

ansible-tine

out of the box mailserver, crm, cms solution

Stefan Helmert

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

20.04.2019

Content

Motivation

We need

Components

Getting started

- Domain

- Server

- Deploy

- Setup

- Usage

ToDo

Thanks

Thanks

Discussion

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) 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

Get tine20 admin password

1

```
cat credentials/92.60.36.246/tine20_admin_passwd.txt
```

Login



The screenshot shows a web browser window with the address bar displaying `https://tine20.entroserv.de`. The page content includes the Tine 2.0 logo, a login form, and promotional text. The login form has fields for Language (set to English), Username (set to admin), and Password (masked with dots). A 'Login' button is at the bottom right of the form. To the right of the form, there is text about Tine 2.0's purpose and links to the homepage and forum. Below that is a 'Translations' section with text about language support.

← → ↻ ⓘ 🔒 `https://tine20.entroserv.de` ... 🛡️



Login

Language: ▼

Username:

Password:

Login

Tine 2.0 ® is made for

Tine 2.0 ® wants to make bus collaboration easier and more € your needs! So you are warmly discuss with us, bring in ideas i

[Tine 2.0 ® Homepage](#)
[Tine 2.0 ® Forum](#)

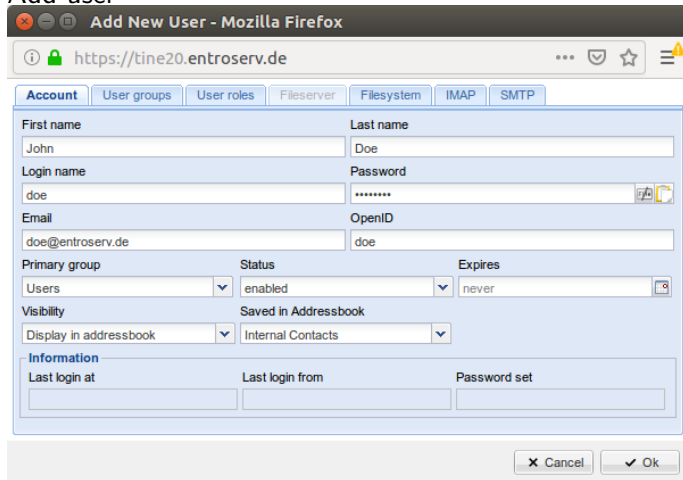
Translations

If the state of your language is or if you miss a language, plea becoming a Tine 2.0 ® transla

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.

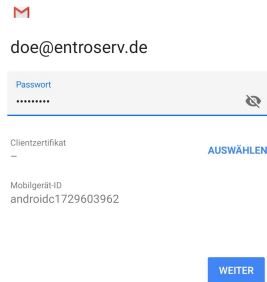
| Account | | |
|------------------------|----------------------|--------------|
| First name | Last name | |
| John | Doe | |
| Login name | Password | |
| doe | ***** | |
| Email | OpenID | |
| doe@entroserv.de | doe | |
| Primary group | Status | Expires |
| Users | enabled | never |
| Visibility | Saved in Addressbook | |
| Display in addressbook | Internal Contacts | |
| Information | | |
| 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

