

Wikiprint Book

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Email Notification of Ticket Changes

Trac supports notification of ticket changes via email.

Email notification is useful to keep users up-to-date on tickets of interest, and also provides a convenient way to post all ticket changes to a dedicated mailing list.

Disabled by default, notification can be activated and configured in [trac.ini](#).

Receiving Notification Mails

When reporting a new ticket or adding a comment, enter a valid email address or your Trac username in the *reporter*, *assigned to/owner* or *cc* field. Trac will automatically send you an email when changes are made to the ticket, depending on how notification is configured.

How to use your username to receive notification mails

To receive notification mails, you can either enter a full email address or your Trac username. To get notified with a simple username or login, you need to specify a valid email address in your [preferences](#).

Alternatively, a default domain name (`smtp_default_domain`) can be set in the [TracInI](#) file, see [Configuration Options](#) below. In this case, the default domain will be appended to the username, which can be useful for an "Intranet" kind of installation.

When using apache and mod_kerb for authentication against Kerberos / Active Directory, usernames take the form (username@EXAMPLE.LOCAL). To avoid this being interpreted as an email address, add the Kerberos domain to (ignore_domains).

Ticket attachment notifications

Since 1.0.3 Trac will send notifications when a ticket attachment is added or deleted. Usually attachment notifications will be enabled in an environment by default. To disable the attachment notifications for an environment the `TicketAttachmentNotifier` component must be disabled:

```
[components]
trac.ticket.notification.TicketAttachmentNotifier = disabled
```

Configuring SMTP Notification

Important: The `[trac] base_url` option must be configured for links in the notification message to be correctly generated.

Configuration Options

These are the available options for the [notification] section in trac.ini:

[notification]

