Proposal: New way to organize tickets on Trac

tl;dr; This is a proposal on how organize tasks on Trac - so every project or team has more features available to help them manage their work. Also aims to improve reports by using more visualization.

Content:

Ticket form changes

Is important to organize the information documented in the different fields of the ticket form, the more we create the habit of using these fields correctly, the easier will be to find things on Trac.

List of all elements associated with a ticket, changes to current ones and new fields being added to the form.

Element	Current usage	New usage
Priority	blocker, critical, major, normal, minor, trivial	same
Type	defect, enhancement, task, project	task, defect, enhancement (remove project)
Version	versions (and series?)	versions (and series?)
Milestones	releases	change to be used for monthly planning
Cc	copy people on the ticket to be notified	same
Components	project/services	[goal is for each project to have their set of components i.e. core tor has components guard]

		remove projects (we will use another solution)
Points & Actual Points	don't think is used anymore	remove
Owner	current assigned person	same
Reporter	person who created the ticket	same
Keywords NOTE: people can use other keywords, this proposal does not intent to control the usage of keywords. The modifications here is to avoid duplication of information in order to help build the same habit across all dev teams.	**{username}-patch** **{series}-deferrable** **{series}-triaged-{num}** **{series}-backport** **lorax** **needs-proposal** **tor-client**, **tor-relay**, **tor-hs**, **tor-auth**, **tor-pt**, **tor-guard**, **tor-bridge** **doc** or **tor-doc** **tor-spec** **Sponsor{ID}** **prop{NUM}** **easy**	remove: **{series}-deferrable** **tor-client**, **tor-relay**, **tor-hs**, **tor-auth**, **tor-pt**, **tor-guard**, **tor-bridge** **doc** or **tor-doc** **tor-spec** **Sponsor{ID}** **prop{NUM}** **easy**
Parent	main task	same
Child	sub-task	same
new: Sponsor	-	dropdown with all sponsors
new: proposal	-	text field (?) I wonder if we can actually link to it on the repo.
new: size	-	where: small = up to 2 days of work medium = up to 1 week of work large = more than that
new: project	-	we need a new level to organize tasks. this should replace the projects listed as components. check plug-in session below for solution

Implementation

This is a checklist that should be migrated to track eventually - the goal of it is to track all the steps necessary to implement this project

- verify if plug-ins are good to use:
    - multiple projects: https://trac-hacks.org/wiki/SimpleMultiProjectPlugin
    - dependencies, project planning, tracking states http://trac-hacks.org/wiki/ProjectPlanPlugin
- install plugins and modify trac form following the table above
- review current components and see which one can become a project:
    - https://docs.google.com/spreadsheets/d/1TVgOXGtzcg0-5iyFb4kPwWkfVAyPHPG0SkyI6ODh0ZM/edit?usp=sharing
- create projects and migrate tickets from respective components
- organize 0.2.7 release with the new system
- move all sponsor tags to respective fields
- create milestones for each month for each project
- migrate tickets where a version is tracked on milestone to be tracked on 'version' (i.e. 0.2.6 or a TBB version)
- migrate dependencies using project management plugin dependency feature
- migrate proposals to field
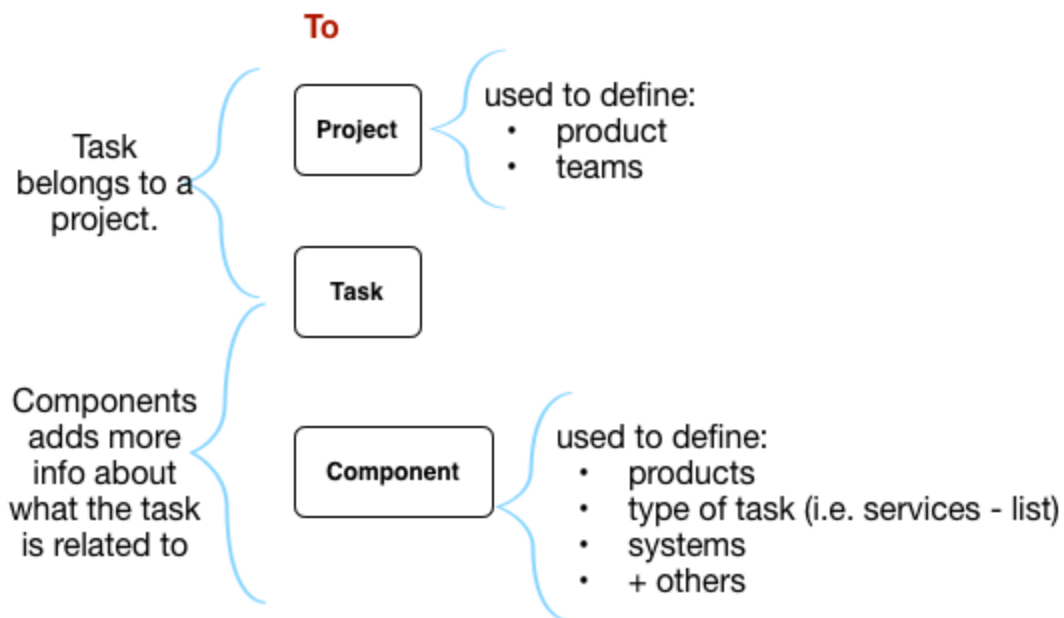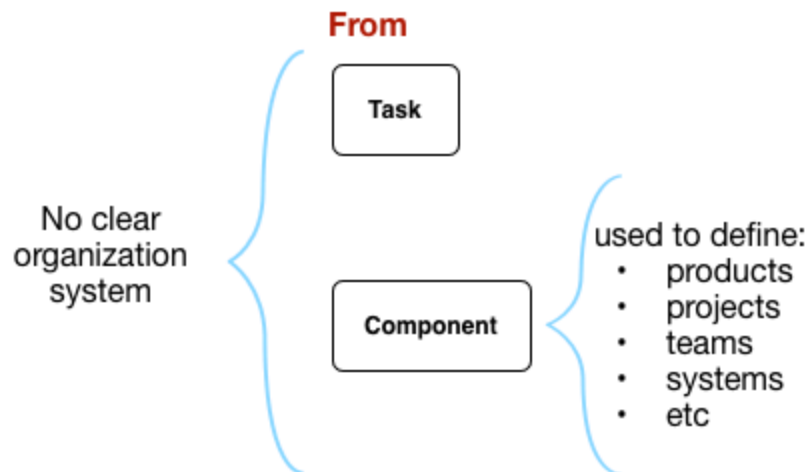- review keywords (ongoing process)
- ………

