Email Polling System

The **Email Approver System** included in this article acts as a **email polling system** that fetches emails and complete assignments periodically based on configurations.

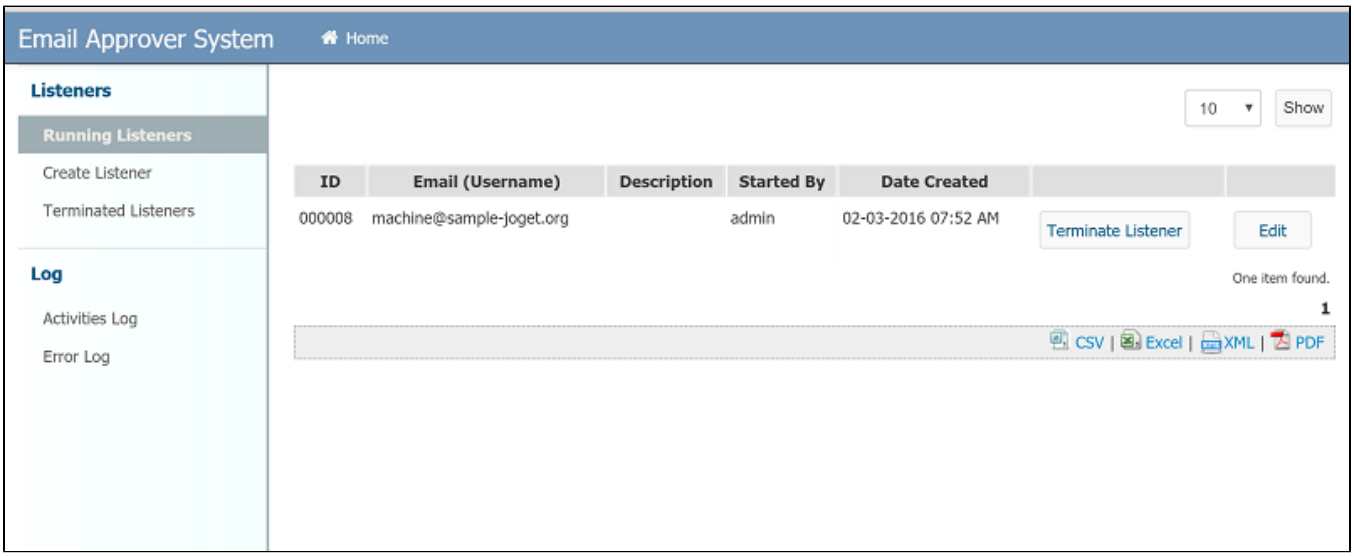


Figure 1: Setting up the listeners

There can be more than 1 listener set at any point of time. Each listener, technically, will be a process instance that repetitively run in a loop until terminated by the user.