biochem 101	cellular structure and function of cells, and the role of various organelles in cellular processes.	biology
biochem 201	cellular metabolism, including glycolysis, the citric acid cycle, and oxidative phosphorylation.	biology
biochem 301	cellular signaling, including the role of hormones, growth factors, and neurotransmitters.	biology
biochem 401	cellular differentiation, including the role of stem cells and the process of embryonic development.	biology
biochem 501	cellular aging, including the role of telomeres and the process of cellular senescence.	biology
biochem 601	cellular death, including the role of apoptosis and the process of necrosis.	biology
biochem 701	cellular repair, including the role of DNA repair mechanisms and the process of wound healing.	biology
biochem 801	cellular regeneration, including the role of stem cells and the process of tissue repair.	biology
biochem 901	cellular homeostasis, including the role of feedback loops and the process of maintaining internal balance.	biology
biochem 1001	cellular evolution, including the role of natural selection and the process of speciation.	biology
biochem 1101	cellular ecology, including the role of organisms in their environment and the process of ecosystem functioning.	biology
biochem 1201	cellular conservation, including the role of preserving biodiversity and the process of sustainable development.	biology
biochem 1301	cellular ethics, including the role of moral principles and the process of ethical decision-making.	biology
biochem 1401	cellular law, including the role of legal systems and the process of justice.	biology
biochem 1501	cellular religion, including the role of faith and the process of spiritual growth.	biology
biochem 1601	cellular philosophy, including the role of critical thinking and the process of intellectual inquiry.	biology
biochem 1701	cellular psychology, including the role of the mind and the process of mental health.	biology
biochem 1801	cellular sociology, including the role of social structures and the process of community development.	biology
biochem 1901	cellular anthropology, including the role of human culture and the process of cultural evolution.	biology
biochem 2001	cellular linguistics, including the role of language and the process of communication.	biology
biochem 2101	cellular history, including the role of past events and the process of historical analysis.	biology
biochem 2201	cellular geography, including the role of physical space and the process of spatial organization.	biology
biochem 2301	cellular economics, including the role of financial systems and the process of resource allocation.	biology
biochem 2401	cellular politics, including the role of governance and the process of political action.	biology
biochem 2501	cellular art, including the role of creative expression and the process of artistic production.	biology
biochem 2601	cellular science, including the role of empirical research and the process of scientific discovery.	biology
biochem 2701	cellular technology, including the role of innovation and the process of technological advancement.	biology
biochem 2801	cellular medicine, including the role of healthcare and the process of medical treatment.	biology
biochem 2901	cellular law, including the role of legal systems and the process of justice.	biology
biochem 3001	cellular religion, including the role of faith and the process of spiritual growth.	biology
biochem 3101	cellular philosophy, including the role of critical thinking and the process of intellectual inquiry.	biology
biochem 3201	cellular psychology, including the role of the mind and the process of mental health.	biology
biochem 3301	cellular sociology, including the role of social structures and the process of community development.	biology
biochem 3401	cellular anthropology, including the role of human culture and the process of cultural evolution.	biology
biochem 3501	cellular linguistics, including the role of language and the process of communication.	biology
biochem 3601	cellular history, including the role of past events and the process of historical analysis.	biology
biochem 3701	cellular geography, including the role of physical space and the process of spatial organization.	biology
biochem 3801	cellular economics, including the role of financial systems and the process of resource allocation.	biology
biochem 3901	cellular politics, including the role of governance and the process of political action.	biology
biochem 4001	cellular art, including the role of creative expression and the process of artistic production.	biology
biochem 4101	cellular science, including the role of empirical research and the process of scientific discovery.	biology
biochem 4201	cellular technology, including the role of innovation and the process of technological advancement.	biology
biochem 4301	cellular medicine, including the role of healthcare and the process of medical treatment.	biology
biochem 4401	cellular law, including the role of legal systems and the process of justice.	biology
biochem 4501	cellular religion, including the role of faith and the process of spiritual growth.	biology
biochem 4601	cellular philosophy, including the role of critical thinking and the process of intellectual inquiry.	biology
biochem 4701	cellular psychology, including the role of the mind and the process of mental health.	biology
biochem 4801	cellular sociology, including the role of social structures and the process of community development.	biology
biochem 4901	cellular anthropology, including the role of human culture and the process of cultural evolution.	biology
biochem 5001	cellular linguistics, including the role of language and the process of communication.	biology
biochem 5101	cellular history, including the role of past events and the process of historical analysis.	biology
biochem 5201	cellular geography, including the role of physical space and the process of spatial organization.	biology
biochem 5301	cellular economics, including the role of financial systems and the process of resource allocation.	biology
biochem 5401	cellular politics, including the role of governance and the process of political action.	biology
biochem 5501	cellular art, including the role of creative expression and the process of artistic production.	biology
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biochem 6101	cellular philosophy, including the role of critical thinking and the process of intellectual inquiry.	biology
biochem 6201	cellular psychology, including the role of the mind and the process of mental health.	biology
biochem 6301	cellular sociology, including the role of social structures and the process of community development.	biology
biochem 6401	cellular anthropology, including the role of human culture and the process of cultural evolution.	biology
biochem 6501	cellular linguistics, including the role of language and the process of communication.	biology
biochem 6601	cellular history, including the role of past events and the process of historical analysis.	biology
biochem 6701	cellular geography, including the role of physical space and the process of spatial organization.	biology
biochem 6801	cellular economics, including the role of financial systems and the process of resource allocation.	biology
biochem 6901	cellular politics, including the role of governance and the process of political action.	biology
biochem 7001	cellular art, including the role of creative expression and the process of artistic production.	biology
biochem 7101	cellular science, including the role of empirical research and the process of scientific discovery.	biology
biochem 7201	cellular technology, including the role of innovation and the process of technological advancement.	biology
biochem 7301	cellular medicine, including the role of healthcare and the process of medical treatment.	biology
biochem 7401	cellular law, including the role of legal systems and the process of justice.	biology
biochem 7501	cellular religion, including the role of faith and the process of spiritual growth.	biology
biochem 7601	cellular philosophy, including the role of critical thinking and the process of intellectual inquiry.	biology
biochem 7701	cellular psychology, including the role of the mind and the process of mental health.	biology
biochem 7801	cellular sociology, including the role of social structures and the process of community development.	biology
biochem 7901	cellular anthropology, including the role of human culture and the process of cultural evolution.	biology
biochem 8001	cellular linguistics, including the role of language and the process of communication.	biology
biochem 8101	cellular history, including the role of past events and the process of historical analysis.	biology
biochem 8201	cellular geography, including the role of physical space and the process of spatial organization.	biology
biochem 8301	cellular economics, including the role of financial systems and the process of resource allocation.	biology
biochem 8401	cellular politics, including the role of governance and the process of political action.	biology
biochem 8501	cellular art, including the role of creative expression and the process of artistic production.	biology
biochem 8601	cellular science, including the role of empirical research and the process of scientific discovery.	biology
biochem 8701	cellular technology, including the role of innovation and the process of technological advancement.	biology
biochem 8801	cellular medicine, including the role of healthcare and the process of medical treatment.	biology
biochem 8901	cellular law, including the role of legal systems and the process of justice.	biology
biochem 9001	cellular religion, including the role of faith and the process of spiritual growth.	biology
biochem 9101	cellular philosophy, including the role of critical thinking and the process of intellectual inquiry.	biology
biochem 9201	cellular psychology, including the role of the mind and the process of mental health.	biology

