



Praxisdemonstration

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- Beginn der "Hackerkarriere" in den 80er-Jahren
- Studium der Informatik und Mathematik
- IT-Freiberufler seit 1994
- Verschiedene Kunden im mittelständischen bis Großkunden-Umfeld
- Soweit möglich, bevorzugter Einsatz von freier und Open Source-Software in Projekten
- Allergie gegen Präsentationsfolien

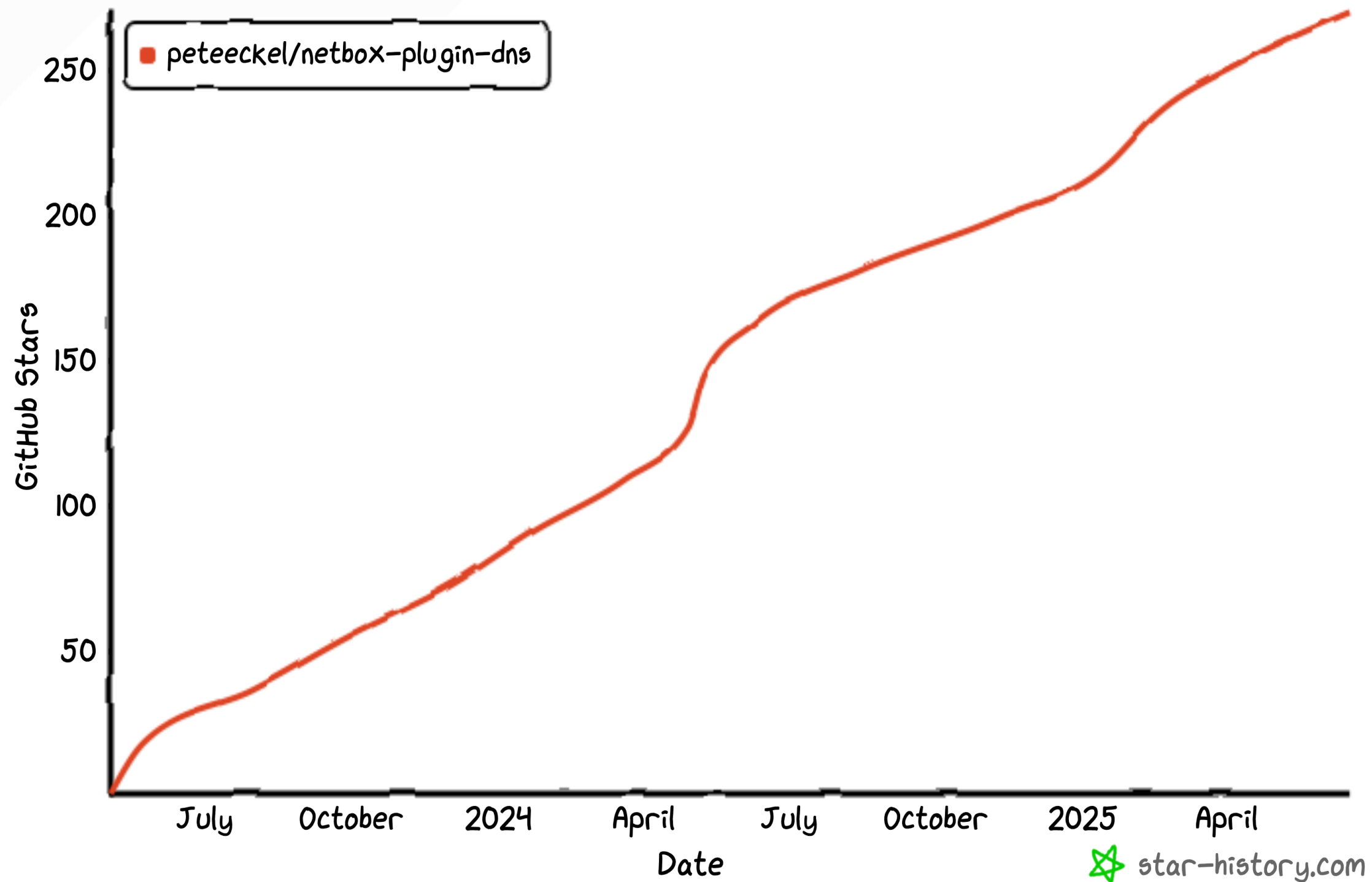
NetBox DNS

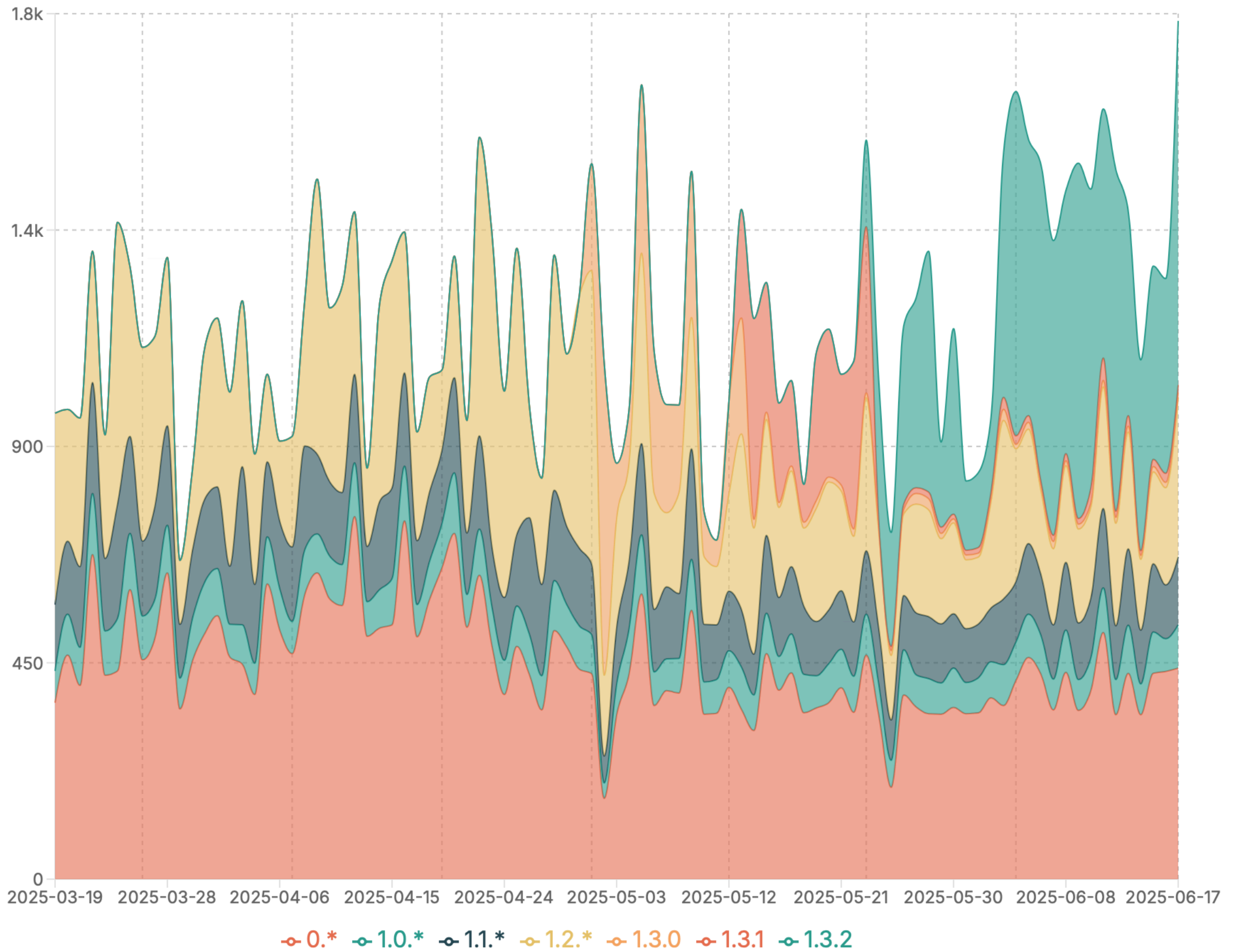
- Anforderung entstand aus einem Kundenprojekt 2021
- Benötigt wurde ein DNS-"Frontend" mit einfacher, sicherer Bedienung
- NetBox wegen potentieller weitergehender Nutzung (IPAM, DCIM) strategisch präferiert
- Entwicklung aufbauend auf bereits existierendem Plugin-Projekt
- Übernahme der Weiterentwicklung 2023 nach Rückzug der ursprünglichen Maintainer

Wer nutzt das Plugin?

- Nicht sicher zu sagen:
 - Open Source
 - Keine Telemetrie
- Ein paar Anwender sind aber trotzdem bekannt

↕ Star History





Grundlegende Funktionen

Manuelles Vorgehen per GUI

- Anlegen eines zusätzlichen Views und Umbenennen des Default-Views
- Anlegen von Nameservern
- Anlegen einer Zone
- Anlegen eines Records
- Was sind Managed Records?