Configurations

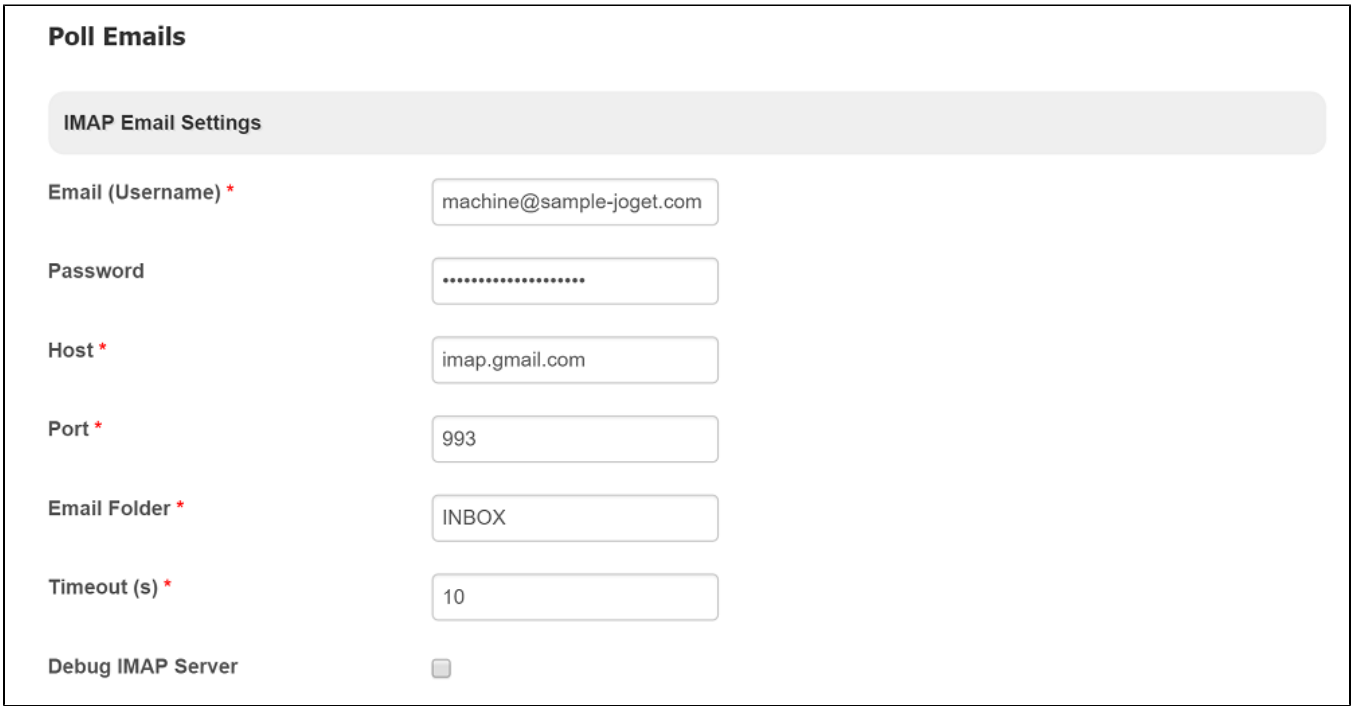


Figure 2: IMAP Email Settings

IMAP Email Settings must be configured so that it will check a specific email's inbox for new incoming mails.

It is important to create a dedicated email address to receive such "response" emails so that the the execution code block does not spend too much time going through irrelevant emails.

