

# EMail Notification to Unlock LUKS encrypted disk via Dropbear SSH

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**description:** Get notified by mail when your System is waiting to be unlocked  
**category:** Linux  
**slug:** email\_notification\_to\_unlock\_luks\_encrypted\_disk\_via\_dropbear\_ssh  
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I'm running Proxmox VE Hosts with full encrypted disks and Dropbear SSH to unlock them remotely. I wanted to get notified when I have to login and enter the key, e.g. in case of an unexpected reboot.

My setup is based on the [mailjet](#) Free Tier (6000 Mails / Month, 200 Mails / Day) and some initramfs customizing to include curl, a few other required libraries and a simple script to send an API request, tested on PVE 7.1 / Debian 11 (bullseye)

I will enclose placeholder in < >, please replace them with appropriate values based on your Environment.

The hook script `/etc/initramfs-tools/hooks/curl` take care that `curl`, `libnss_dns` and a `resolv.conf` are included in the initramfs:

```
#!/bin/sh

PREREQ=""

prereqs()
{
    echo "$PREREQ"
}

case $1 in
prereqs)
    prereqs
    exit 0
;;
esac

. /usr/share/initramfs-tools/hook-functions

copy_exec /usr/bin/curl /bin

# Fix DNS resolver
cp -a /usr/lib/x86_64-linux-gnu/libnss_dns* $DESTDIR/usr/lib/x86_64-linux-gnu/
printf "nameserver <dns_server1_ipv4_address>\n\nnameserver <dns_server2_ipv4_address>\n" > $DESTDIR/etc/resolv.conf
```

The actual notification will be send by `/etc/initramfs-tools/scripts/init-premount/notification` through the mailjet API. You shouldn't have a problem to adjust it to use any other Service as long you can trigger a API via curl :)

```
#!/bin/sh

PREREQ=""

prereqs()
{
```

```

        echo "$PREREQ"
    }

    case $1 in
    prereqs)
        prereqs
        exit 0
        ;;
    esac

    . /scripts/functions

    configure_networking

    /bin/curl --insecure -s \
    -X POST \
    --user "<mailjet_api_user>:<mailjet_api_pass>" \
    https://api.mailjet.com/v3.1/send \
    -H 'Content-Type: application/json' \
    -d '{
        "Messages": [
            {
                "From": {
                    "Email": "<sender_email>",
                    "Name": "<sender_name>"
                },
                "To": [
                    {
                        "Email": "<recipient_mail>",
                        "Name": "<recipient_name>"
                    },
                    {
                        "Email": "<recipient2_mail>",
                        "Name": "Pushover"
                    }
                ],
                "Subject": "Action required: Unlock <fqdn>!",
                "TextPart": "Server <fqdn> was restarted and need to be unlocked to proceed boot sequence.",
                "CustomID": "DropbearUnlockRequest"
            }
        ]
    }'
```

I'm also using [Pushover](#) to receive notifications on my mobile, they offer mail2push, so I just added my personal pushover address as second recipient to get notified by Mail and Pushover.

Make both scripts executable:

```

chmod +x /etc/initramfs-tools/hooks/curl`
chmod +x /etc/initramfs-tools/scripts/init-premount/notification
```

Run `update-initramfs -u` and you are good to go, during the next reboot you should receive an Email Notification to enter your LUKS Key and unlock your disk.