Views

"Namespaces" für Zonen

- Initial gibt es immer einen Default-View mit Namen "_default_"
- Ein neuer View mit Namen "external" wird zusätzlich angelegt
- Der Default-View wird zur Abgrenzung von "external" auf "internal" umbenannt

Views

+ Add

⬆ Import

⬇ Export ▾

Results **1**

Filters

Q ▾ Quick search

⌵

⌵

⚙ Configure Table ▾

☐	NAME ▾	✕	DEFAULT VIEW	
☐	<u>_default_</u>		✓	✎ ▾
Showing 1-1 of 1				Per Page ▾

✎ Edit Selected

🗑 Delete Selected

Edit

View

Name*

☒ Default View

Description

IPAM Prefixes

IP Address Filter

Specify criteria for address record creation in JSON form

Tenancy

Tenant group

Tenant

Cancel

Save

external

Created 2025-06-12 14:22 · Updated 2025-06-12 14:22

Bookmark

Subscribe

Clone

Edit

Delete

- View
- Contacts
- Journal
- Changelog

View	
Name	external
Default View	✖
Description	External View

Tags

No tags assigned

IPAM Prefixes

No prefixes assigned

IP Address Filters

No filters defined

Views

+ Add

⬆ Import

⬇ Export ▾

Results **2**

Filters

🔍 Quick search

⌵

⌵

⚙️ Configure Table ▾

☐ NAME ▾	× DEFAULT VIEW	
☐ external	×	✎ ▾
☐ internal	✓	✎ ▾

Showing 1-2 of 2

Per Page ▾

✎ Edit Selected

🗑 Delete Selected

Nameserver

- Nameserver dienen als Objekte für NS und SOA Records
- NetBox DNS verwaltet (derzeit) nur Namen, jedoch keine Konfiguration von Nameservern (diese ist implementierungsabhängig)
- Nameserver sind global definiert, nicht spezifisch für einen View

Add a new Nameserver

[? Help](#)

Create

Nameserver

Name*

Description

Tenancy

Tenant group

Tenant

Tags

Tags

Nameservers

+ Add

⬆ Import

⬇ Export ▾

Results **3**

Filters

Qv Quick search

▼

⚙ Configure Table ▾

☐ NAME ▾	×	TAGS	
☐ ns1.example.com	—		✎ ▾
☐ ns2.example.com	—		✎ ▾
☐ ns3.example.com	—		✎ ▾
Showing 1-3 of 3			Per Page ▾

✎ Edit Selected

🗑 Delete Selected

Zonen

- Zonen sind die zentralen Objekte in (NetBox) DNS
- Eindeutige Namen pro View
- Default-Parameter sind per NetBox-Konfiguration zu ändern (z.B. SOA Refresh/Expire/...) oder definieren (z.B. SOA MName, SOA RName, Nameserver)

Add a new Zone

Create

Zone

View*internal

Name*zone1.example.com

Template-----

StatusActive

Nameservers

ns2.example.com × ns3.example.com ×

Default TTL86400

Default TTL for new records in this zone

Description

SOA

SOA TTL*86400

TTL for the SOA record of the zone

SOA MNamens1.example.com

Primary nameserver this zone

SOA RName

hostmaster.example.com|

Cancel>Create>Create & Add Another

Mailbox of the zone's administrator

zone1.example.com

Created 2025-06-12 14:52 · Updated 2025-06-12 14:52

+ Add Record

Bookmark

Subscribe

Clone

Edit

Delete

- Zone
- Managed Records3
- Contacts
- Journal
- Changelog

Zone	
Name	zone1.example.com
View	internal
Status	Active
Nameservers	ns2.example.com ns3.example.com
Default TTL	86400

Tags
No tags assigned

Zone SOA		
TTL	86400	
MName	ns1.example.com	
RName	hostmaster.example.com	
Serial (auto-generated)	1749739969	2025-06-12 14:52:49
Refresh	43200	
Retry	7200	
Expire	2419200	
Minimum TTL	3600	

zone1.example.com

Created 2025-06-12 14:52 · Updated 2025-06-12 14:52

+ Add Record

Bookmark

Subscribe

Clone

Edit

Delete

- Zone
- Managed Records3
- Contacts
- Journal
- Changelog

Quick search

Configure Table

NAME	ZONE	TTL	TYPE	VALUE	ACTIVE
@	zone1.example.com	—	NS	ns2.example.com.	✓
@	zone1.example.com	—	NS	ns3.example.com.	✓
@	zone1.example.com	86400	SOA	ns1.example.com. hostmaster.example.com. 1749739969 43200 7200 ...	✓

Showing 1-3 of 3

Per Page

Zonen

- (Relativ) viel "Klickarbeit"
- Diverse Parameter tauchen in wenigen verschiedenen Kombinationen auf
- Managed Records (SOA, NS) werden automatisch angelegt ...
- ... sonst aber keine Records (MX, SPF ...)

