

# ansible-tine

out of the box mailserver, crm, cms solution

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<https://www.entroserv.de/de/offene-software/ansible-tine>

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# Motivation

→ **let's run a startup company** ←

**We need:**

- ▶ Webpage (CMS)
- ▶ E-Mail (Mailserver, Spamfilter)
- ▶ Mailinglist
- ▶ Groupware, CRM
- ▶ **and the s for security**

# DeMotivation

→ **let's run a startup company** ←

## **IT-Infrastructure:**

- ▶ Cloud Solution
  - ▶ DSGVO?
  - ▶ Lock-In?
  - ▶ Security?
  - ▶ price?
- ▶ Self-Hosted
  - ▶ Installation?
  - ▶ Configuration?
  - ▶ Updates?
  - ▶ Backups?
  - ▶ Documentation?
  - ▶ Will it work?
- ▶ Self-Hosted using integrated solution
  - ▶ everything fully supported?
  - ▶ price?
- ▶ Dedicated-Hosting by IT-Service
  - ▶ price?

# We need

...to get ready **NOW**

- ▶ **self-hosted** but:
- ▶ easy to install
- ▶ easy to configure
- ▶ easy to integrate
- ▶ useful defaults

→ Fill out form and click **START**

# We need

... useful **TOOLS** and **FEATURES**

- ▶ E-Mail (Webmail, SMTP, IMAP, Exchange)
- ▶ Default signature
- ▶ Multiuser + Frontend for administration
- ▶ Mail-Alias
- ▶ Quota
- ▶ Sieve integration
- ▶ Spamfilter with Learning (integrated in Mailclient)
- ▶ Autoconfig (Thunderbird), Autodiscovery (ActiveSync)
- ▶ Calendar (Web, Caldav and ActiveSync)
- ▶ Addressbook (syncned)
- ▶ Mailinglist
- ▶ TLS, TLSA, DKIM, DMARC, SPF, ADSP, ARC
- ▶ Filestorage
- ▶ Backup
- ▶ Flatfile CMS

# We need

...some nice to have tools

- ▶ Human Resource Management
- ▶ CRM
- ▶ Timekeeping
- ▶ Base data
- ▶ Sales
- ▶ Task Planning
- ▶ Inventory management

# Components

- ▶ Tine 2.0
- ▶ Apache2
- ▶ Postfix
- ▶ Dovecot
- ▶ Sieve
- ▶ MySQL/Mariadb
- ▶ Rspamd
- ▶ Mailman
- ▶ Cryptdomainmgr (+ dehydrated)
- ▶ Cron
- ▶ Ansible
- ▶ inwx.de
- ▶ Letsencrypt
- ▶ Grav



# Components

- ▶ Tine 2.0
  - ▶ Accountmanagement, Administration
  - ▶ ActiveSync, Exchange
  - ▶ Caldav
  - ▶ Carddav
  - ▶ Groupware, CRM and additional tools
  - ▶ Webmail
  - ▶ Filestorage
- ▶ Apache2
  - ▶ Web-UIs
  - ▶ Webpage
  - ▶ PHP
  - ▶ TLS
- ▶ Postfix
  - ▶ SMTP
- ▶ Dovecot
  - ▶ IMAP
- ▶ Sieve
  - ▶ Filtering
  - ▶ Control remote spam/ham learning

# Components

- ▶ MySQL/Mariadb
  - ▶ Store Useraccounts
  - ▶ Store Mailaccounts
- ▶ Rspamd
  - ▶ Spamcheck
  - ▶ DKIM signing
  - ▶ DKIM keygen
- ▶ Mailman
  - ▶ Mailinglist
  - ▶ Mailinglist administration
- ▶ Cryptomainmgr (+ dehydrated)
  - ▶ TLS certificates
  - ▶ TLSA
  - ▶ DKIM
  - ▶ Domain management (update records)
  - ▶ DH params
- ▶ Cron
  - ▶ Used by Tine 2.0 and Cryptomainmgr
- ▶ Ansible
  - ▶ Install and configure all this

