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/issues of interest, and also provides a convenient way to post all ticket changes to a dedicated mailing list. For example, this is how the ?Trac-tickets mailing list is set up.

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 the *Preferences* page.

Alternatively, a default domain name (smtp_default_domain) can be set in the <u>TracIni</u> file, see <u>Configuration Options</u> 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: For TracNotification to work correctly, the [trac] base_url option must be set in trac.ini.

Configuration Options

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

[notification]

	Comma separated for if domains that should be considered as cold for email addresses have an	no Miner
	Width of ambiguous characters that should be used in the radio of the notification mail.	
	Excission for some width as characters in	erosta.
	of ASCA, This is expensely more uses. If the training the wide of the ASCA charges	and a
	This is expensely C.K years, (show if 9.2)	
sen etter tester	Sales turber, and term benefit of the for	Spatial man mary
	back medication. (since 1.0)	n(historia, deare)
Marie Color Color	Surface former to distribute amail confinations.	nacyus.
		Name of Street Oracle of
	amaliabless is resited, the sensiting resident will not be redect.	
	Suite of the composition of reportments	
	PRINCIPAL CONTRACT	
	This empower is usually the confination	
	epoen to send emails. The numerity provides compressed in send of the send of	mer person i randor
	server, and reconstruct amount on the	
	Comma separated for if domains that should not be considered part of amal addresses (for	
SHARE MAKE	National portion to create unique Message (C. Seader, Solver 1 & CE.	un
	Specifies the MME animaling schame for amalic.	
	Summer originary was desirable to be	
nine annualing	ASSS or BAN otherwise. Excepts, which works with any little of content burning course some	
	town with teachy and operations also employed. On the particular period with a period beaution.	
	emper impage (non-simple fun- tauris) I S Atlantolog sone la uset.	
	hands) I it throughly send to used.	
and the same of th	Dia sandroi program monoment file . i and . r options.	onesi i
	(almost 4)	
and the same and	alongs sand collisations in Addresses are not makingfore).	(m. Mrket)
	Comma separated band and addresses to	
ette about to	alongs sand collisations to Addresses can be seen by all moletons (Co.)	(market)
	son'ty of recipions (Cr.). Surfact transforming appearing withcome that	
	to not specify one Puly spelified addresses are	
		(make)
	no modified. The defeat domain is appointed to all ocomorphisms for which as amal address committee found in the oner settings.	
and determinations	ne modifier. The default domain is appended to all assemble plots of which an amail address names he hand in the over settings. Enable attack militarion.	postdad)
AND ADDRESS AND AD	na matifiari. Tra default domain in apparalad to all acemanalogis for which as amail abbase names he hand in the over settings. Ename amail notification. Sendor address to use in notification amails.	
	not motified. The default domain is approvided to all assessmentings for which as amail abbases controlled hands in the user settings. Entette private techniques. Sendor settings to use in confination provide.	
	not medified. The default formula is appropriate to a manuscratified for which are and address amount be found to the own writings. Enter years institution. Enter years institution and address amount in the contraction of the contraction o	
	no multitud. The delated density is appropriate to discontinual legislation of the similar and small address securities found in the same satisface. Explain and continuation. Exercise address or uses in molecular annuals. Market and analysis of any process and along y applying made in any infrared in The reference and confidence made.	dicedital
22. All 100 Al	no modifica. The default density is appropriet to all communicating the right on a small address community to both on a small address community to both on the communication. Sender address to come to confidentiate models. Sender address to come to confidentiate models. Set the communication of the co	
	um mattille. The defend fremañ he gepreiet te di amerimekojn frem am europea. De seu mattille hand in de met allebra mente ha hand in de am europea. De seu mattille hand in de am europea. De seu mattille hand in de seu mat	Audian
	on motified. The advant formula is expectable to a construction from the control address construction for the control address construction. The control address formula address to control address for the control address formula address control address formula address control address and the control address control address con	Secretary Provided and Secretary Secretary
	and mediated. The definite formals is operated to all communities for the first of the same unless assumed in the first of the same unless, the first of the same unless, the first period of the first period	Audian
AND	are marked. The advance formula is appropriet to all assemble of the price of the appropriet to a small public or an advance of the price of the appropriet	Secretary Provided and Secretary Secretary
STATE AND STATE OF THE STA	on artifacts for the desiration in equivalent and an artifacts and a final content in the content of the content in the conten	Secretary Provided and Secretary Secretary
AND ADMINISTRATION OF THE PARTY OF T	on artifacts for the desiration in equivalent and an artifacts and a final content in the content of the content in the conten	Secretary Provided and Secretary Secretary
SERVICE AND SERVICE SE	on marketin from their formation in approximate of the control of their formation of thei	Secretary Provided and Secretary Secretary
	on artifacts for the data of manufacts appropriate and commonlying for the control and commonlying for the control and control	Secretary Provided and Secretary Secretary
The state of the s	se mersione has the simulated equations and a second secon	American Vivolitation Employ packing packing yang yang
The state of the s	Les considered. The destination of appropriate processing the control of the cont	American Vivolitation Employ packing packing yang yang
The state of the s	Les annielles Trans de la financia de appreciation personne les annielles Trans de la financia del la financia	American Vivolitation Employ packing packing yang yang
The state of the s	or created. The desire from the appropriate control of the control	American Vivolitation Employ packing packing yang yang
The state of the s	or contact. The state interest is experient. The state of the state o	Production of the Control of the Con
The state of the s	so calcular The section of the secti	American Vivolitation Employ packing packing yang yang
The state of the s	or contact. The state interest is experient. The state of the state o	Control of the Contro
The state of the s	or called To Man Anna Anna Anna Anna Anna Anna Anna	Production of the Control of the Con
The state of the s	or analise. The state of the st	Control of the Contro
The state of the s	or called To Man Anna Anna Anna Anna Anna Anna Anna	Paradasian American A
The state of the s	or analise in the substitution of angular control of the substitution of angular control of the substitution of the substituti	Control of the Contro
The state of the s	or analise To an extra contract of the contrac	Paradasian American A
The state of the s	or analise in the substitution of angular control of the substitution of the substitut	Paradasian American A
The state of the s	or analow for the property of the control of the co	Paradasian American A
The state of the s	the control of the co	Paradasian American A
The state of the s	the control of the co	Paradasian American A
The state of the s	or called the state of the stat	Paradasian American A