Records

- Record-Typen werden von dnspython geerbt
- Validierung von Namen, RDATA-Format, Namen in RDATA
- Validierung der Records in einer Zone (z. B. kein CNAME mit anderen Daten)
- Generierung von PTR Records für Address Records

Add a new Record

[? Help](#)

Create

Record

Name*

name1

View

internal

Zone*

zone1.example.com

Type*

AAAA

Value*

2001:db8:1::1

Status*

Active

TTL

☐ Disable PTR

Disable PTR record creation

Description

Tenancy

Tenant group

Tenant

Cancel

Create

Create & Add Another

[+ Add CNAME](#)
[Bookmark](#)
[Subscribe](#)
[Clone](#)
[Edit](#)
[Delete](#)

Record	Contacts	Journal	Changelog
--------	----------	---------	-----------

Tags

No tags assigned

+ Add CNAME

Record	
Name	1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0
Zone	1.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa
Type	PTR
Value	name1.zone1.example.com.
TTL	—
Address Records	name1.zone1.example.com
Status	Active

Records

Address Records

- Beim Anlegen eines Address Records wird, falls die zugehörige Reverse Zone vorhanden ist, ein PTR Record angelegt
- Falls die Reverse Zone nicht vorhanden ist, wird sie nicht automatisch angelegt!
- Wenn man sie später manuell anlegt, erzeugt das Plugin die PTR Records automatisch
- PTR Records sind "Managed Records"

Managed Records

"read only"-Records

- Managed Records sind Records, die von NetBox DNS angelegt werden und nicht vom Anwender geändert werden können
- Bei Änderungen an dem Objekt, für das ein Managed Record erzeugt wird (Zone, Address Record, Nameserver, IP-Adresse etc.) ändert sich das Managed Record mit (deswegen "managed")
- Das gilt auch für Änderungen an den Zonen, in denen das Managed Record liegt (z.B. bei Änderungen an der Hierarchie von Reverse-Zonen)

Templates

Record und Zone Templates

- Das Anlegen von Zonen bedeutet (relativ) viel "Klickarbeit"
- Diverse Parameter tauchen in wenigen verschiedenen Kombinationen auf
- Managed Records (SOA, NS) werden automatisch angelegt ...
- ... sonst aber keine Records (MX, SPF ...)
- Die Lösung: Templates

Record Templates

- Record Templates sind Records ohne Zonenzuordnung (nur Name, Type, Value)
- Validierung der nicht zonenbezogenen Felder wie bei Records
- Zuweisung erfolgt nicht an Zonen, sondern an Zone Templates

Record Template Bulk Import

Direct Import

Upload File

Data File

Data

```
name,record_name,type,value
Primary MX Record,@,MX,10 mx1.example.com
Secondary MX Record,@,MX,20 mx2.example.com
SPF Record,@,TXT,v=spf1 -all
DMARC Record,_dmarc,TXT,v=DMARC1;p=reject
|
```

Enter object data in CSV, JSON or YAML format.

Format*

Auto-detect



CSV delimiter

Auto-detect



The character which delimits CSV fields. Applies only to CSV format.

Cancel

Submit

Field Options

FIELD	REQUIRED	ACCESSOR	DESCRIPTION
name	✓	—	Template Name
record_name	✓	—	Name
type	✓	—	Type ?
value	✓	—	Value
status	—	—	Status ?

Record Templates

+ Add

⬆ Import

⬇ Export ▾

Results **4**

Filters

Q ▾ Quick search

⌵ ▾

⚙ Configure Table ▾

☐	NAME ▾	✖	RECORD NAME	TTL	TYPE	VALUE	TAGS	
☐	Backup MX Record		@	—	MX	20 mx2.example.com.	—	
☐	DMARC Record		_dmarc	—	TXT	v=DMARC1;p=reject	—	
☐	Primary MX Record		@	—	MX	10 mx1.example.com.	—	
☐	SPF Record		@	—	TXT	v=spf1 +mx -all	—	

Showing 1-4 of 4

Per Page ▾

Edit Selected

Delete Selected

Zone Templates

- Zone Templates können u. a. Nameserver, SOA MName/SOA RName, DNSSEC Policies und Registrierungsinformationen enthalten
- Tenants und Tags werden ebenfalls unterstützt
- Record Templates werden bei Anwendung von Zone Templates auf Zonen als Records in den Zonen angelegt

Add a new Zone Template

[? Help](#)