# Components

- ▶ inwx.de
  - ▶ hosts domain
  - ▶ controlled by Cryptdomainmgr
  - ▶ DNSSEC
- ▶ Letsencrypt
  - ▶ Provides TLS certificates
- ▶ Grav
  - ▶ Webpage/CMS

# Getting started

## Domain

Currently only Internetworx ([inwx.de](http://inwx.de)) supported;  
No reseller support yet

- ▶ create account
  - ▶ username and password for automatic update needed
  - ▶ individual account for client required
- ▶ register domain

# Getting started

## Server

Smallest V-Server (1 GB RAM, 50 GB SSD)

- ▶ install full Server Ubuntu 18.04 or Debian 9
- ▶ enable SSH root access

# Getting started

## Deploy

### Config – CRM, email

vars/common.yml

```
1 hostname: "pserver"
2 tld: "entroserv.de"
3 subdomain: "{{ tld }}"
4 servername: "pserver"
5 domain: "{{ servername }}.{{ subdomain }}"
6 tinedomains:
7     - "tine20.{{ subdomain }}"
8 rspamdomains:
9     - "rspamd.{{ subdomain }}"
10 emaildomain: "{{ subdomain }}"
11 imapuserdomain: "entro"
12 tlsa: 'auto:3:1:1:auto:2:0:1'
```

# Getting started

## Deploy

### Config – Mailinglist

vars/common.yml

```
1 defaultlistmap:
2     { emaildomain: "lists.{{ subdomain }}",
3       webdomain: "www.lists.{{ subdomain }}",
4       mx: '{{ subdomain }}' }
```

# Getting started

## Deploy

### Config – CMS, web

vars/common.yml

```
1 webdomains:
2   - "www.{{ subdomain }}"
3   - "{{ subdomain }}"
4 grav_admin_user: "admin"
5 grav_admin_email:
6   "{{ tine20_admin_name }}@{{ emaildomain }}"
```



# Getting started

## Deploy

### Config – multidomain

vars/common.yml

```
1 emailmaps:
2   - { emaildomain: "entroserv.net",
3       mx: "{{ domain }}" }
4   - { emaildomain: "entroserv.com",
5       mx: "{{ domain }}" }
6 listmaps:
7   - { emaildomain: "lists.entroserv.net",
8       webdomain: "www.lists.entroserv.net",
9       mx: '{{ domain }}' }
10  - { emaildomain: "lists.entroserv.com",
11      webdomain: "www.lists.entroserv.com",
12      mx: '{{ domain }}' }
```

# Getting started

## Deploy

### Config – TLS certificate

vars/cert.yml

```
1 certemail: "stefan.helmert@t-online.de"
2 certextra: []
3 certocsp:
4   - "--ocsp"
5 certbaselocation: "/etc/ssl"
```

# Getting started

## Deploy

### Config – internetworx login

vars/inwx.yml

```
1 inwxlogin: "entroserv"
```

### Config – internetworx password

vars/inwx.yml

```
1 inwxpasswd: "*****"
```

# Getting started

Deploy

## Config – all passwords

vars/passwords.yml

```
1  rspamd_pw: "{{ lookup('password', 'credentials/'
2                + inventory_hostname
3                + '/rspamd_pw.txt chars=ascii_letters,
4                                digits') }}"
5  [...]
```

# Getting started

## Deploy

### Start Ansible-Playbook

```
1 ansible-playbook deploy_playbook.yml -i hosts
```

```
PLAY [crm-server] *****
```

```
TASK [up : Debug host] *****
```

```
ok: [92.60.36.246 -> localhost] => {  
    "msg": "92.60.36.246"  
}
```

```
TASK [up : Waiting for startup] *****
```

