

# Dokumentation Deployment einer Rest API

Autor: Gerrit Koppe

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Lernfeld 9: Netzwerke und Dienste bereitstellen

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## 1 Einleitung

In dieser Dokumentation

## 2 Vorbereitungen

## 3 Konfiguration der User

## 4 Konfiguration des Netzwerks

## 5 Konfiguration der Firewall

## 6 Installation Apache2

## 7 Inbetriebnahme Rest API

## 8 Anlagen

### 8.1 Bilder

#### 8.1.1 Konfiguration User

#### 8.1.2 Konfiguration Netzwerk

#### 8.1.3 Konfiguration Firewall

```
fernzugriff@raspberrypi:~$ sudo apt install ufw
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done: 100%
The following package was automatically installed and is no longer required:
  libfuse2
Use 'sudo apt autoremove' to remove it.
The following NEW packages will be installed:
  ufw
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 167 kB of archives.
After this operation, 857 kB of additional disk space will be used.
Get:1 http://mirror.netzwerke.de/raspbian/raspbian bullseye/main armhf ufw all 0.36-7.1 [167 kB]
Fetched 167 kB in 0s (497 kB/s)
Preconfiguring packages ...
Selecting previously unselected package ufw.
(Reading database ... 109573 files and directories currently installed.)
Preparing to unpack .../archives/ufw_0.36-7.1_all.deb ...
Unpacking ufw (0.36-7.1) ...
Setting up ufw (0.36-7.1) ...

Creating config file /etc/ufw/before.rules with new version

Creating config file /etc/ufw/before6.rules with new version

Creating config file /etc/ufw/after.rules with new version

Creating config file /etc/ufw/after6.rules with new version
Created symlink /etc/systemd/system/multi-user.target.wants/ufw.service → /lib/systemd/system/ufw.service.
Processing triggers for rsyslog (8.2102.0-2+deb11u1) ...
Processing triggers for man-db (2.9.4-2) ...
```

Abbildung 1: Installation der UFW Firewall

```
fernzugriff@raspberrypi:/etc/ufw$ sudo ufw allow from 192.168.24.0/24 proto tcp to any port 22
Rules updated
```

Abbildung 2: SSH Port für gleiches Netzwerk öffnen

```
fernzugriff@raspberrypi:/etc/ufw$ sudo ufw allow 13376
Rules updated
Rules updated (v6)
```

Abbildung 3: Port der API für alle Netzwerke freischalten

```
fernzugriff@raspberrypi:/etc/ufw$ sudo ufw allow out to any port 53
Rule added
Rule added (v6)
```

Abbildung 4: Ausgehende DNS Anfragen erlauben

```
fernzugriff@raspberrypi:/etc/ufw $ sudo ufw default deny incoming
Default incoming policy changed to 'deny'
(be sure to update your rules accordingly)
```

Abbildung 5: Alle eingehenden Pakete ohne Regel verbieten

```
fernzugriff@raspberrypi:/etc/ufw $ sudo ufw status numbered
Status: active
```

	To	Action	From	
	--	-----	----	
[ 1]	13376	ALLOW IN	Anywhere	
[ 2]	22/tcp	ALLOW IN	192.168.24.0/24	
[ 3]	53	ALLOW OUT	Anywhere	(out)
[ 4]	13376 (v6)	ALLOW IN	Anywhere (v6)	
[ 5]	53 (v6)	ALLOW OUT	Anywhere (v6)	(out)

Abbildung 6: Übersicht aller angelegten Regeln

## 8.2 Quellen