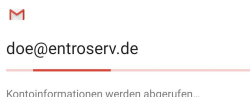
Passwort

Clientzertifikat
—

Mobilgerät-ID
androidc1729603962

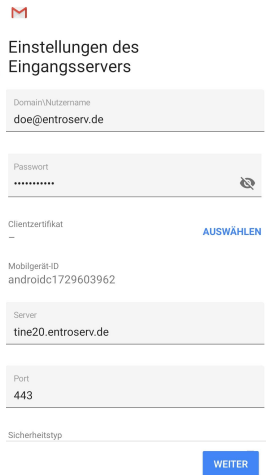
AUSWÄHLEN

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

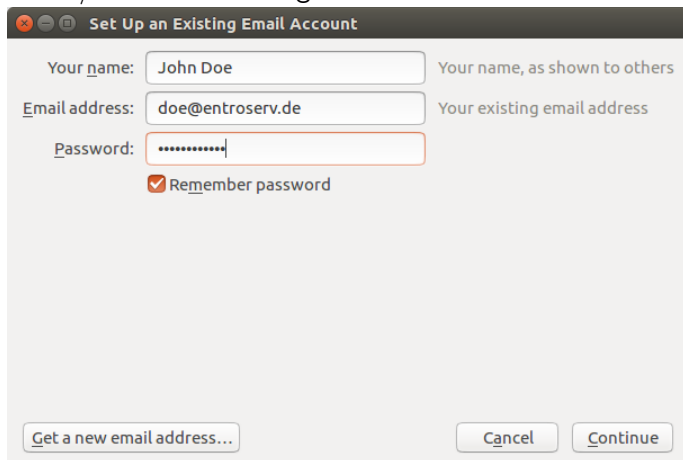
WEITER

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

Getting started

Setup

IMAP/SMTP autoconfig for Thunderbird



The screenshot shows a dialog box titled "Set Up an Existing Email Account". It contains three input fields: "Your name:" with the value "John Doe", "Email address:" with the value "doe@entroserv.de", and "Password:" with masked characters "*****". To the right of each field is a descriptive label: "Your name, as shown to others", "Your existing email address", and "Password:". Below the password field is a checked checkbox labeled "Remember password". At the bottom left is a button labeled "Get a new email address...". At the bottom right are two buttons: "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: *****

☒ 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

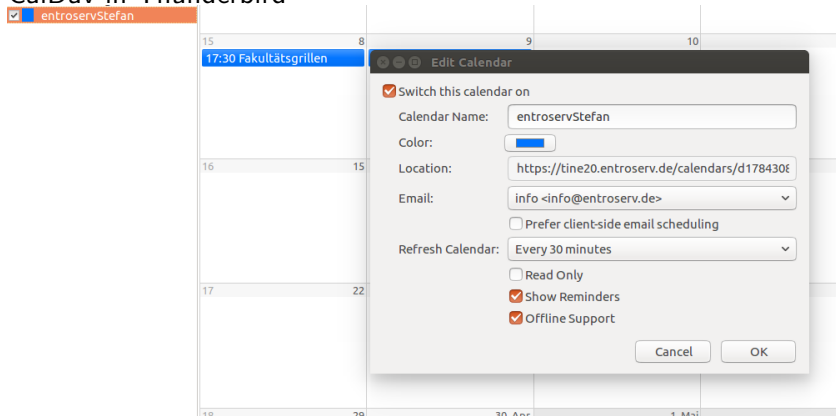
The screenshot displays the Tine2.0 calendar application. On the left, a sidebar shows the navigation pane with sections for 'KALENDER' (All calendars, My calendars, Shared calendars, Other users' calendars) and 'TEILNEHMER' (Participants). Below this is a 'MINI KALENDER' for April 2019, with the 14th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

- Name:** Stefan Helmerts persönlicher Kalender
- Hierarchy/Name:** (empty field)
- Farbe:** (orange color swatch)
- Meine Zugriffsrechte:** Lesen, Hinzufügen, Bearbeiten, Löschen, Private
- Busy:** (checkbox)
- CalDAV URL:** <https://tine20.entroserv.de/calendars/d1784308b42d9e6fe>
- Buttons:** X Abbrechen, ✓ 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/... ☆ 📁 🛡️ 📄 📧 🏠 🅔 🌐 🔑 🔒 🔧 🔍 ⋮