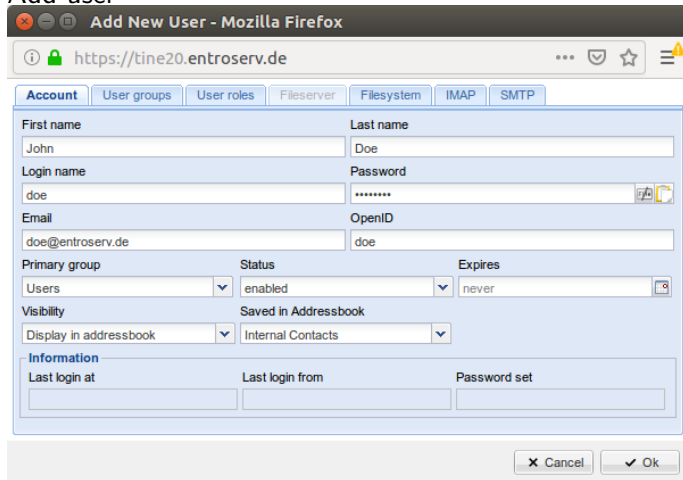
```
ok: [92.60.36.246 -> localhost]
```



# Getting started

## Setup

### Add user



The screenshot shows a Mozilla Firefox window titled "Add New User - Mozilla Firefox" with the address bar displaying "https://tine20.entroserv.de". The "Account" tab is selected, showing a form for adding a new user. The form includes fields for First name (John), Last name (Doe), Login name (doe), Password (masked with dots), Email (doe@entroserv.de), and OpenID (doe). There are also dropdown menus for Primary group (Users), Status (enabled), Expires (never), Visibility (Display in addressbook), and Saved in Addressbook (Internal Contacts). At the bottom, there is an "Information" section with fields for Last login at, Last login from, and Password set. The "Cancel" and "Ok" buttons are at the bottom right.

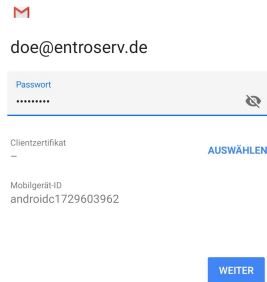
Account		
First name	Last name	
John	Doe	
Login name	Password	
doe	*****	
Email	OpenID	
doe@entroserv.de	doe	
Primary group	Status	Expires
Users	enabled	never
Visibility	Saved in Addressbook	
Display in addressbook	Internal Contacts	
<b>Information</b>		
Last login at	Last login from	Password set

**Important:** User must login and relogin to use email.

# Getting started

## Setup

### ActiveSync autodiscovery on Android



doe@entroserv.de

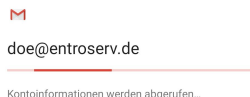
Passwort  
\*\*\*\*\*

Clientzertifikat  
—

Mobilgerät-ID  
androidc1729603962

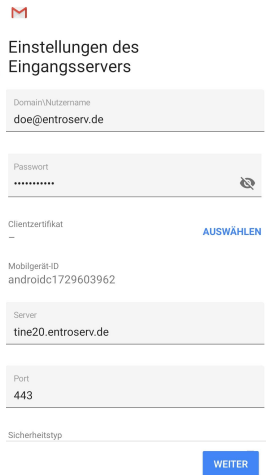
AUSWÄHLEN

WEITER



doe@entroserv.de

Kontoinformationen werden abgerufen...