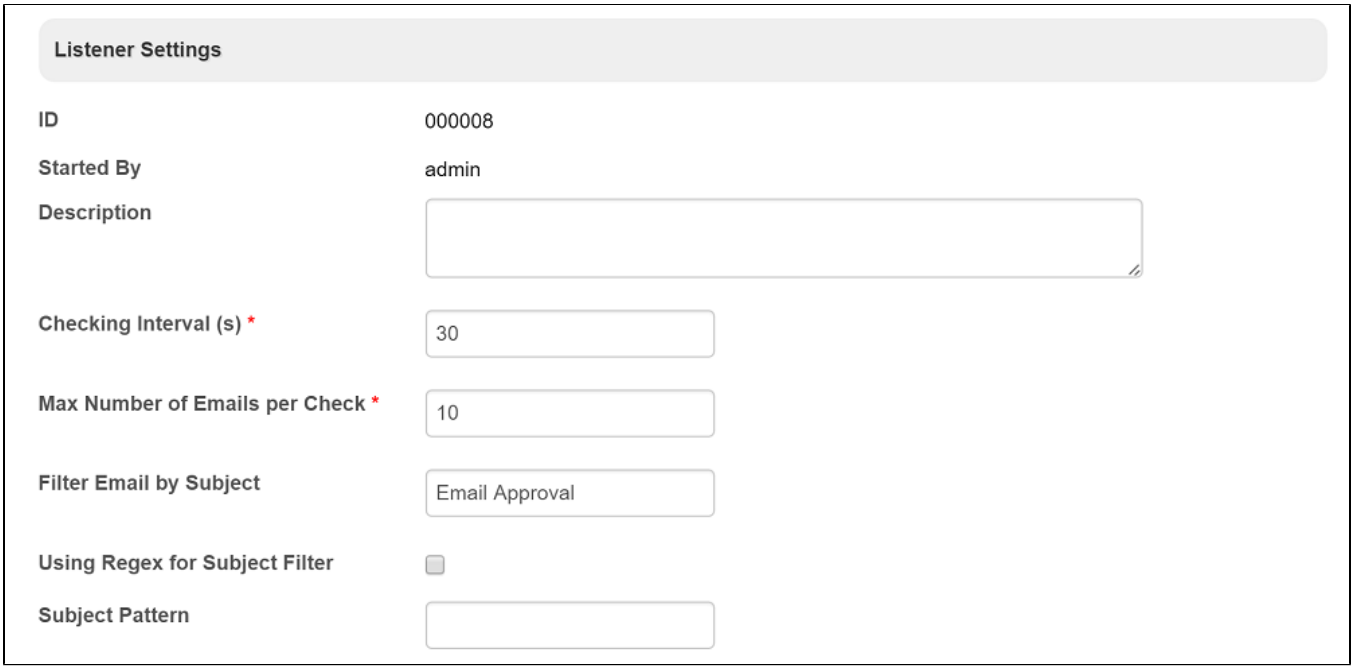


Figure 3: Listener Settings

Listener Settings needs to be also configured to determine the frequency of checking and emails to be matched too.

Take note that the checking interval is also subjected to the **Deadline Checker** interval set in Joget Workflow's system settings. Please ensure the **Process Deadline Checker Interval** is **enabled**. This can be located at Admin Bar > General Settings > Timer Settings > Process Deadline Checker Interval