[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 <u>TracNotification</u> for more details.

Available subscribers:

Subscriber	Description
AlwaysEmailSubscriber	
	Ticket
	that
	l'm
	listed
	in
CarbonCopySubscriber	the
	cc
	field
	lis
	modifie
	Any
NewTicketSubscriber	ticket
	is
	create
	Ticket
	that
FicketOwnerSubscriber	own
120/1000 110/1000 120/1000 1	is
	create
	or
	modifie
	Ticket
	that
	₩
TicketPreviousUpdatersSubscriber	previou
	update
	lis
	modifie
	Ticket
	that
TicketReporterSubscriber	
	reporte
	is
	modifie
	l update
CicketUpdaterSubscriber	ll l
	a
	ticket

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 in trac.ini:

[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 $\underline{\text{TracNotification}}$ for more details.

Available subscribers:

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

Each user can override these defaults in his 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.

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 (see <a>?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 addressed 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 looks like this:

```
$ticket_body_hdr
$ticket_props
{% choose ticket.new %}\
{% when True %}\
$ticket.description
{% end %}\
{% otherwise %}\
     if changes_body %}\
\{('Changes (by (author)s):', author=change.author)\}
$changes_body
{ %
     end %}\
{%
     if changes_descr %}\
       if not changes_body and not change.comment and change.author %}\
\{('Description changed by (author)s:', author=change.author)\}
       end %}\
$changes_descr
{%
      end %
      if change.comment %}\
{ %
${changes_body and _('Comment:') or _('Comment (by %(author)s):', author=change.author)}
$change.comment
     end %
{% end %}\
{\% end \%}
${_('Ticket URL: <%(link)s>', link=ticket.link)}
$project.name <${project.url or abs_href()}>
$project.descr
```

Sample Email

```
#42: testing
    Id: 42
                           Status: assigned
                         Modified: Fri Apr 9 00:04:31 2004
Component: report system
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: <a href="http://example.com/trac/ticket/42">http://example.com/trac/ticket/42</a>
My Project <http://myproj.example.com/>
```

Customizing e-mail content for MS Outlook

MS Outlook normally presents plain text e-mails with a variable-width font, and as a result the ticket properties table will most certainly look like a mess in MS Outlook. This can be fixed with some customization of the e-mail template.

Replace the following second row in the template:

```
$ticket_props
```

with this (requires Python 2.6 or later):

The table of ticket properties is replaced with a list of a selection of the properties. A tab character separates the name and value in such a way that most people should find this more pleasing than the default table when using MS Outlook.

```
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: <a href="http://example.com/trac/ticket/42>">http://example.com/trac/ticket/42>">http://example.com/rac/ticket/42>">http://example.com/>
```

Important: Only those ticket fields that are listed in sel are part of the HTML mail. If you have defined custom ticket fields which are to be part of the mail, then they have to be added to sel. Example:

```
sel = ['Reporter', ..., 'Keywords', 'Custom1', 'Custom2']
```

However, the solution is still a workaround to an automatically HTML-formatted e-mail.

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 2#7107 for details.

Troubleshooting

If you cannot get the notification working, first make sure the log is activated and have a look at the log to find if an error message has been logged. See <u>TracLogging</u> for help about the log feature.

Notification errors are not reported through the web interface, so the user who submits a change or a new ticket never gets notified about a notification failure. The Trac administrator needs to look at the log to find the error trace.

Permission denied error

Typical error message:

```
File ".../smtplib.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: <u>TracTickets</u>, <u>TracIni</u>, <u>TracGuide</u>, <u>?TracDev/NotificationApi</u>