a holiday, anniversary or birthday.
note	Begins with ! (exclamation point). A record of some useful information.
task	Begins with - (minus sign). Something that needs to be done.
delegated task	Begins with % (percent sign). Something assigned to someone else to be done.
task group	Begins with + (plus sign). Related tasks, some may be prerequisites for others.
inbasket	Begins with \$ (dollar sign). Quick entry to be edited later when time permits.
someday maybe	Begins with ? (question mark). Remember but don't show in the common views.
hidden	Begins with # (hash mark). Hidden from all etm views except folder view.
defaults	Begins with = (equal sign). Sets default options for subsequent entries.

@key value options

@a	alert (see alerts below).
@b	beginby. An integer number of days before the starting datetime to begin displaying an upcoming notification.
@c	context. E.g., errands, home, office, phone.
@d	description. An elaboration of the details of the item.
@e	extent. A time period (see fuzzy datetimes and time periods below).
@f	done; due. Fuzzy datetimes specifying when a task was finished and when it was due.
@g	goto. A file path or url to be opened using the system default application when the user presses <i>Ctrl-G</i> in the details view of the item.
@j	job. Group tasks only. A component task.
@k	keyword. A heirarchical classifier for an item using a format such as <code>client:project</code> .
@l	location. The location at which, for example, an event will take place.
@m	memo. Further details about the item not included in the summary or the description.
@o	overdue. Repeating tasks only (see repetition rules below).
@p	priority. Either 0 (no priority) or an integer between 1 (highest priority) and 9 (lowest priority).

@r	repetition rule. The specification of how an item is to repeat (see repetition rules).
@s	starting datetime. When an action is started, an event begins or a task is due.
@t	tags. A tag or a comma separated list of tags.
@u	user. A user or a comma separated list of users.
@v	value. A key from values in <code>etm.cfg</code> used in actions to specify the billing rate to be applied to the time spent.
@z	time zone. A time zone such as <code>US/Eastern</code> .
@+	include. Repeated items only. A datetime or list of datetimes to be added to the repetitons generated by the repetition rule.
@-	exclude. Repeated items only. A datetime or list of datetimes to be removed from the repetitons generated by the repetition rule.

alerts

Examples:

- @a 10m,5m** Trigger the default alert ten minutes and five minutes before the starting datetime of the item.
- @a 1h:s** Trigger a sound alert one hour before the starting datetime.
- @a 2d:e;who@what.com;filepath** Send an email to the listed recipient exactly 2 days (48 hours) before the starting time of the item.

The format for each of these:

@a <trigger times>[:action[;arguments]]

In addition to the default action used when the optional **action** is not given, there are five possible values for **action**:

- d** display. Execute `alert_displaycmd` in `etm.cfg`.
- v** voice. Execute `alert_voicecmd` in `etm.cfg`
- s** sound. Execute `alert_soundcmd` in `etm.cfg`.
- e** email. `:e;recipients[;attachments]`. Send an email to **recipients** optionally attaching **attachments**. The item summary is used as the subject of the email and the expanded value of `email_template` from `etm.cfg` as the body.
- p** process. `:p;process`. Execute `process`.

Either **e** or **p** can be combined with other actions in a single alert but not with one another.

fuzzy datetimes and time periods

Suppose, for example, that it is currently Wednesday, November 14, 2012. Then, in any **@key** calling for a datetime, **value** would expand as follows:

mon 2p	2:00pm Monday, November 19
fri	12:00am Friday, November 16.
9a -1/1	9:00am Monday, October 1.
+2/15	12:00am Tuesday, January 15 2013.
8p +7	8:00pm Monday, November 26.
-14	12:00am Monday, November 5.

In any **@key** calling for a time period, **value** would expand as follows:

2h30m	2 hours and thirty minutes.
7d	7 days.
45	45 minutes.

repetition rules

The specification of how an item is to repeat. Repeating items must have an **@s** entry as well as one or more **@r** entries. Generated datetimes are those satisfying any of the **@r** entries and falling *on or after* the datetime given in **@s**.

