# The Trac Ticket System

The Trac ticket database provides simple but effective tracking of issues and 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 <u>TracWiki</u>, this subsystem has been designed with the goal of making user contribution and participation as simple as possible. It should be as easy as possible to report bugs, ask questions, suggest improvements and discuss resolutions.

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, some Trac installations may put restrictions in place about 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 <u>WikiStart</u>, or contact your local Trac administrator.

#### **Ticket Fields**

A ticket contains the following information attributes:

- Reporter The author of the ticket.
- Type The nature of the ticket (for example, defect or enhancement request). See <u>TicketTypes?</u> for more details.
- Component The project module or subsystem this ticket concerns.
- Version Version of the project that this ticket pertains to.
- Keywords Keywords that a ticket is marked with. Useful for searching and report generation.
- Priority The importance of this issue, ranging from trivial to blocker. A pull-down if different priorities where defined.
- Milestone When this issue should be resolved at the latest. A pull-down menu containing a list of milestones.
- Assigned to/Owner Principal person responsible for handling the issue.
- Cc A comma-separated list of other users or E-Mail 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? One of new, assigned, closed, reopened.
- Summary A brief description summarizing the problem or issue. Simple text without 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 <u>type</u>, <u>component</u>, version, priority and severity fields can be managed with <u>trac-admin</u> or with the <u>WebAdmin</u> plugin.
- Description of the builtin priority values is available at <u>TicketTypes</u>

#### **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 <u>WikiFormatting</u> 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 <u>timeline</u> 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 <u>TracNotification</u> 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 <u>WebAdmin</u> plugin in the "Ticket System" section (others in the <u>[ticket]</u> 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 TracTicketsCustomFields 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 <u>trac.ini</u> to "true". In that case, Trac will use the list of all users who have accessed the project to populate the drop-down field.

To appear in the dropdown list, a user needs be registered with the project, *i.e.* a user session should exist in the database. Such an entry is automatically created in the database the first time the user submits a change in the project, for example when editing the user's details in the *Settings* page, or simply by authenticating if the user has a login. Also, the user must have TICKET\_MODIFY permissions.

#### Notes:

- See Populating Assign To Drop Down on how to add user entries at database level
- If you need serious flexibility and aren't afraid of a little plugin coding of your own, see FlexibleAssignTo (disclosure: I'm the author)
- Activating this option may cause some performance degradation, read more about this in the Trac performance 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 droplist
- version The version droplist
- **severity** The severity droplist
- keywords The keywords
- priority The priority droplist

- milestone The milestone droplist
- **owner** The person responsible for the ticket
- $\mathbf{cc}$  The list of emails for notifying about the ticket change

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

See also: <u>TracGuide</u>, <u>TracWiki</u>, <u>TracTicketsCustomFields</u>, <u>TracNotification</u>, <u>TracReports</u>, <u>TracQuery</u>