Create

Zone Template

Template Name*

Forward Zone

Description

Nameservers

ns2.example.com

×

ns3.example.com

×

▼

+

SOA

MName

ns1.example.com

▼

+

RName

hostmaster.example.com

Record Templates

Record templates

Backup MX Record

×

DMARC Record

×

Primary MX Record

×

▼

+

SPF Record

×

DNSSEC

DNSSEC Policy

▼

Domain Registration

Registrar

▼

Cancel

Create

Create & Add Another

Forward Zone

Created 2025-06-20 13:30 · Updated 2025-06-20 13:30

Bookmark

Subscribe

Clone

Edit

Delete

- Zone Template
- Journal
- Changelog

Zone Template	
Name	Forward Zone
Nameservers	ns2.example.com ns3.example.com
SOA MName	ns1.example.com
SOA RName	hostmaster.example.com

Tags

No tags assigned

Domain Registration	
Registrar	—
Registrant	—
Administrative Contact	—
Technical Contact	—
Billing Contact	—

Record Templates					
NAME	RECORD NAME	TTL	TYPE	VALUE	
Backup MX Record	@	—	MX	20 mx2.example.com.	
DMARC Record	_dmarc	—	TXT	v=DMARC1;p=reject	
Primary MX Record	@	—	MX	10 mx1.example.com.	
SPF Record	@	—	TXT	v=spf1 +mx -all	

Reverse Zone

Created 2025-06-20 13:31 · Updated 2025-06-20 13:31

- Bookmark
- Subscribe
- Clone
- Edit
- Delete

Zone TemplateJournalChangelog

Zone Template	
Name	Reverse Zone
Nameservers	ns2.example.com ns3.example.com
SOA MName	ns1.example.com
SOA RName	hostmaster.example.com

Tags
No tags assigned

Domain Registration	
Registrar	—
Registrant	—
Administrative Contact	—
Technical Contact	—
Billing Contact	—

Verwendung von Zone Templates

- "Klassisch" über das GUI
- REST API
- Bulk Import

Verwendung von Zone Templates

- Zonen mit Template "Forward Zone" oder "Reverse Zone" bekommen automatisch Nameserver, SOA MName und SOA RName zugewiesen
- Zonen mit Template "Forward Zone" erhalten zusätzlich MX, DMARC und SPF Records
- Werden Felder beim Einrichten von Zonen manuell gesetzt, übersteuert deren Inhalt den der Templates
- Templates werden kopiert, nicht referenziert - nachträgliche Änderungen am Template ändern die Zonen nicht!

Zone Bulk Import

Direct Import Upload File Data File

Data

```
name,view,template
zone6.example.com,internal,Forward Zone
zone7.example.com,internal,Forward Zone
zone6.example.com,external,Forward Zone
zone7.example.com,external,Forward Zone
3.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa,internal,Reverse Zone
4.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa,internal,Reverse Zone
3.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa,external,Reverse Zone
4.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa,external,Reverse Zone
```

Enter object data in CSV, JSON or YAML format.

Format* Auto-detect

CSV delimiter Auto-detect

The character which delimits CSV fields. Applies only to CSV format.

Cancel Submit

Field Options

FIELD	REQUIRED	ACCESSOR	DESCRIPTION
name	✓	—	Name
view	—	name	View
status	—	—	Status ?
template	—	name	Template
nameservers	—	name	Nameservers

Zones

+ Add

⬆ Import

⬇ Export ▾

Results 8

Filters

Qv Quick search

▼

⚙ Configure Table ▾

☐	NAME ▾	VIEW	STATUS	TAGS	
☐	3.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa	internal	Active	—	 ▾
☐	3.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa	external	Active	—	 ▾
☐	4.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa	external	Active	—	 ▾
☐	4.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa	internal	Active	—	 ▾
☐	zone6.example.com	internal	Active	—	 ▾
☐	zone6.example.com	external	Active	—	 ▾
☐	zone7.example.com	external	Active	—	 ▾
☐	zone7.example.com	internal	Active	—	 ▾

Showing 1-8 of 8

Per Page ▾

 Edit Selected

 Delete Selected

zone6.example.com

Created 2025-06-20 13:42 · Updated 2025-06-20 13:42

- + Add Record
- Bookmark
- Subscribe
- Clone
- Edit
- Delete

- Zone
- Registration
- Records4
- Managed Records3
- Contacts
- Journal
- Changelog

Zone

Name	zone6.example.com
View	internal
Status	Active
Nameservers	ns2.example.com ns3.example.com
Default TTL	86400