A repetition rule begins with **@r frequency** where **frequency** is one of the following characters:

- y** yearly.
- m** monthly.
- w** weekly.
- d** daily.
- l** list (a list of datetimes will be provided using **@+**).

The **@r frequency** entry can, optionally, be followed by one or more **&key value** pairs:

- &i** interval (positive integer, default = 1) E.g, with frequency **w**, interval 3 would repeat every three weeks.
- &t** total (positive integer) Include no more than this total number of repetitions.
- &s** bysetpos (integer). When multiple dates satisfy the rule, take the date from this position in the list, e.g, **&s 0** would choose the first element and **&s -1** the last.
- &u** until (datetime). Only include repetitions falling *before* (not including) this datetime.
- &M** bymonth (1, 2, ..., 12)
- &m** bymonthday (1, 2, ..., 31)
- &W** byweekno (1, 2, ..., 53)
- &w** byweekday (integer 0, 1, ..., 6 or English weekday abbreviation SU ... SA)
- &h** byhour (0 ... 23)
- &n** byminute (0 ... 59)

examples

- @r d &h 10, 14 18, 22:** Daily at 10am, 2pm, 6pm and 10pm.
- @r y &i 4 &M 11 &m range(2,9) &w TU:** The first Tuesday after a Monday in November every four years (presidential election day).
- @r m &w MO, TU, WE, TH, FR &m -1, -2, -3 &s -1:** The last weekday of each month. (The **&s -1** entry extracts the last date which is both a weekday and falls within the last three days of the month.)

overdue

A repeating *task* may optionally also include an **@o <k|s|r>** entry (default: **k**):

- @o k** Keep the current due date if it becomes overdue and use the next due date from the recurrence rule if it is finished early.
- @o r** Restart the repetitions based on the last completion date.
- @o s** Skip overdue due dates and set the due date for the next repetition to the first due date from the recurrence rule on or after the current date.

Views

- day** All scheduled (dated) items appear in this view, grouped by date and sorted by starting time and item type.
- week** A graphical view of a week showing scheduled events and free periods.
- month** A monthly calendar view with the date numbers colored to indicate the amount of scheduled time for events for that date.
- past due** All dated tasks whose due dates have passed including delegated tasks and waiting tasks (tasks with unfinished prerequisites) grouped by available, delegated and waiting and, within each group, by the due date.
- next** All undated tasks grouped by context (home, office, phone, computer, errands and so forth) and sorted by priority.
- folder** All items grouped by folder (project file path) and sorted by type and *relevant datetime*, i.e., the past due date for any past due tasks, the starting datetime for any non-repeating items and the datetime of the next instance for any repeating items.
- keyword** All items grouped by keyword and sorted by type and *relevant datetime*.
- tag** All items with tag entries grouped by tag and sorted by type and *relevant datetime*. Note that items with multiple tags will be listed under each tag.

Reports

A *report specification* is created by entering a report type character followed by a groupby setting and, perhaps, by one or more report options. Together, the type character, groupby setting and options determine which items will appear in the report and how they will be organized and displayed.

There are two possible report type characters:

- a:** actions with totals.
- c:** comprehensive item types.

groupby

A semicolon separated list of elements that determine how items will be grouped and sorted. Possible elements include *date specifications* and elements from

- c** context.
- f** file path.
- k** keyword.
- u** user.

A *date specification* is a combination of one or more of the following:

- yy** 2-digit year, e.g., 13.
- yyyy** 4-digit year, e.g., 2013.
- M** month, 1 - 12.
- MM** month, 01 - 12.
- MMM** locale specific abbreviated month name, e.g., Jan.
- MMMM** locale specific month name, e.g., January.
- d** month day, 1 - 31.
- dd** month day, 01 - 31.
- ddd** locale specific abbreviated week day, e.g, Mon.
- dddd** locale specific week day, e.g., Monday.