Example Configuration (SMTP)

```
[notification]
smtp_enabled = true
smtp_server = mail.example.com
smtp_from = notifier@example.com
smtp_replyto = myproj@projects.example.com
smtp_always_cc = ticketmaster@example.com, theboss+myproj@example.com
```

Example Configuration (sendmail)

```
[notification]
smtp_enabled = true
email_sender = SendmailEmailSender
sendmail_path = /usr/sbin/sendmail
smtp_from = notifier@example.com
smtp_replyto = myproj@projects.example.com
smtp_always_cc = ticketmaster@example.com, theboss+myproj@example.com
```

Subscriber Configuration

The default subscriptions are configured in the [\[notification-subscriber\]](#) section.

[notification-subscriber]

The notifications subscriptions are controlled by plugins. All `INotificationSubscriber` components are in charge. These components may allow to be configured via this section in the `trac.ini` file.

See [TracNotification](#) for more details.

Available subscribers:

Subscriber	Description
AlwaysEmailSubscriber	
CarbonCopySubscriber	Ticket that I'm listed in the CC field is modified
TicketOwnerSubscriber	Ticket that I own is created or modified
TicketPreviousUpdatersSubscriber	Ticket that I previously updated is modified
TicketReporterSubscriber	Ticket that I reported is modified
TicketUpdaterSubscriber	I update a ticket

Each user can override these defaults in their *Notifications* preferences.

For example to unsubscribe from notifications for one's own changes and comments, the rule "Never notify: I update a ticket" should be added above other subscription rules.

The subscription rule name on the left side of the = can be anything, it has no meaning outside this configuration file. The subscriber name on the right side of the = must be one of the subscribers listed in the above table.

The following attributes of default subscriptions can be configured:

- .distributor (Default: email)
 - Other values require plugins. For example `on-site` requires `th:OnSiteNotificationsPlugin`.
- .priority (Default: 100)
 - Smaller values override larger values.
 - If you use 0, then users will not be able to override this rule.
- .adverb (Default: always)
 - `never` can be used to silence other subscription rules with higher values.
- .format (Default: text/plain)
 - Other values require plugins. For example `text/html` requires `th:TracHtmlNotificationPlugin`.

Example Configuration (default subscriptions)

```
[notification-subscriber]
always_notify_owner = TicketOwnerSubscriber
always_notify_owner.distributor = email
always_notify_owner.priority = 100
always_notify_owner.adverb = always
always_notify_owner.format = text/plain

always_notify_previous_updater = TicketPreviousUpdatersSubscriber

never_notify_updater = TicketUpdaterSubscriber
never_notify_updater.adverb = never
never_notify_updater.priority = 0

notify_cc_html = CarbonCopySubscriber
notify_cc_html.format = text/html
```

Customizing the e-mail subject

The e-mail subject can be customized with the `ticket_subject_template` option, which contains a [Genshi text template](#) snippet. The default value is:

```
${prefix} #${ticket.id}: ${summary}
```

The following variables are available in the template:

- `env`: The project environment object (see [env.py](#)).
- `prefix`: The prefix defined in `smtp_subject_prefix`.
- `summary`: The ticket summary, with the old value if the summary was edited.
- `ticket`: The ticket model object (see [model.py](#)). Individual ticket fields can be accessed by appending the field name separated by a dot, eg `${ticket.milestone}`.