#### Einstellungen des Eingangsservers

Domain\Nutzername  
doe@entroserv.de

Passwort  
\*\*\*\*\*

Clientzertifikat  
—

Mobilgerät-ID  
androidc1729603962

Server  
tine20.entroserv.de

Port  
443

Sicherheitstyp

WEITER

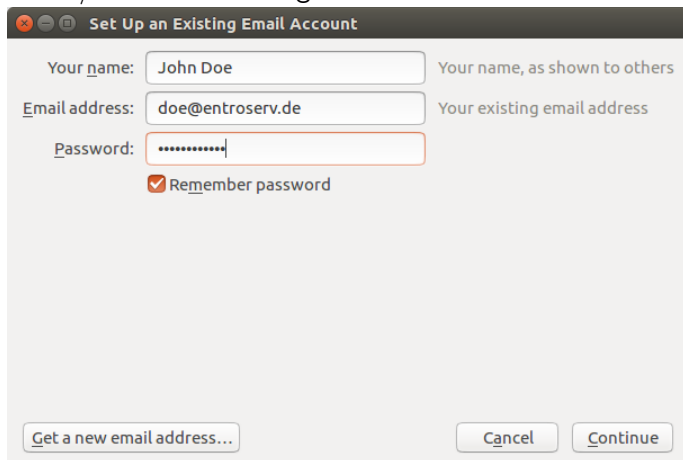
**Because:** `https://autodiscover.entroserv.de/autodiscover/autodiscover.php`



# Getting started

## Setup

### IMAP/SMTP autoconfig for Thunderbird



The screenshot shows a window titled "Set Up an Existing Email Account" with a dark header bar. Inside the window, there are three input fields and a checkbox. The first field is labeled "Your name:" and contains the text "John Doe". The second field is labeled "Email address:" and contains the text "doe@entroserv.de". The third field is labeled "Password:" and contains a series of dots. To the right of each field is a descriptive text: "Your name, as shown to others", "Your existing email address", and "Your password" (partially obscured). Below the password field is a checked checkbox labeled "Remember password". At the bottom of the window, there are three buttons: "Get a new email address...", "Cancel", and "Continue".

**Set Up an Existing Email Account**

Your name: John Doe Your name, as shown to others

Email address: doe@entroserv.de Your existing email address

Password: ..... Your password

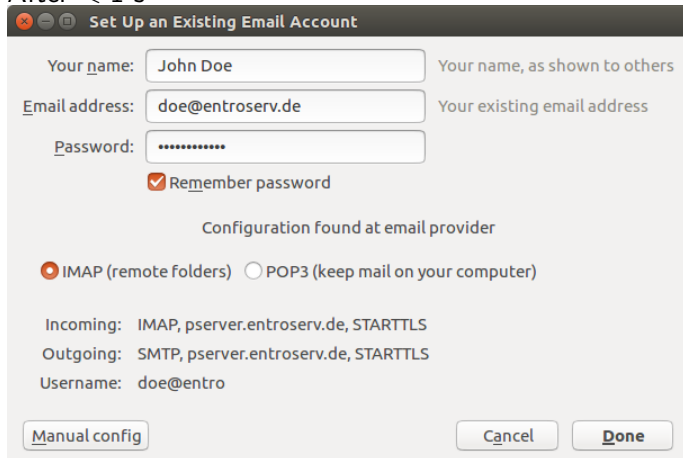
☒ Remember password

Get a new email address... Cancel Continue

# Getting started

## Setup

After < 1 s



**Set Up an Existing Email Account**

Your name:  Your name, as shown to others

Email address:  Your existing email address

Password:

☒ Remember password

Configuration found at email provider

☒ IMAP (remote folders) ☐ POP3 (keep mail on your computer)

Incoming: IMAP, pserver.entroserv.de, STARTTLS

Outgoing: SMTP, pserver.entroserv.de, STARTTLS

Username: doe@entro

**Because:**

<https://autoconfig.entroserv.de/mail/config-v1.1.xml>

# Getting started

## Setup

### Calendar setup in Tine2.0

The screenshot displays the Tine2.0 calendar application. On the left, a sidebar shows the navigation pane with sections for 'KALENDER' (All calendars, My calendars, Shared calendars, Other users' calendars) and 'TEILNEHMER' (Participants). Below this is a 'MINI KALENDER' for April 2019, with the 14th highlighted. The main area shows a calendar grid with a time slot from 17:00 to 18:00 containing an event titled 'Fakultätsgrillen' at 17:30. A dialog box titled 'Eigenschaften von Kalender "Stefan Helmerts persönlicher Kalender"' is open on the right, showing the following details:

