

# Configuring mail forwarding for the root user

## WHAT?

This article describes how to configure mail forwarding for the root user.

## WHY?

Enable mail forwarding for the root user to get information about system events.

## EFFORT

It should not take longer than five minutes to configure mail forwarding.

## REQUIREMENTS

- A network connection
- A remote e-mail account that reliably receives messages
- root or sudo privileges

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# 1 Introduction

System daemons, `cron` jobs, `systemd` timers, and other applications can generate e-mails and send them to the `root` user of the system. These messages can contain security-relevant reports and incidents that might require a quick response by the system administrator.

By default, each user account owns a local mailbox and will be notified about new mail messages upon login. To get notified about the messages sent to `root` in a timely fashion, it is recommended to forward these mails to a dedicated remote e-mail account that is regularly checked.

## 2 Configuring root mail forwarding with YaST

The following procedure describes how to configure mail forwarding for the `root` user to a dedicated remote e-mail account.

### PROCEDURE 1: CONFIGURE `root` MAIL FORWARDING WITH YAST

1. Install the `yast2-mail` package:

```
> sudo zypper in yast2-mail
```

2. Run the interactive YaST mail configuration:

```
> sudo yast mail
```

3. Choose *Permanent* as *Connection type* and proceed with *Next*.
4. Enter the address of the *Outgoing mail server*. If necessary, configure *Authentication*. It is strongly recommended to *Enforce TLS encryption* to prevent potentially sensitive system data from being sent unencrypted over the network. Proceed with *Next*.
5. Enter the e-mail address to *Forward root's mail to* and *Finish* the configuration.



### Important: Do not accept remote SMTP connections

Do *not* enable *Accept remote SMTP connections*, otherwise the local machine will act as a mail relay.

6. Send a message to test whether the mail forwarding works correctly:

```
> mail root
subject: test
```

```
test
```

```
.
```

7. Check the remote e-mail account for new messages. Your test message should arrive within minutes.

### 3 What's next?

Depending on the number of managed machines and the number of persons who need to be informed about system events, different e-mail address models can be established:

- Collect messages from different systems in an e-mail account that is only accessed by a single person.
- Collect messages from different systems in a group e-mail account (aliases or mailing list) that can be accessed by all relevant persons.
- Create separate e-mail accounts for each system.

It is crucial that administrators regularly check the related e-mail accounts. To facilitate this effort and identify important events, avoid sending unnecessary information. Configure applications to send only relevant information.

### 4 Troubleshooting

If the test message sent in *Procedure 1, "Configure root mail forwarding with YaST"* does not arrive, perform the following steps to analyze the problem.

Is the `postfix` daemon running?

Check if the `postfix` daemon is running with `systemctl status postfix.service`. If the service is down, the output includes additional information on the cause of the problem.

Has the test message been sent?

Use the `mailq` command to verify that the test message from *Step 6* has been sent. Upon success, the queue should be empty.

Is the outgoing mail server resolved correctly?

Check that the system resolves the mail server of the remote e-mail account correctly. Run `host -t mx example.com` (where `example.com` is the domain of the e-mail account configured in step 5).

Can you reach the outgoing mail server?

Verify you can ping the mail server with `ping -c 5 mail.example.com` (where `mail.example.com` is the host name of the mail server returned by the `host` command in the previous step).


Does the test message still not arrive?

If `mailq` reports the message has been sent successfully, the problem must be on the receiving end. Check the configuration of the remote e-mail account and its spam folder.

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