Tags

No tags assigned

Zone SOA

TTL	86400
MName	ns1.example.com
RName	hostmaster.example.com
Serial	1
Refresh	43200
Retry	7200
Expire	2419200
Minimum TTL	3600

zone6.example.com

Created 2025-06-20 13:42 · Updated 2025-06-20 13:42

+ Add Record

Bookmark

Subscribe

Clone

Edit

Delete

- Zone
- Registration
- Records4
- Managed Records3
- Contacts
- Journal
- Changelog

Quick search

Configure Table

	NAME	ZONE	TTL	TYPE	VALUE	TAGS	ACTIVE	
☐	_dmarc	zone6.example.com	—	TXT	v=DMARC1;p=reject	—	✓	Edit
☐	@	zone6.example.com	—	MX	10 mx1.example.com.	—	✓	Edit
☐	@	zone6.example.com	—	MX	20 mx2.example.com.	—	✓	Edit
☐	@	zone6.example.com	—	TXT	v=spf1 +mx -all	—	✓	Edit

Showing 1-4 of 4

Per Page

Edit Selected

Delete Selected

IPAM DNSsync

Automatische Verwaltung von Address Records für IP-Adressen

- Duplizierte Information: IP-Adressen und DNS-Namen in IPAM und in NetBox DNS
- Synchronisation über Prefixes/Views
- Beeinflussung der Synchronisation über NetBox Custom Fields (optional)
- Filterung auf View-Level ist möglich

Add a new prefix

Create

Prefix

Prefix*

2001:db8::/32

IPv4 or IPv6 network with mask

Status*

Active

Operational status of this prefix

VRF

Role

+

- ☐

Is a pool

All IP addresses within this prefix are considered usable
- ☐

Mark utilized

Treat as fully utilized

Description

Tags

Scope

Scope type

Scope

2001:db8::/32

Created 2025-06-12 16:23 · Updated 2025-06-12 16:23

DNS Views

Bookmark

Subscribe

Clone

Edit

Delete

- Prefix
- Child Prefixes
- Child Ranges
- IP Addresses
- Contacts
- Journal
- Changelog

Prefix	
Family	IPv6
VRF	Global
Tenant	—
Aggregate	—
Scope	—
VLAN	—
Status	Active
Role	—
Description	—
Is a pool	✖

Addressing	
Utilization	0.0%
Child IPs	0
Available IPs	79.2 octillion
First available IP	2001:db8::1/32

Tags
No tags assigned

Comments
None

Parent Prefixes
None

Configure DNS views for prefix 2001:db8::/32

Assigned DNS Views

external

x

internal

x

▼

Explicitly assigning DNS views overrides all inherited views for this prefix

Cancel

Save

2001:db8::/32

Created 2025-06-12 16:23 · Updated 2025-06-12 16:23

- DNS Views
- Bookmark
- Subscribe
- Clone
- Edit
- Delete

- Prefix
- Child Prefixes
- Child Ranges
- IP Addresses
- Contacts
- Journal
- Changelog

Prefix	
Family	IPv6
VRF	Global
Tenant	—
Aggregate	—
Scope	—
VLAN	—
Status	Active
Role	—
Description	—
Is a pool	✖

Addressing	
Utilization	0.0%
Child IPs	0
Available IPs	79.2 octillion
First available IP	2001:db8::1/32

Tags
No tags assigned

Comments
None

Assigned DNS Views	
NAME	DESCRIPTION
external	External View
internal	Internal View

Parent Prefixes
None

Vorbereitung des IPAM-Prefixes

- Das Parent Prefix der anzulegenden IP-Adressen wird angelegt
- Anschließend werden dem Prefix über den "DNS Views"-Button DNS-Views zugewiesen
- Umgekehrt können auch Views Prefixes zugewiesen werden
- Bei Anlegen von IP-Adressen im definierten Prefix mit DNS-Namen in einer Zone in den zugeordneten Views werden nun Address Records angelegt

IP Address Bulk Import

Direct Import

Upload File

Data File

Data

address,status,dns_name
2001:db8:2::1:1/64,active,ipam1.zone2.example.com
2001:db8:2::1:2/64,active,ipam2.zone2.example.com
2001:db8:2::1:3/64,active,ipam3.zone2.example.com
2001:db8:2::1:3/64,active,ipam4.zone2.example.com
2001:db8:2::1:4/64,active,ipam5.zone2.example.com

Enter object data in CSV, JSON or YAML format.

Format*

Auto-detect

CSV delimiter

Auto-detect

The character which delimits CSV fields. Applies only to CSV format.