For example, `c ddd, MMM d yyyy ...` would group items by year, month and day together to give output such as

```
Fri, Apr 1 2011
  items for April 1
Sat, Apr 2 2011
  items for April 2
```

As another example, suppose that keywords have the format `client:project`. Then `c MMM yyyy; k[0]; k[1] ...` would group by year and month, then client and finally project:

```
Apr 2011
  client a
    project 1
      items for client a, project 1 in April
    project 2
      items for client a, project 2 in April
  client b
    project i
      items for client b, project i in April
  ...
```

Items that are missing an element specified in **groupby** will be omitted from the output, e.g., items without **keywords** will be omitted if **k** is included. Similarly, undated items will be omitted when a date specification is included.

options

Report options are listed below. Report type **c** supports all options except *-d*. Report type **a** supports all options except *-o* and *-h*.

- b** begin (datetime). Limit the display of dated items to those with datetimes falling *on or after* this datetime.
- c** context (regular expression).
- d** depth (integer). The default, **-d 0**, includes all outline levels. Use **-d 1** to include only level 1, **-d 2** to include levels 1 and 2 and so forth.
- e** end (datetime). Limit the display of dated items to those with datetimes falling *before* this datetime.
- f** file (relative file path).
- h** hue (0, 1 or 2). **-h 2**, uses all possible colors for leaf fonts, **-h 1** uses red for past due items and black for everything else and **-h 0** uses black for everything.
- k** keyword (regular expression).
- l** location (regular expression).
- o** omit (see omit below).
- s** summary (regular expression).
- t** tags (comma separated list of regular expressions).
- u** user (regular expression).

With any of the above options that call for a regular expression, you can use **!** (exclamation point) as a prefix to negate the result. E.g., **-t tag1, !tag2** would select items with one or more tags that match **tag1** but none that match **tag2**.

omit

Show/hide a)ctions, d)elegated tasks, e)vents, g)roup tasks, n)otes, o)ccasions and/or other t)asks. E.g. use **-o on** to omit occasions and notes and **-o !on** to show only occasions and notes.

Shortcuts

On Mac OS X, use the *Command* key instead of the *Ctrl* key.

general

- F1** Show this help information.
- F2** Show information about etm.
- F3** Check for a newer version of etm.
- F4** Display a twelve month calendar. Use left and right cursor keys to change years and the spacebar to return to the current year.
- F5** Open the date calculator.
- F6** Show local Yahoo weather information.
- F7** Show local USNO sun and moon data.
- Comma** Switch to the *day* view.
- Period** Switch to the *past due* view.
- Slash** Switch to the *next* view.
- Semicolon** Switch to the *week* view.
- Apostrophe** Switch to the *month* view.
- Left Bracket** Switch to the *folder* view.
- Right Bracket** Switch to the *keyword* view.
- Back Slash** Switch to the *tag* view.
- SpaceBar** Display the current date in the day, week and month views. See also *Ctrl-J* below.
- Escape** Clear the pattern filter and return focus to the view menu.
- Tab** Toggle the focus between the view menu and the main window.
- Ctrl-A** Show the remaining alerts for today, if any.
- Ctrl-C** If you have an entry for *calendars* in your *etm.cfg* file, then open a dialog to choose which calendars to display.
- Ctrl-E** Show the list of error messages, if any, that were when data files were last loaded.
- Ctrl-F** Enter an expression in the pattern filter to limit the display to items with matching summaries (titles) or branches.
- Ctrl-J** Enter a fuzzy parsed date to be shown in the day, week and month views. Relative days and months can be entered in this dialog. E.g., **+21** to go forward 21 days or **-1/1** to go to the first day of the previous month. See also *Spacebar* above.
- Ctrl-M** Activate the view menu pop up.
- Ctrl-N** Create a new event, note or task.
- Ctrl-O** Open your *etm.cfg* file for editing.
- Ctrl-P** Switch to the past due view.
- Ctrl-R** Create a custom report.
- Ctrl-S** Open the etm scratch pad.
- Ctrl-T** If the action timer is inactive, create a new action timer. Otherwise toggle the timer between paused and running.

Shift-Ctrl-T If the action timer is active, stop the timer and record the action.

day view

Return If a leaf is selected, open the details view for the leaf.