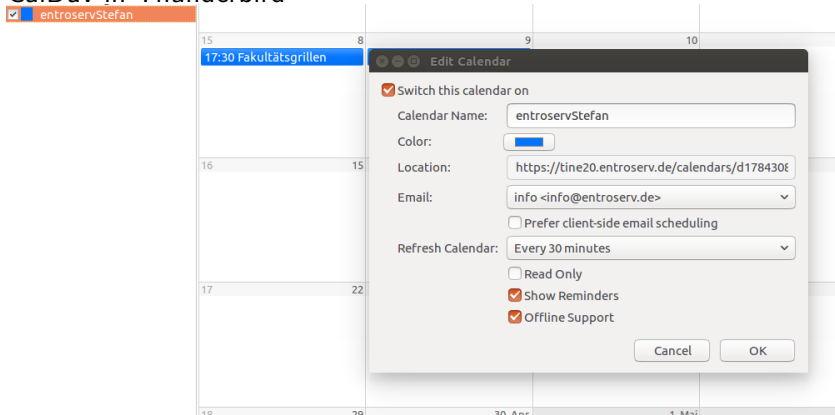
- Name:** Stefan Helmerts persönlicher Kalender
- Hierarchy/Name:** (empty field)
- Farbe:** (orange color swatch)
- Meine Zugriffsrechte:** Lesen, Hinzufügen, Bearbeiten, Löschen, Private
- CalDAV URL:** <https://tine20.entroserv.de/calendars/d1784308b42d9e6fe>

At the bottom of the dialog are buttons for 'Abbrechen' (Cancel) and 'Ok'.

# Getting started

## Setup

### CalDav in Thunderbird



Is there CalDav autoconfig available?

# Getting started

## Setup

### Adminpanel of mailman

← → ↻ 🔒 https://www.lists.entroserv.de/admin/lounge/... ☆ 📁 🛡️ 📄 📧 🏠 🅔 🌐 🔑 🔧 🔍 ⋮

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## Lounge mailing list administration

### Membership Management... Section

---

Configuration Categories	Other Administrative Activities
<ul style="list-style-type: none"><li>• <a href="#">General Options</a></li><li>• <a href="#">Passwords</a></li><li>• <a href="#">Language options</a></li><li>• <b>Membership Management...</b><ul style="list-style-type: none"><li>◦ <a href="#">[Membership List]</a></li><li>◦ <a href="#">Mass Subscription</a></li><li>◦ <a href="#">Mass Removal</a></li><li>◦ <a href="#">Address Change</a></li></ul></li><li>• <a href="#">Non-digest options</a></li><li>• <a href="#">Digest options</a></li></ul>	<ul style="list-style-type: none"><li>• <a href="#">Privacy options...</a></li><li>• <a href="#">Bounce processing</a></li><li>• <a href="#">Archiving Options</a></li><li>• <a href="#">Mail&lt;-&gt;News gateways</a></li><li>• <a href="#">Auto-responder</a></li><li>• <a href="#">Content filtering</a></li><li>• <a href="#">Topics</a></li></ul> <ul style="list-style-type: none"><li>• <a href="#">Tend to pending moderator requests</a></li><li>• <a href="#">Go to the general list information page</a></li><li>• <a href="#">Edit the public HTML pages and text files</a></li><li>• <a href="#">Go to list archives</a></li><li>• <b><a href="#">Logout</a></b></li></ul>

---

Make your changes in the following section, then submit them using the *Submit Your Changes* button below.