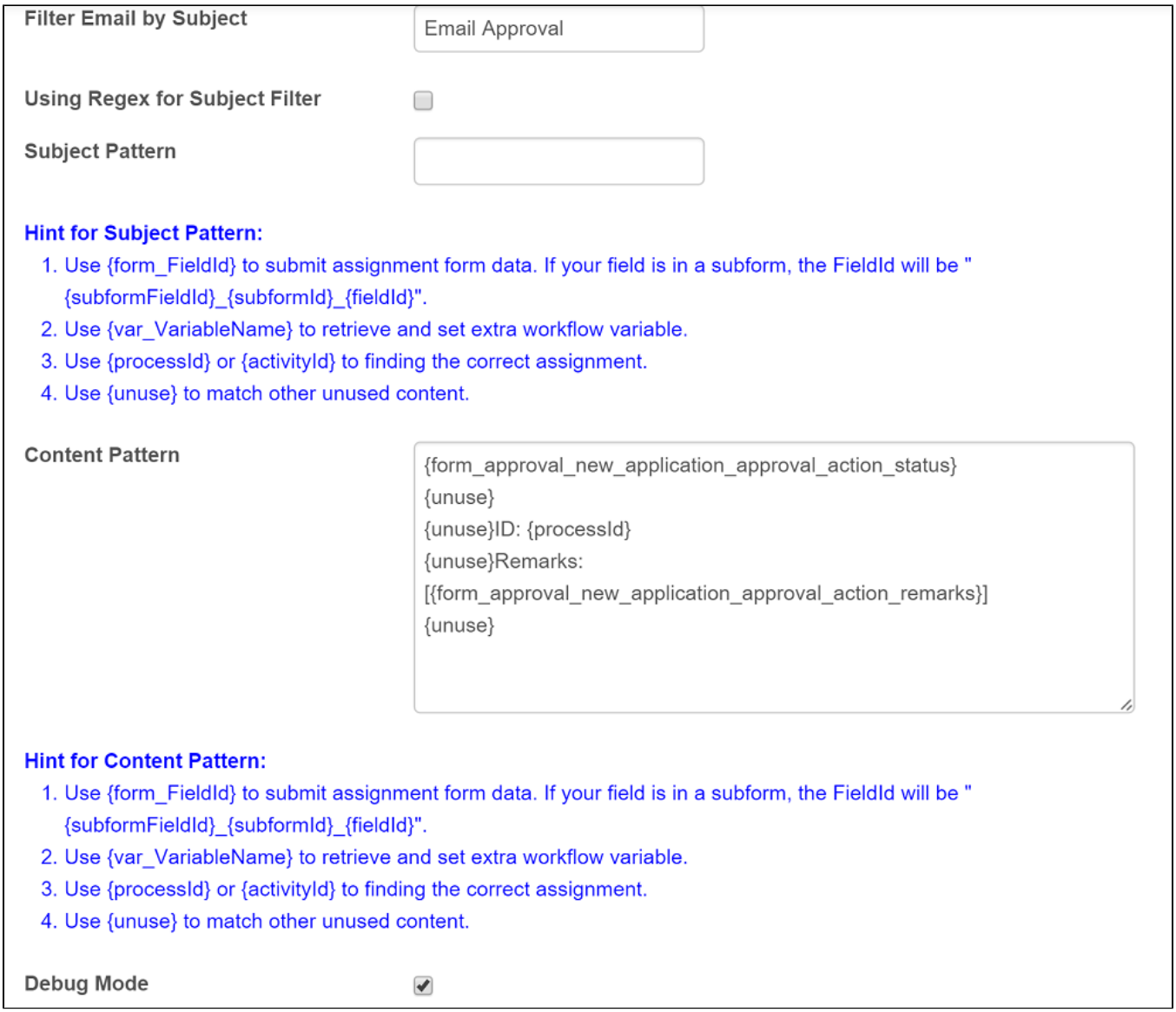


Figure 4: Listener Settings - Subject and Content

Subject and Content Patterns are very important.

Make sure that you **match** the content of the outgoing mail that you send out in your other Joget Workflow App.

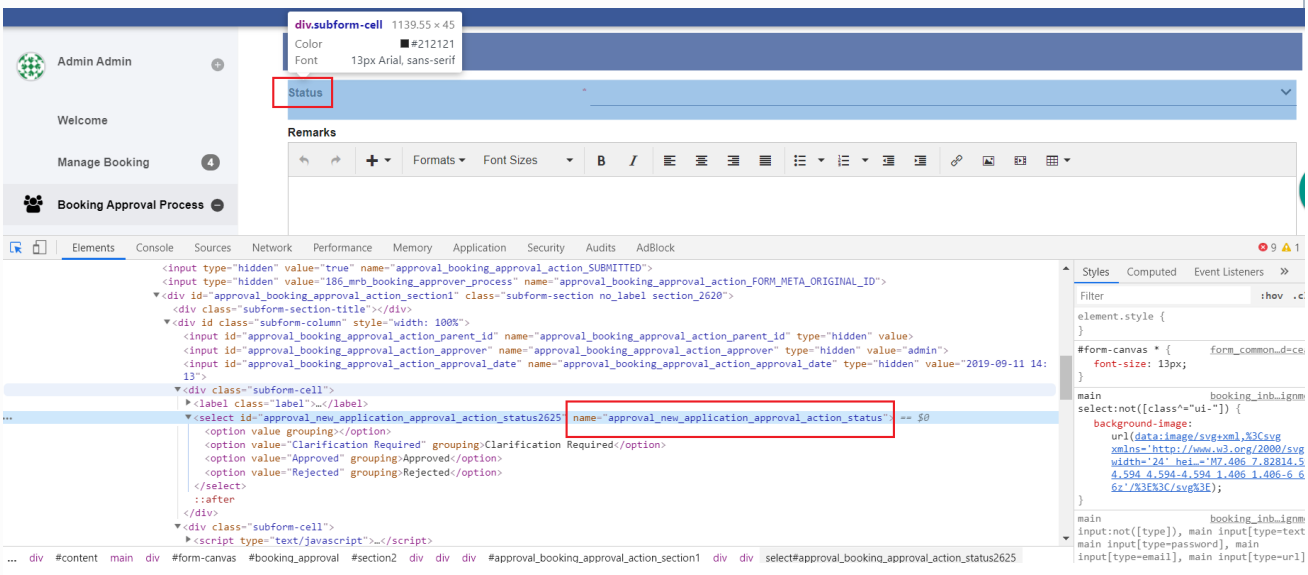
It may take a few tries to get it right so you can turn on the **Debug Mode** to get the relevant logs for debugging purpose.

Content Pattern

```
{form_approval_new_application_approval_action_status}
{unuse}
{unuse}ID: {processId}
{unuse}Remarks: [{form_approval_new_application_approval_action_remarks}]
{unuse}
```

Info

You may be wondering where does **{form_approval_new_application_approval_action_status}** comes from. It is actually the field element name of said field. Just use the **Inspect Element** feature in your browser to acquire the field element name and **add the prefix "form_"** to it. (see sample screenshot below) This will retrieve the value in the email content and set it into the form data.



