## The Trac Ticket System

The Trac ticket system provides a simple but effective way to track issues and software bugs within a project.

As the central project management element of Trac, tickets can be used for **project tasks**, **feature requests**, **bug reports**, **software support issues** among others.

As with the TracWiki, this subsystem has been designed to make user contribution and participation as simple as possible.

An issue is assigned to a person who must resolve it or reassign the ticket to someone else. All tickets can be edited, annotated, assigned, prioritized and discussed at any time.

However, a Trac installation may place restrictions on who can change what. For example, the default installation doesn't permit to non-authenticated users ("anonymous" users) to change anything, even to comment on an issue, for obvious spam prevention reasons. Check the local contributing policy, which you can usually find on the front page of WikiStart, or contact your local Trac administrator.

#### **Ticket Fields**

A ticket contains the following information:

- Reporter The author of the ticket.
- Type The category of the ticket. The default types are defect, enhancement and task.
- Component The project module or subsystem that this ticket concerns.
- Version Version of the project that this ticket pertains to.
- Keywords Keywords that a ticket is tagged with. Useful for searching and report generation.
- · Priority The importance of this issue, ranging from trivial to blocker. A dropdown list when multiple priorities are defined.
- Milestone Due date of when this issue should be resolved. A dropdown list containing the milestones.
- Assigned to/Owner Principal person responsible for handling the issue.
- Cc A comma-separated list of other users or email addresses to notify. Note that this does not imply responsibility or any other policy.
- Resolution Reason for why a ticket was closed. One of fixed, invalid, wontfix, duplicate, worksforme.
- Status What is the current status? The statuses are defined in the <u>ticket workflow</u>. For the default workflow the statuses are new, assigned, accepted, closed and reopened.
- $\bullet \quad \textbf{Summary} \textbf{A description summarizing the issue. Simple text without } \underline{\textbf{WikiFormatting.}} \\$
- Description The body of the ticket. A good description should be specific, descriptive and to the point. Accepts WikiFormatting.

### Notes:

- Versions of Trac prior to 0.9 did not have the type field, but instead provided a severity field and different default values for the priority field. This
  change was done to simplify the ticket model by removing the somewhat blurry distinction between priority and severity. However, the old model is
  still available if you prefer it: just add/modify the default values of the priority and severity, and optionally hide the type field by removing all the
  possible values through trac-admin.
- The type, component, version, priority and severity fields can be managed with trac-admin or through the WebAdmin.
- Description of the builtin *priority* values is available at <a href="TicketTypes">TicketTypes</a>

# **Changing and Commenting Tickets**

With appropriate permissions, as already mentioned above, a ticket entered into Trac can at any time be modified by annotating.

Then, annotations like changes and comments to the ticket are logged as a part of the ticket itself. When viewing a ticket, the history of changes will appear below the main ticket area.

Comment editing (available since 0.12) is meant to be used to make small corrections to comments, like fixing formatting, forgotten WikiFormatting or spelling errors, not major edits. For longer edits, you should be adding a new comment instead. Editing a comment will not produce a new entry on timeline, while entering a new comment or other changes will do.

All edits (field changes, new comments, comment edits) update the "last changed" time of the ticket.

# Notes:

- An important feature is being able to use <u>TracLinks</u> and <u>WikiFormatting</u> in ticket descriptions and comments. Use <u>TracLinks</u> to refer to other issues, changesets or files to make your ticket more specific and easier to understand.
- See TracNotification for how to configure email notifications of ticket changes.
- See TracWorkflow for information about the state transitions (ticket lifecycle), and how this workflow can be customized.

### **Default Values for Drop-Down Fields**

The option selected by default for the various drop-down fields can be set in trac.ini, in the [ticket] section:

- default\_component: Name of the component selected by default.
- default\_milestone: Name of the default milestone.
- default\_priority: Default priority value.
- default\_severity: Default severity value.
- default\_type: Default ticket type.
- default\_version: Name of the default version.
- default\_owner: Name of the default owner. If set to the text < default > (the default value), the component owner is used.

If any of these options are omitted, the default value will either be the first in the list, or an empty value, depending on whether the field in question is required to be set. Some of these can be chosen through the WebAdmin in the "Ticket System" section, others can be set in the [ticket] section in trac.ini.

### **Hiding Fields and Adding Custom Fields**

Many of the default ticket fields can be hidden from the ticket web interface simply by removing all the possible values through <u>trac-admin</u>. This of course only applies to drop-down fields, such as *type*, *priority*, *severity*, *component*, *version* and *milestone*.

Trac also lets you add your own custom ticket fields. See <u>TracTicketsCustomFields</u> for more information.

### Assign-to as Drop-Down List

If the list of possible ticket owners is finite, you can change the assign-to ticket field from a text input to a drop-down list. This is done by setting the restrict\_owner option of the [ticket] section in trac.ini to true. In that case, Trac will populate the list with all users who have an authenticated session and possess the TICKET\_MODIFY permissions.

An authenticated session will be created the first time a user authenticates with the project. You can manually add an authenticated session using the <a href="trac-admin">trac-admin</a> session add command. The :1 suffix on the session id (i.e. username) is the key to creating an authenticated session:

```
trac-admin /path/to/projenv session add <sid>:1 [name] [email]
```

You may find the dropdown list is *overpopulated* with users that are no longer active in the project. Revoking authentication privileges will not remove the session data that is used to populate the dropdown list. The <u>trac-admin</u> command can be used to list and remove sessions:

List all sessions:

trac-admin /path/to/projenv session list

· Remove a session:

trac-admin /path/to/projenv session delete SID

Alternatively, you can just revoke <code>TICKET\_MODIFY</code> from users that you don't want to be included in the list. However, that will not be possible if you've granted <code>TICKET\_MODIFY</code> to all anonymous or authenticated users.

### Notes:

- If you need more flexibility and aren't afraid of a little plugin coding of your own, see the ■FlexibleAssignTo plugin.
- Activating this option may cause some performance degradation. Read more about this in the <a href="Trac performance">Trac performance</a> page.

### **Preset Values for New Tickets**

To create a link to the new-ticket form filled with preset values, you need to call the /newticket? URL with variable=value separated by &. Possible variables are:

- type The type droplist.
- reporter Name or email of the reporter.
- summary Summary line for the ticket.
- description Long description of the ticket.
- component The component dropdown list.
- version The version dropdown list.
- severity The severity dropdown list.
- keywords The keywords or tags.
- priority The priority dropdown list.
- milestone The milestone dropdown list.
- owner The person responsible for the ticket.
- cc The list of emails for notifying about the ticket change.

Example: [/newticket?summary=Compile%20Error&version=1.0&component=gui]

# **Deleting Tickets**

Ticket delete and ticket change delete functions are enabled through an optional component. To enable the functionality edit the [components] section of Traclni:

```
[components]
tracopt.ticket.deleter.* = enabled
```

The *Delete* buttons appears next to the *Reply* buttons in the ticket description and ticket change areas. TICKET\_ADMIN permission is required for deleting tickets and ticket changes.

See also: TracTicketsCustomFields, TracNotification, TracReports, TracQuery