Customizing the e-mail content

The notification e-mail content is generated based on `ticket_notify_email.txt` in `trac/ticket/templates`. You can add your own version of this template by adding a `ticket_notify_email.txt` to the `templates` directory of your environment. The default is:

```
${ticket_body_hdr}
${ticket_props}
# if ticket.new:
```

```

${ticket.description}
# else:
#   if changes_body:
${_('Changes (by %(author)s):', author=change.author)}

${changes_body}
#   endif
#   if changes_descr:
#       if not changes_body and not change.comment and change.author:
${_('Description changed by %(author)s:', author=change.author)}
#       endif
${changes_descr}
--
#   endif
#   if change.comment:

${_('Comment:') if changes_body else
_('Comment (by %(author)s):', author=change.author)}

${change.comment}
#   endif
# endif
--
${_('Ticket URL: <%(link)s>', link=ticket.link)}
${project.name} <${project.url or abs_href()}>
${project.descr}

```

See the [cookbook](#) for additional template customization recipes.

Sample Email

```

#42: testing
-----+-----
      Id: 42          |      Status: assigned
Component: report system |      Modified: Fri Apr 9 00:04:31 2004
Severity: major       |      Milestone: 0.9
Priority: lowest      |      Version: 0.6
Owner: anonymous      |      Reporter: jonas@example.com
-----+-----

Changes:
* component: changeset view => search system
* priority: low => highest
* owner: jonas => anonymous
* cc: daniel@example.com =>
      daniel@example.com, jonas@example.com
* status: new => assigned

Comment:
I'm interested too!

--
Ticket URL: <http://example.com/trac/ticket/42>
My Project <http://myproj.example.com/>

```

Using GMail as the SMTP relay host

Use the following configuration snippet:

```

[notification]
smtp_enabled = true
use_tls = true

```

```
mime_encoding = base64
smtp_server = smtp.gmail.com
smtp_port = 587
smtp_user = user
smtp_password = password
```

where *user* and *password* match an existing GMail account, ie the ones you use to log in on <http://gmail.com>.

Alternatively, you can use `smtp_port = 25`.

You should not use `smtp_port = 465`. Doing so may deadlock your ticket submission. Port 465 is reserved for the SMTPS protocol, which is not supported by Trac. See [#7107](#) for details.

Troubleshooting

If notifications are not working, inspect the [log](#) for error messages.

Notification errors are not always reported through the web interface, so the user who submits a change or creates a ticket may not get notified about a notification failure. The Trac administrator needs to look at the log to find the error message and traceback.

Permission denied error

Typical error message:

```
...
File ".../smtpplib.py", line 303, in connect
    raise socket.error, msg
error: (13, 'Permission denied')
```

This error usually comes from a security settings on the server: many Linux distributions do not allow the web server (Apache, ...) to post email messages to the local SMTP server.

Many users get confused when their manual attempts to contact the SMTP server succeed:

```
telnet localhost 25
```

This is because a regular user may connect to the SMTP server, but the web server cannot:

```
sudo -u www-data telnet localhost 25
```

In such a case, you need to configure your server so that the web server is authorized to post to the SMTP server. The actual settings depend on your Linux distribution and current security policy. You may find help in the Trac [MailingList](#) archive.

Relevant ML threads:

- SELinux: <http://article.gmane.org/gmane.comp.version-control.subversion.trac.general/7518>

For SELinux in Fedora 10:

```
$ setsebool -P httpd_can_sendmail 1
```

Suspected spam error

Some SMTP servers may reject the notification email sent by Trac.

The default Trac configuration uses Base64 encoding to send emails to the recipients. The whole body of the email is encoded, which sometimes trigger *false positive* spam detection on sensitive email servers. In such an event, change the default encoding to "quoted-printable" using the `mime_encoding` option.

Quoted printable encoding works better with languages that use one of the Latin charsets. For Asian charsets, stick with the Base64 encoding.

See also: [TracTickets](#), [TracIni](#), [TracGuide](#), [TracDev/NotificationApi](#)