Lounge mailing list administration

Membership Management... Section

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

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

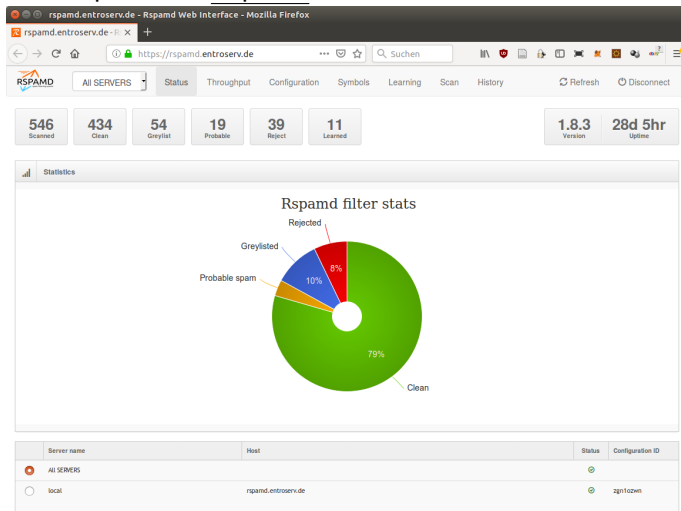
Membership List

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

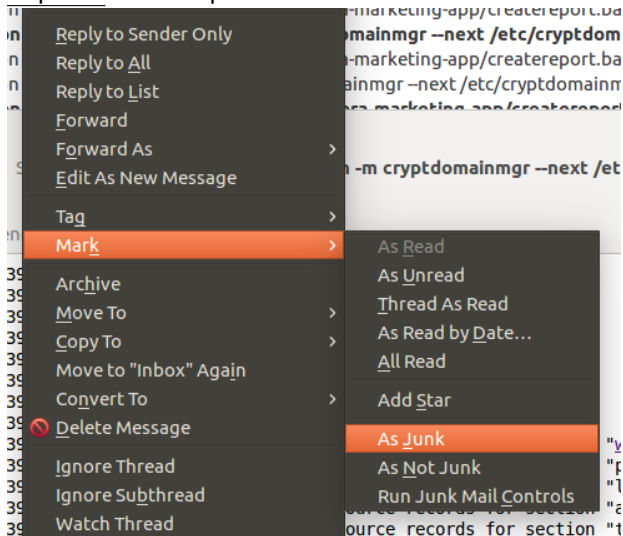
Upload text

Upload text

Getting started

Usage

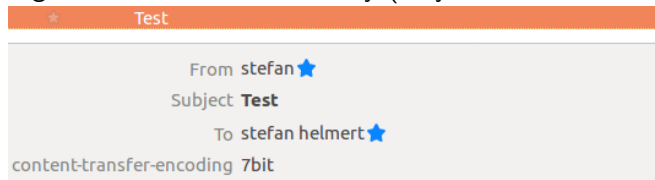
Rspamd learns Spam and Ham from Thunderbird



Getting started

Usage

Signature added automatically (only tine20 and exchange)



Test

--

Stefan Helmert
Brückenstr. 2
09111 Chemnitz

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

E-Mail: info@entroserv.de

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

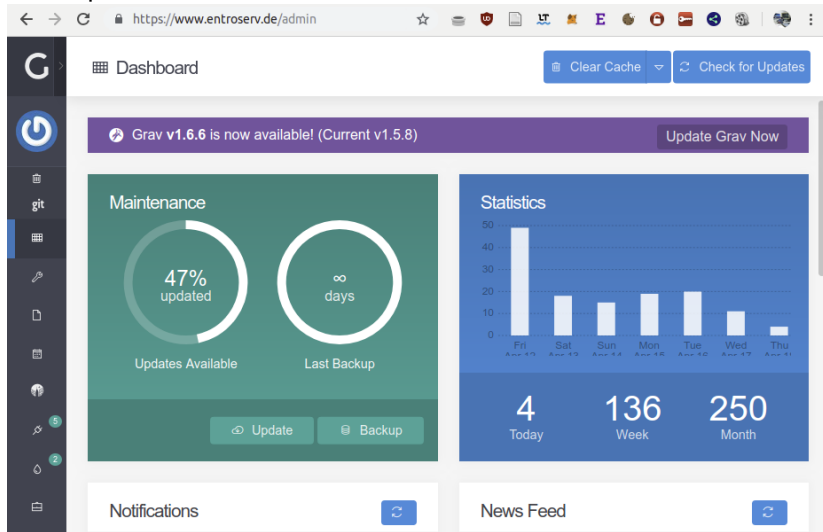
Datenschutz: <https://www.entroserv.de/datenschutzerklaerung>

Possible with IMAP?