Sample email to be sent out configured in Email Tool from the system to the respondent.

```
The following application required your approval with details:
=====================================
Name : #form.seaa_application.name#
Email : #form.seaa_application.email#
ID: #assignment.processId#
=====================================
Please reply this email with keyword "Approved", "Rejected" or "Clarification Required".
If your have remark message, please fill inline between the square brackets below.
Remarks: [ ]
==  This is a system generated message. ==
```

Sample email

```
The following application required your approval with details:
=====================================
Name : Etta
Email : etta@joget.com
ID: 43_seaa_new_application_approver_process
=====================================
Please reply this email with keyword "Approved", "Rejected" or "Clarification Required".
If your have remark message, please fill inline between the square brackets below.
Remarks: []
==  This is a system generated message. ==
```

Sample email replied by the receiver back to the mailer.

```
Approved

> The following application required your approval with details:
> ===================================
> Name : Etta
> Email : etta@joget.com
> ID: 43_seaa_new_application_approver_process
> ===================================
> Please reply this email with keyword "Approved", "Rejected" or "Clarification Required".
> If your have remark message, please fill inline between the square brackets below.
> Remarks: [356pm approved]
> ==  This is a system generated message. ==
```

Server log showing email polling and assignment completion.

Log

```
INFO  02 Mar 2016 16:52:50 App: eas - Poll Email tool  - Connect to IMAP for machine@sample-joget.com
INFO  02 Mar 2016 16:52:53 App: eas - Poll Email tool  - IMAP connected for machine@sample-joget.com
INFO  02 Mar 2016 16:52:53 App: eas - Poll Email tool  - Unread Messages: 1
INFO  02 Mar 2016 16:52:54 App: eas - Poll Email tool  - Subject filter for (Re: Email Approval).
INFO  02 Mar 2016 16:52:55 App: eas - Poll Email tool  - --- Mail 0: Re: Email Approval ---
INFO  02 Mar 2016 16:52:55 App: eas - Poll Email tool  - Sender: Cat Grant <cat-grant@sample-joget.com>
INFO  02 Mar 2016 16:52:55 App: eas - Poll Email tool  - Mail Content: Approved____> The following application
required your approval with details:__> ===================================__> Name : Etta__> Email :
etta@joget.com__> ID: 43_seaa_new_application_approver_process__> ===================================__>__>
Please reply this email with keyword "Approved", "Rejected" or "Clarification Required".__>__> If your have
remark message, please fill inline between the square brackets below.__> Remarks: [356pm approved]__>__> ==
This is a system generated message. ==__>__>__
INFO  02 Mar 2016 16:52:55 App: eas - Poll Email tool  - subject_pattern:
INFO  02 Mar 2016 16:52:55 App: eas - Poll Email tool  - subject_reg:
INFO  02 Mar 2016 16:52:55 App: eas - Poll Email tool  - subject_reg:
INFO  02 Mar 2016 16:52:55 App: eas - Poll Email tool  - content_pattern:
{form_approval_new_application_approval_action_status}__{unuse}__{unuse}ID: {processId}__{unuse}Remarks:
[{form_approval_new_application_approval_action_remarks}]__{unuse}__
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - content_reg: \
{form_approval_new_application_approval_action_status\}__\{unuse\}__\{unuse\}ID: \{processId\}__\{unuse\}
Remarks: \[\{form_approval_new_application_approval_action_remarks\}\]__\{unuse\}__
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - content_reg: (.*?)__([\s\S]*)__([\s\S]*)ID: (.*?)__
([\s\S]*)Remarks: \[(.*?)\]__([\s\S]*)__
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - key:
form_approval_new_application_approval_action_status
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - value: Approved
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - key: unuse
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - value: __> The following application required your
approval with details:__> ===================================__> Name : Etta__> Email : etta@joget.com
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - key: unuse
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - value: >
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - key: processId
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - value: 43_seaa_new_application_approver_process
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - key: unuse
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - value: > ===================================__>__>
Please reply this email with keyword "Approved", "Rejected" or "Clarification Required".__>__> If your have
remark message, please fill inline between the square brackets below.__>
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - key:
form_approval_new_application_approval_action_remarks
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - value: 356pm approved
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - key: unuse
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - value: >__> ==  This is a system generated message.
==__>__>
INFO  02 Mar 2016 16:52:56 App: eas - Poll Email tool  - Submit Form for assignment:
81_43_seaa_new_application_approver_process_approval {approval_new_application_approval_action_status=[Ljava.
lang.String;@e992653, approval_new_application_approval_action_remarks=[Ljava.lang.String;@68a31aa1}
I
```

If there is a match based on the subject or the content, the code block will then retrieve the email's sender information (email) and matches it with an existing user in the system.