Note1: We won't be implementing any change on the workflow. More discussion is necessary before deciding if any change should be done or not so we are leaving it out from this round of implementation.

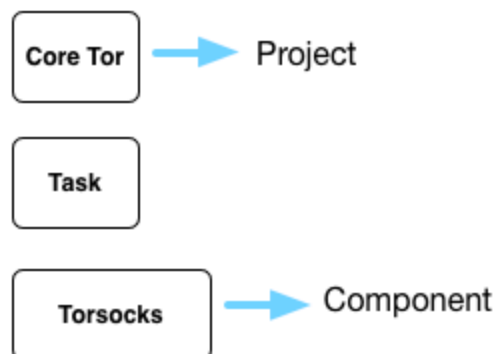## How Project will work with Components:

By adding the project plugin we gain a new level of hierarchy to organize our work on Trac.

Right now we define what the work is about by using components. This becomes a problem when we start to have a long list of components that includes everything: product, project small or big, team, system etc.

By adding projects we can created a new level in the hierarchy:

From

Task

No clear
organization
system

Component

used to define:
- products
- projects
- teams
- systems
- etc

To

Project

used to define:
- product
- teams

Task
belongs to a
project.

Task

Components
adds more
info about
what the task
is related to

Component

used to define:
- products
- type of task (i.e. services - list)
- systems
- + others