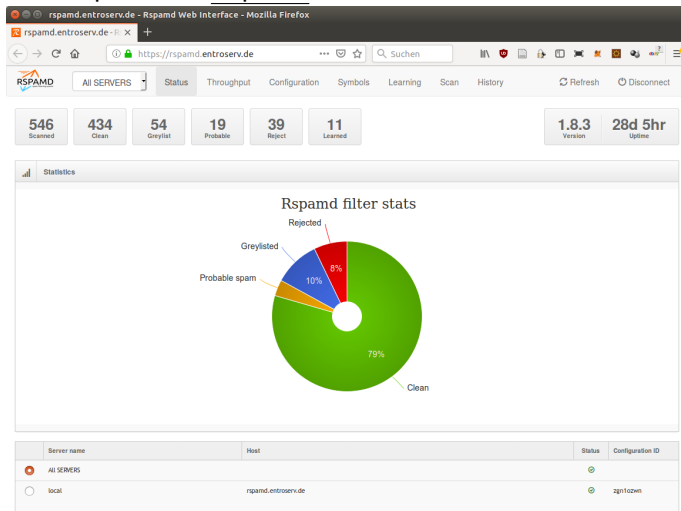
### Membership List

Find member ([help](#)):

# Getting started

## Usage

### UI of Spamfilter Rspamd



# Getting started

## Usage

### Rspamd learns Spam and Ham

rspamd.entroserv.de - Rspamd Web Interface - Mozilla Firefox

rspamd.entroserv.de - R x +

https://rspamd.entroserv.de

Suchen

RSPAMD

All SERVERS

Status Throughput Configuration Symbols **Learning** Scan History

Refresh Disconnect

Learn RSPAMD

Insert raw SPAM source:

Insert raw HAM source:

Insert raw Fuzzy storage:

Flag 1

Weight 1

Upload text

Upload text

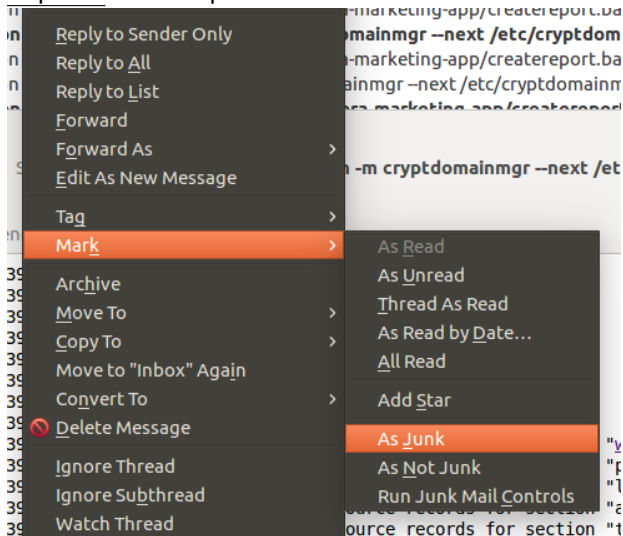
Upload text

Upload text

# Getting started

## Usage

### Rspamd learns Spam and Ham from Thunderbird

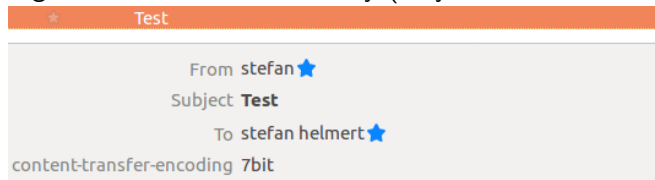




# Getting started

## Usage

Signature added automatically (only tine20 and exchange)



Test

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Stefan Helmert  
Brückenstr. 2  
09111 Chemnitz

Web: <https://www.entroserv.de>

E-Mail: [info@entroserv.de](mailto:info@entroserv.de)

Impressum: <https://www.entroserv.de/impressum>

Datenschutz: <https://www.entroserv.de/datenschutzerklaerung>

Possible with IMAP?

# Discussion

???