Cancel

Submit

Field Options				
FIELD	REQUIRED	ACCESSOR	DESCRIPTION	
address	✓	—	IPv4 or IPv6 address (with mask)	
status	✓	—	Operational status ?	
vrf	—	name	Assigned VRF	
tenant	—	name	Assigned tenant	
role	—	—	Functional role ?	

IP Addresses

Results 5

Filters

Qv Quick search

▼

▼

⚙ Configure Table

▼

☐	IP ADDRESS	VRF	STATUS	ROLE	TENANT	ASSIGNED	DNS NAME	DESCRIPTION	
☐	2001:db8:2::1:1/64	Global	Active	—	—	—	ipam1.zone2.example.com	—	📄 ✎ ▼
☐	2001:db8:2::1:2/64	Global	Active	—	—	—	ipam2.zone2.example.com	—	📄 ✎ ▼
☐	2001:db8:2::1:3/64	Global	Active	—	—	—	ipam3.zone2.example.com	—	📄 ✎ ▼
☐	2001:db8:2::1:3/64	Global	Active	—	—	—	ipam4.zone2.example.com	—	📄 ✎ ▼
☐	2001:db8:2::1:4/64	Global	Active	—	—	—	ipam5.zone2.example.com	—	📄 ✎ ▼
Showing 1-5 of 5									Per Page ▾

✎ Edit Selected

🗑 Delete Selected

Bookmark

Subscribe

Clone

Edit

Delete

Created 2025-06-12 16:36 · Updated 2025-06-12 16:36

IP Address Related IPs **4** Contacts Journal Changelog

IP Address	
Family	IPv6
VRF	Global
Tenant	—
Status	Active
Role	—
DNS Name	ipam1.zone2.example.com
Description	—
Assignment	—
NAT (inside)	—
NAT (outside)	—
Primary IP	✗
OOB IP	✗

Tags

No tags assigned

Parent Prefixes							
PREFIX	STATUS	CHILDREN	TENANT	SCOPE	VLAN	ROLE	DESCRIPTION
2001:db8::/32	Active	0	—	—	—	—	—

Services				
NAME	PARENT	PROTOCOL	PORTS	DESCRIPTION
— No services found —				

Related DNS Address Records			
NAME	ZONE	TYPE	VALUE
ipam1	[external] zone2.example.com	AAAA	2001:db8:2::1:1
ipam1	zone2.example.com	AAAA	2001:db8:2::1:1

Related DNS Pointer Records			
NAME	ZONE	TYPE	VALUE
1.0.0.0.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	[external] 2.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa	PTR	ipam1.zone2.example.
1.0.0.0.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	2.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa	PTR	ipam1.zone2.example.

+ Add CNAME

Record

Name	ipam1
Zone	[external] zone2.example.com
Type	AAAA
Value	2001:db8:2::1:1
TTL	—
Disable PTR	✖
PTR Record	1.0.0.0.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.2.0.0.0.8.b.d.0.1.0.0.2.ip6.arpa [PTR]
IPAM IP Address	2001:db8:2::1:1/64
Status	Active

Validierung und Integritätstests

Beispiele

- Fehlerhafter Record-Name
- Fehlerhafter Record-Wert
- Fehlendes CNAME Target
- Fehlende Adress Records für Nameserver
- ...

Add a new Record

[? Help](#)

Create

Record

Name*

na_me1 is not a valid DNS host name

View

Zone*

Type*

Value*

Status*

TTL

☐ Disable PTR
Disable PTR record creation

Description

Tenancy

Tenant group

Tenant

Add a new Record

Create

Record

Name* @

View internal

Zone* zone1.example.com

Type* MX

Value* mx1.example.com

Record value mx1.example.com is not a valid value for a MX record: expecting an integer.

Status* Active

TTL

☐ Disable PTR
Disable PTR record creation

Description

Tenancy

Tenant group

Tenant

www.zone1.example.com [CNAME]

Created 2025-06-20 13:58 · Updated 2025-06-20 13:58

Bookmark

Subscribe

Clone

Edit

Delete

- Record
- Contacts
- Journal
- Changelog

Record	
Name	www
Zone	zone1.example.com
Type	CNAME
Value	name1.zone5.example.com.
Warning	There is no matching target record for CNAME value name1.zone5.example.com.
TTL	—
Status	Active

Tags

No tags assigned

example.com

Created 2025-06-20 13:59 · Updated 2025-06-20 13:59

+ Add Record

Bookmark

Subscribe

Clone

Edit

Delete

- Zone
- Records4
- Managed Records3
- Child Zones7
- Contacts
- Journal
- Changelog

Zone

Name	example.com
View	internal
Status	Active
Nameservers	ns2.example.com ns3.example.com
Warnings	Nameserver ns2.example.com does not have an active address record in zone example.com Nameserver ns3.example.com does not have an active address record in zone example.com
Default TTL	86400