Usage example

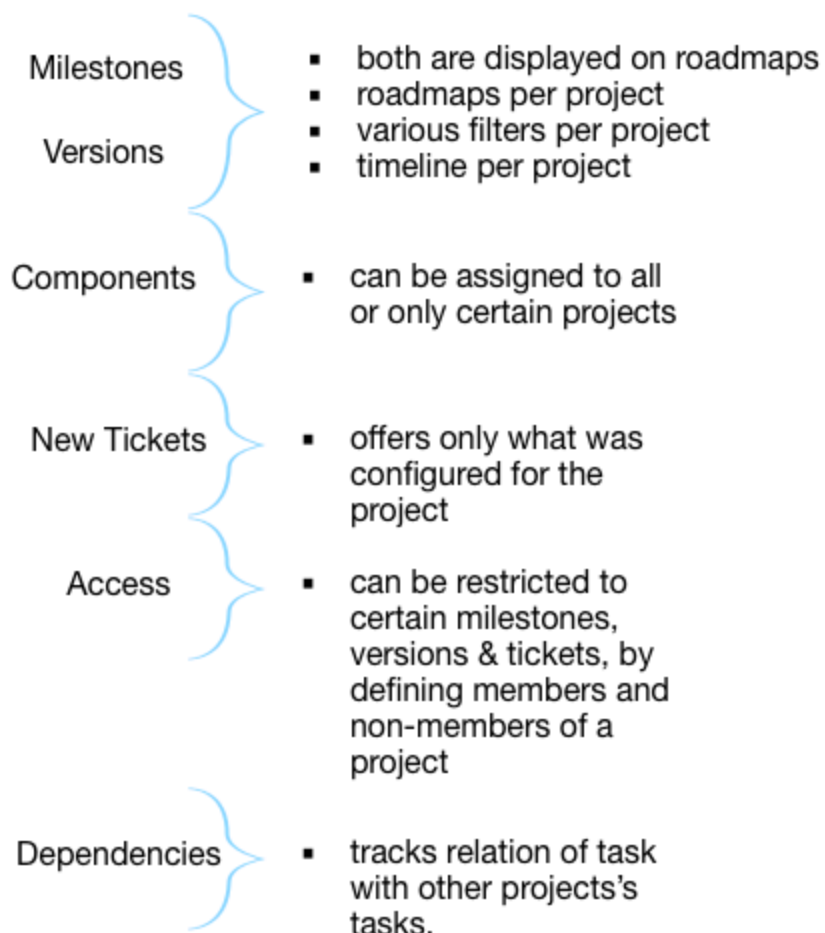Core Tor → Project

Task

Torsocks → Component

Also, the plugin gives you the ability to associate a component with one or multiple projects. So when you are creating a ticket from a project you will only see components for that project, making the list shorter and giving you space to create more components for your project to better organize it.

With the second plugin (project management plugin) we will be able to build relationship between tasks of a project with the other (dependencies).

This will give us the following features to organize our work:

Projects Features

Milestones Versions	• both are displayed on roadmaps • roadmaps per project • various filters per project • timeline per project
Components	• can be assigned to all or only certain projects
New Tickets	• offers only what was configured for the project
Access	• can be restricted to certain milestones, versions & tickets, by defining members and non-members of a project
Dependencies	• tracks relation of task with other projects's tasks.

How monthly plannings will work

Milestones will be created for each month. As we are already doing for roadmaps using tables at the wiki, we will populate those milestones with the tasks we plan to get done for the month. During weekly meetings we can look at the tickets and report back.
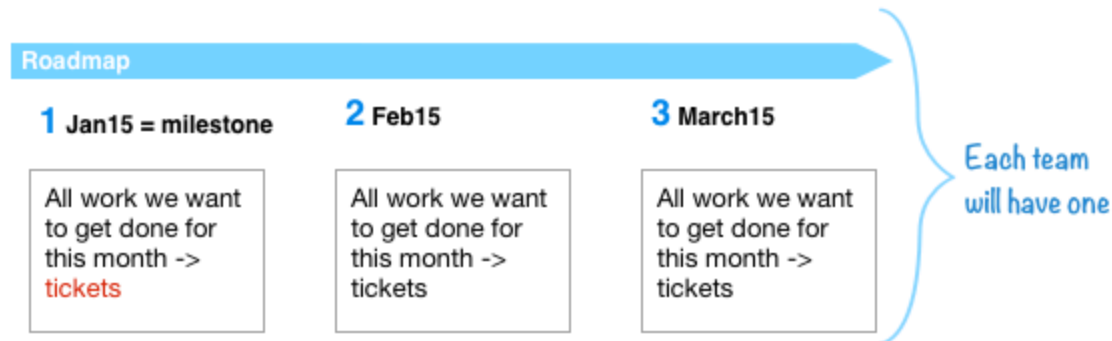
We can plan month by month or we can plan multiple months ahead. The teams decide what they want.

Why am I suggesting this?

Tor dev teams are already used to do either weekly or bi-weekly check-ins on IRC where they give updates on what they did and what they will do next.

Normally I see people wondering what to do next. If the team has elected tasks for the month together, all you have to do is to look at the milestone/month backlog to pick what to do next.

This will help give some perspective on how much we can do in a month and start organizing better our release cycles as we will be able to start counting how many months are necessary for a release. And it will help us keep track of deliverables completion.

Roadmap

1 Jan15 = milestone

All work we want to get done for this month -> tickets

2 Feb15

All work we want to get done for this month -> tickets

3 March15

All work we want to get done for this month -> tickets

Each team will have one

Example of how a team could function in a month period.

Milestone: Jan15

Week 1

Team starts to pick up tasks from the milestone backlog

Week 2

update: what I did last week / what I will do this week

Week 3

update: what I did last week / what I will do this week

Week 4

*what we said we would do this month
* what we actually did
* what we will do next month