LeftArrow Display the last date with scheduled items before the current. Display the week containing this date in week view and the month containing this date in month view.

RightArrow Display the first date with scheduled items after the current. Display the week containing this date in week view and the month containing this date in month view.

week view

Double-Click In a busy time slot, open the details dialog for the relevant event.

In an empty time slot, open a dialog to create a new event for the relevant date and time.

LeftArrow Display the previous week.

RightArrow Display the next week.

Control-B Open a display showing the periods during the week when you are busy.

month view

Double-Click Make the selected date visible in both the day and week views and switch to the week view.

LeftArrow Move the selection to the previous month.

RightArrow Move the selection to the next month.

UpArrow Move the selection to the previous week.

DownArrow Move the selection to the next week.

tree views

The following apply to all views other than the week and month views. Hovering the mouse over a leaf displays a tooltip with the details of the relevant item.

Double-Click On a branch, toggle between expanded and collapsed.

On a leaf, open the details dialog for the selected item.

Return When a leaf is selected, open the details dialog for the selected item.

Ctrl-/ Open a dialog to choose the level of expansion for the tree.

UpArrow Moves the cursor to the item in the same column on the previous row. If the parent of the current item has no more rows to navigate to, the cursor moves to the relevant item in the last row of the sibling that precedes the parent.

DownArrow Moves the cursor to the item in the same column on the next row. If the parent of the current item has no more rows to navigate to, the cursor moves to the relevant item in the first row of the sibling that follows the parent.

LeftArrow Hides the children of the current item by collapsing a branch.

Minus Same as LeftArrow.

RightArrow Reveals the children of the current item by expanding a branch.

Plus Same as RightArrow.

Asterisk Expands all children of the current item.

PageUp Moves the cursor up one page.

PageDown Moves the cursor down one page.

Home Moves the cursor to an item in the same column of the first row of the first top-level item in the model.

End Moves the cursor to an item in the same column of the last row of the last top-level item in the model.

details view

Return Edit this item.

Ctrl-C Edit a copy of this item.

Ctrl-D Delete this item.

Ctrl-E Edit the file containing this item.

Ctrl-F If the selected item is a task, enter a finish date for it.

Ctrl-H Show the history of changes to the file containing this item.

Ctrl-M Move this item to a different file.

Ctrl-R If this is a repeating item, show its repetitions.

Ctrl-T Start the timer for a new action based on the selected item.

SpaceBar In the “edit which instance” dialog, move the selection to the next alternative.

reports dialog

Escape If the list of report specifications is open, close it.

Return In the report specification field, add the current specification to the list if it is not already included. Use Ctrl-S to save such changes to the list.

Ctrl-D Remove the current report specification from the list if it is included. Use Ctrl-S to save such changes to the list.

Ctrl-E Export the current report.

Ctrl-L Open the list of report specifications.

Ctrl-P Print the current report.

Ctrl-R Refresh the report using the selected report options setting.

Ctrl-S Save changes to the list of report options settings.

editor

Ctrl-Return Save changes if modified and close the editor.

Ctrl-I Insert the contents of the *etm* scratch pad at the cursor position.

Ctrl-S Save changes.

Ctrl-W Close the editor, prompting to save changes if modified.

Preferences

Alert template expansions for use in `displaycmd`, `voicemcd` and `email_template` below:

`!summary!` the item’s summary.
`!start_date!` the starting date of the event.
`!start_time!` the starting time of the event.
`!time_span!` the time span of the event (see below).
`!alert_time!` the time the alert is triggered.
`!time_left!` the time remaining until the event starts.
`!when!` the time remaining until the event starts as a sentence (see below).
`!d!` the item’s `@d` (description).
`!l!` the item’s `@l` (location).