Getting started

Usage

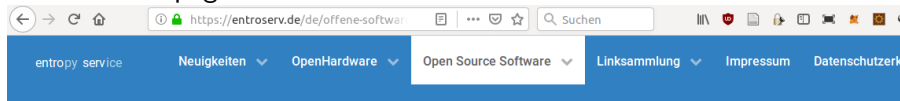
Adminpanel of Grav CMS



Getting started

Usage

How the Webpage looks like



Inhaltsverzeichnis

- Cryptdomainmgr
 - Aufbau
 - Installation
 - Nutzung
 - Verwalten von IP-Adressen im DNS
 - TLS-Zertifikate einrichten
 - TLSA-Einträge veröffentlichen
 - DKIM einrichten

Cryptdomainmgr

| Projektdaten | |
|--------------|---|
| Logo |  cryptdomainmgr |
| Quellcode | https://github.com/TheTesla/cryptdomainmgr |
| Paket | https://pypi.org/project/cryptdomainmgr/ |
| Lizenz | AGPLv3 |

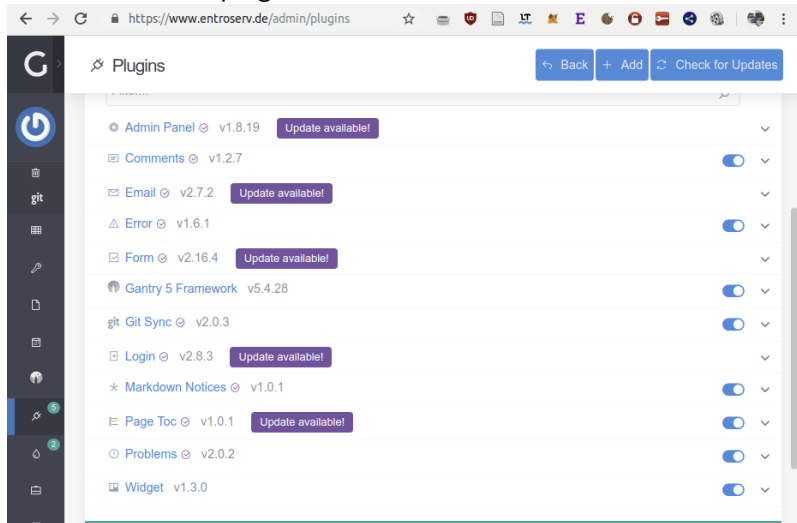
Cryptdomainmgr ist ein Python-Programm, welches TLS-Zertifikate, TLSA-Domäneinträge und DKIM-Schlüssel automatisch erneuert.

Das Verfahren "DNS-Based Authentication of Named Entities" (DANE) koppelt TLS-Zertifikate über Hashwerte (TLS

Getting started

Usage

Grav TOC needs plugin



Getting started

Usage

Grav TOC configuration

← → ↻ 🔒 <https://www.entroserv.de/admin/gantry/configurations/default/layout?nonce=e0fc24f9d74d23ca826ecb50350dbe77>

GRAV

Administrator
Admin,

git

Dashboard

Configuration

Pages 31

Comments

Gantry 5

Plugins 5 12

Themes 2 2

Tools

Logout

Filter...

Positions

Module Position

Spacer

Page Content

System Messages

Particles

Branding

Copyright

Custom HTML

Date

Grav Content

Login

Navigation

Logo logo 15%

Menu menu

Container

Sidebar

TOC custom 100%

25%

Main

Breadcrumbs breadcrumbs

System Messages messages

Page Content content

Footer

Getting started

Usage

Grav TOC configuration

```
1  {% if config.get('plugins.page-toc.active') or
2      attribute(page.header, 'page-toc').active %}
3      {% set table_of_contents = toc(page.content) %}
4      {% if table_of_contents is not empty %}
5          <h4>Table of Contents</h4>
6          {{ toc(page.content) }}
7      {% endif %}
8  {% endif %}
```

Thanks

- ▶ LDAP
- ▶ Client certificate authentication
- ▶ CalDav to Grav CMS events calendar
- ▶ Sieve, CalDav, CardDav autoconfig
- ▶ IMAP signature preview (if possible)
- ▶ Mailman tine20 integration
- ▶ ERP integration (also with GravCart)

Thanks

Thomas Leister – Mailserver-Howto

<https://thomas-leister.de/mailserver-debian-stretch/>

Discussion

???