Whatever we decide to do on the last week of the month, will be the backlog we will look to pick tasks during the first week of the month.
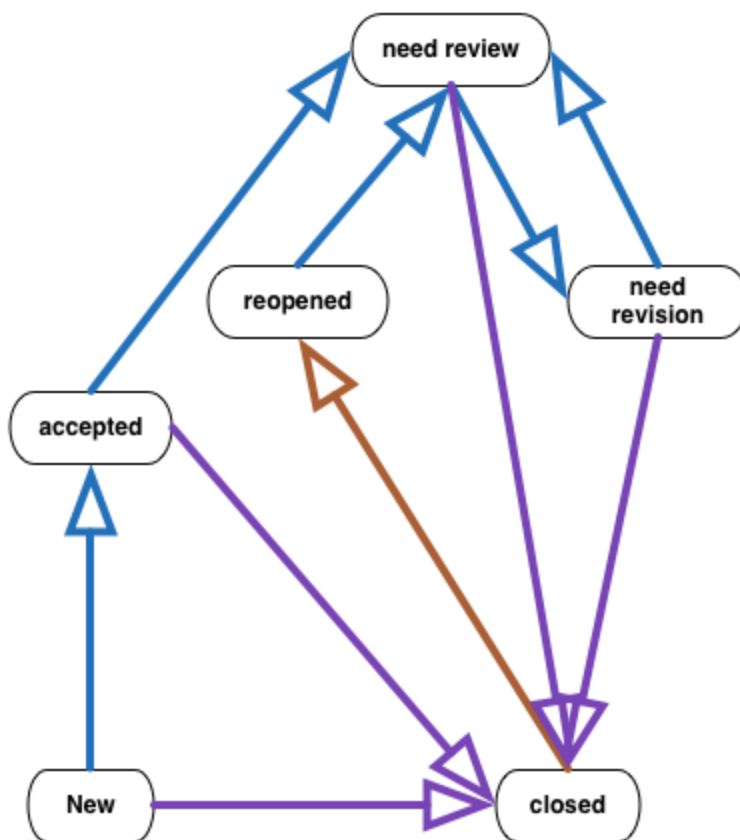
Our sponsors expects reports by month and quarter. It makes sense that we also have our work organized by month.

If we do that we can easily coordinate the reports to our sponsors around the milestones' logs. This will also help build reports to accounting so they can bill our sponsors.

Other stuff we will eventually do

Workflow

We should define what workflow we want. Trac has support for you to configure your workflow. Based on conversation with Tor Core team this is the flow Tor is using now:

But this is not going to be done now :)

Missing

Permission - some folks have pointed out if we had permissions configured on Trac to not let it be so public we could use it more for operations and other tickets like that.

Probably something else……...

Other Plugins we might want to install

UI Improvements

https://trac-hacks.org/wiki/AutocompleteUsersPlugin Autocompletion for CC field (by "real" name and trac username). This should help remove errors where Alice thinks Bob has been CCed (but the trac username that Alice entered was typoed or doesn't exist), and then Alice gets angry that Bob didn't help/comment.

https://trac-hacks.org/wiki/DefaultCcPlugin Add a default list of people to the CC list for new tickets, based on their component. Should be helpful when a component is commonly worked on by multiple people.

https://trac-hacks.org/wiki/UserPicturesPlugin User icon pictures next to their activites. Clinically proven to remind coworkers that the people they are talking to are real humans.

Ticket Organisation Improvements

https://trac-hacks.org/wiki/SubcomponentsPlugin This plugin would allow for subcomponents of a component in a way that is still easy to interact with the component as a whole. [This one should be double extra checked for compatibility with the MultipleProjectSupport plugin… but I think they're compatible. —isis]

Ticket Triaging Improvements

https://trac-hacks.org/wiki/DuplicateTicketSearchPlugin Shows a list of possibly matching/related tickets (and their current status) when you're making a new ticket.

https://trac-hacks.org/wiki/GridModifyPlugin Allows a grid of dropdowns for common modifications for individual tickets in a list (e.g. in the search results list).

https://trac-hacks.org/wiki/PendingTicketPlugin Allows a ticket owner to mark a ticket as "Pending", which means that if the original reporter doesn't comment within some time period, the ticket will be automatically closed.

Making Security-related Issues Private

https://trac-hacks.org/wiki/SensitiveTicketsPlugin will probably work best for our use case. Might need minor tweaking (e.g. to not email changes to people who aren't authorised to view the ticket).

Lightweight Inline Code Review

https://trac-hacks.org/wiki/CodeReviewerPlugin Not entirely sure if this one would be useful if we plan to find a real code review tool, but it does have some nice features.

Miscellaneous links

https://trac-hacks.org/wiki/AccountManagerPlugin

http://trac.edgewall.org/wiki/TracPermissions

http://trac.edgewall.org/wiki/TracRevisionLog

http://trac.edgewall.org/wiki/TracWorkflow

https://trac-hacks.org/wiki/SimpleMultiProjectPlugin

http://stackoverflow.com/questions/1018663/automatic-assignment-of-tickets-with-trac

https://trac.torproject.org/projects/tor/rpc

trac formatting for embedding tickets queries

[[TicketQuery(parent=#2877,format=table,col=component|owner|summary|priority|points,order=priority)]]