The value of `!time_span!` depends on the starting and ending datetimes:

- if the start and end *datetimes* are the same: “10am Wed, Aug 4”
- if the times are different but the *dates* are the same: “10am - 2pm Wed, Aug 4”
- if the *dates* are different: “10am Wed, Aug 4 - 9am Thu, Aug 5”
- if a date falls outside the current year: “10am - 2pm Thu, Jan 3 2013”

Examples of `!time_left!` and `!when!` :

- `@e 2d3h15m`
 - `!time_left!`: “2 days 3 hours 15 minutes”
 - `!when!`: “begins 2 days 3 hours 15 minutes from now”
- `@e 20m`
 - `!time_left!`: “20 minutes”
 - `!when!`: “begins 20 minutes from now”
- `@e 0m`
 - `!time_left!`: “”
 - `!when!`: “begins now”

Action template expansions for use in `action_template` below:

`!label!` the item or group label.
`!time!` the total time using the setting for `action_minutes`.
`!value!` the billing value of the total time. Requires action entries such as `@v br1` and settings for `action_minutes` and `action_rates`.
`!count!` the number of children represented in the time and value totals.

etm.cfg settings

`action_minutes` Round action times up to the nearest minutes minutes in reports. Possible choices are 1, 6, 12, 15, 30 and 60. With 1, no rounding is done and times are reported as integer minutes. Otherwise, the prescribed rounding is done and times are reported as floating point hours.
`action_minutes: 6`
`action_rates` Possible billing rates to use for times in actions. An arbitrary number of rates can be entered using whatever labels you like.
`action_rates:`
`default: 30.0`
`br1: 45.0`
`br2: 60.0`

When the label `default` is used, the corresponding rate will be used when `@v` is not specified in an action.

Note that `etm` accumulates group totals from the `@e` and `@v` entries of individual actions. E.g., with the above settings, actions with entries `@e 75m @v br1` and `@e 60m @v br2` would aggregate to a `!time!` of `1.3 + 1 = 2.3` and a `!value!` of

$$1.3 * 45.0 + 1.0 * 60.0 = 118.50$$

action_template Sets the format for action reports.

`action_template: " !time!!label! (!count!)"`

E.g., with the above settings:

```
27.5h) Client 1 (3)
  4.9h) Project A (1)
  15h) Project B (1)
  7.6h) Project C (1)
24.2h) Client 2 (3)
  3.1h) Project D (1)
  21.1h) Project E (2)
    5.1h) Category a (1)
    16h) Category b (1)
```

action_timer Execute `action_timercmd` every `action_timer` minutes when a timer is running. Choose zero to disable executing the command.

`action_timer: 6`

action_timercmd The command to execute every `action_timer` minutes when a timer is running.

`action_timercmd: '/usr/bin/play \`
`/home/dag/.etm/sounds/etm_ding.wav'`

alert_default The alert or list of alerts to be used when an alert is specified for an item but the type is not given.

`alert_default: [d, v]`

Possible values for the list include:

d: display (requires `alert_displaycmd`)

s: sound (requires `alert_soundcmd`)

v: voice (requires `alert_voicecmd`)

alert_displaycmd The command to be executed when `d` is included in an alert. Possible template expansions are discussed above.

`alert_displaycmd: growlnotify -t !summary! \`
`-m " !time_span!"`

alert_soundcmd The command to be executed when `s` is included in an alert. Possible template expansions are discussed above.

`alert_soundcmd: '/usr/bin/play \`
`/home/dag/.etm/sounds/etm_alert.wav'`

alert_voicecmd The command to be executed when `v` is included in an alert.

`alert_voicecmd: say -v Alex '!summary! !when!.'`

alert_wakecmd If given, this command will be issued to “wake up the display” before executing `displaycmd`.

`alert_wakecmd: ~/bin/SleepDisplay -w`

ampm Use ampm times if true and twenty-four hour times if false. E.g., 2:30pm (true) or 14:30 (false).

`ampm: true`

auto_completions The absolute path to the file to be used for autocompletions in the editor.

`auto_completions: ~/.etm/completions.cfg`

Each line in the file provides a possible completion. E.g.

```
@c computer
@c errands
@c phone
@z US/Eastern
@z US/Central
dnlgrhm@gmail.com
```

calendars A list of (label, default, path relative to `datadir`) tuples to be interpreted as separate calendars. Those for which default is true will be displayed as default calendars.

```
calendars:
- [dag, true, personal]
- [erp, false, personal]
- [shared, true, shared]
```

colors Colors for tree view leaves. 0: use no colors; 1: use only red (past due); 2: use all colors for item types.