If there's a match with an user and if there's a further match with the particular user's assignment, then it will then proceed to complete the assignment.

While completing the assignment, depending on the configurations set, workflow variables' values and/or form data values can be set too.

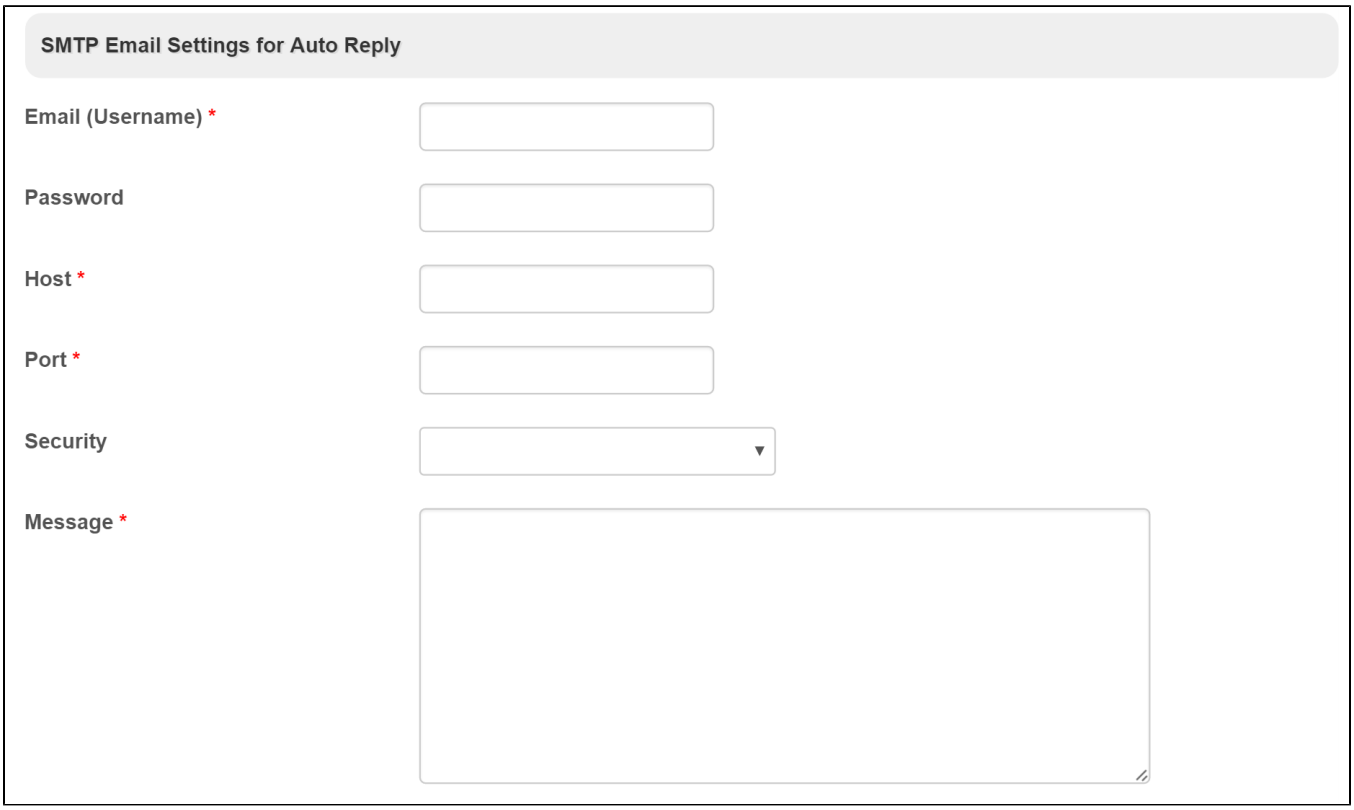


Figure 5: Optional - SMTP Email Settings for Auto Reply

You can configure this section if you want the listener to automatically reply to email that it matches.

Download Demo App

- Approve Via Email

Related Elements

- Bean Shell for Process Tool