`colors: 2`

datadir Absolute path to the `etm` data files root directory.

`datadir: ~/.etm/data`

email_template The format for the message body for email alerts.

```
email_template: " !time_span!!!"  
  
!d!"
```

With the above setting for `alert_labels`, this template might expand as follows:

```
Time: 1pm - 2:30pm Wed, Aug 4  
Location: Conference Room
```

```
<contents of the item's description>
```

filechange_alert The command to be executed when `etm` detects an external change in any of its data files. Leave this command empty to disable the notification.

`filechange_alert: '/usr/bin/play \`
`/home/dag/.etm/sounds/etm_alert.wav'`

hg_commit The command to commit changes to the repository.

`hg_commit: /usr/local/bin/hg commit -A \`
`-R {repo} -m "{msg}"`

hg_history The command to show the history of changes for a particular data file.

```
hg_history: "/usr/local/bin/hg log \  
--style compact \  
--template '{rev}: {desc}\n' \  
-R {repo} -p -r 'tip':0 {file}"
```

hg_init The command to initialize or create a repository.

`hg_init: /usr/local/bin/hg init "{0}"`

If *Mercurial* is installed on your system, then the default versions of the `hg` commands given above should work without modification. If you want to use another version control system, then enter the commands for your version control system. `{repo}` will be replaced with the internally generated name of the repository in `hg_commit` and `hg_history`, `{file}` with the internally generated file name in `hg_history`, `{msg}` with the internally generated commit message in `hg_commit` and `{0}` with the name of the repository in `hg_init`.

local_timezone This timezone will be used as the default value for `@z`.

`local_timezone: US/Eastern`

monthly A relative path from `datadir` to be used for `monthly` files.

`monthly: personal/dag/monthly`

With the above setting for `datadir`, the suggested location for saving new items in, say, October 2012, would be the file:

```
~/etm/data/personal/dag/monthly/2012/10.txt
```

The directories `monthly` and `2012` and the file `10.txt` would, if necessary, be created. The user could either accept this default or choose a different file. If `monthly` is not given, the suggested location for saving new items would be the in the directory specified in `datadir`.

report_specifications The absolute path to the file to be used for report specifications.

`report_specifications: ~/.etm/reports.cfg`

Each line in the file provides a possible specification for a report. E.g.

```
a MMM yyyy, k[0], k[1:] -b -1/1 -e 1  
a k, MMM yyyy -b -1/1 -e 1  
c ddd MMM d yyyy
```

In the reports dialog these appear in the report specifications pop-up list. A specification from the list can be selected and, perhaps, modified or an entirely new specification can be entered.

smtp Settings for the `smtp` server to be used for email alerts.

```
smtp:  
from: dnlgrhm@gmail.com  
id: dnlgrhm  
pw: *****  
server: smtp.gmail.com
```

sunday_first The setting affects only the twelve month calendar display. The first column in each month is Sunday if true and Monday otherwise. Both the week and month views list Monday first regardless of this setting since both reflect the iso standard for week numbering in which weeks begin with Monday.

`sundayfirst: false`

sunmoon_location The USNO location for sun/moon data. Either a US city, state tuple or a placename, longitude, latitude 7-tuple such as [Home, W, 79, 0, N, 35, 54].

`sunmoon_location: [Chapel Hill, NC]`

weather_location The yahoo weather location code and temperature scale for your area.

`weather_location: USNC0105&u=f`

Go to <http://weather.yahoo.com/>, enter your location and hit return. When the weather page for your location opens, choose view source (under the View menu), search for “forecastrss” and copy the location code that follows `p=`.

weeks_after For repeating items with an infinite number of repetitions, only those that occur within the first `weeks_after` weeks after the current week are displayed along with the first repetition after this interval.

`weeks_after: 52`