Tags

No tags assigned

Zone SOA

TTL	86400
MName	ns1.example.com
Warning	Nameserver ns1.example.com does not have an active address record in zone example.com
RName	hostmaster.example.com
Serial (auto-generated)	17504279612025-06-20 13:59:21
Refresh	43200
Retry	7200
Expire	2419200
Minimum TTL	3600

RFC 2317

Delegation von CIDR-Reverse-Zonen > 24 Bit Prefixlänge



RFC 2317

- Eine "normale" Zone wird zur RFC 2317-Zone gemacht, indem ihr ein IPv4-Prefix >24 Bit Länge zugewiesen wird
- PTR Records für IPv4-Adressen in diesem Prefix werden in der RFC 2317-Zone angelegt
- Optional können CNAME Records in der übergeordneten "echten" Reverse-Zone angelegt werden

Add a new Zone

[? Help](#)

Create

Zone

View*

Name*

Template

Status

Nameservers

Default TTL

Default TTL for new records in this zone

Description

SOA

SOA TTL*

TTL for the SOA record of the zone

SOA MName

Primary nameserver this zone

SOA RName

Mailbox of the zone's administrator

0.0.10.in-addr.arpa

Created 2025-06-12 16:57 · Updated 2025-06-12 16:57

- + Add Record
- Bookmark
- Subscribe
- Clone
- Edit
- Delete

- Zone
- Managed Records3
- Contacts
- Journal
- Changelog

Zone

Name	0.0.10.in-addr.arpa
View	internal
Status	Active
Nameservers	ns2.example.com ns3.example.com
Default TTL	86400

Tags

No tags assigned

Zone SOA

TTL	86400	
MName	ns1.example.com	
RName	hostmaster.example.com	
Serial (auto-generated)	1749747422	2025-06-12 16:57:02
Refresh	43200	
Retry	7200	
Expire	2419200	
Minimum TTL	3600	

Add a new Zone

Create

Zone

View*internal

Name*0-127.0.0.10.example.com

TemplateReverse Zone

StatusActive

Nameservers

Default TTL86400

Default TTL for new records in this zone

Description

SOA

SOA TTL*86400

TTL for the SOA record of the zone

SOA MName-----

Primary nameserver this zone

SOA RName

Mailbox of the zone's administrator

DNSSEC

DNSSEC Policy

▼

☒ Inline Signing

Use inline signing for DNSSEC

Parental Agents

RFC2317

RFC2317 Prefix

10.0.0.0/25

RFC2317 IPv4 prefix with a length of at least 25 bits

☒ RFC2317 Parent Managed

IPv4 reverse zone for delegating the RFC2317 PTR records is managed in NetBox DNS

Domain Registration

Registrar

▼

Registry Domain ID

Expiration Date

YYYY-MM-DD

Domain Status

▼

Registrant

▼

Administrative Contact

▼

Technical Contact

▼

0-127.0.0.10.example.com

Created 2025-06-12 16:57 · Updated 2025-06-12 16:57

+ Add Record

Bookmark

Subscribe

Clone

Edit

Delete

- Zone
- Managed Records3
- Contacts
- Journal
- Changelog

Zone

Name	0-127.0.0.10.example.com
View	internal
Status	Active
Nameservers	ns2.example.com ns3.example.com
Default TTL	86400

Tags

No tags assigned

Zone SOA

TTL	86400
MName	ns1.example.com
RName	hostmaster.example.com
Serial (auto-generated)	17497474482025-06-12 16:57:28
Refresh	43200
Retry	7200
Expire	2419200
Minimum TTL	3600

RFC2317

Prefix	10.0.0.0/25
Parent Managed	✓
Parent Zone	0.0.10.in-addr.arpa

Add a new Record

[? Help](#)

Create

Record

Name*

View

▼

Zone*

▼

Type*

▼

Value*

Status*

Active

▼

TTL

⬆
⬇
⬇
⬆

☐ Disable PTR

Disable PTR record creation

Description

Tenancy

Tenant group

▼

Tenant

▼

+

Cancel

Create

Create & Add Another

rfc1.zone1.example.com [A]

Created 2025-06-12 17:02 · Updated 2025-06-12 17:02

+ Add CNAME

Bookmark

Subscribe

Clone

Edit

Delete

- Record
- Contacts
- Journal
- Changelog

Record	
Name	rfc1
Zone	zone1.example.com
Type	A
Value	10.0.0.1
TTL	—
Disable PTR	✖
PTR Record	1.0-127.0.0.10.example.com [PTR]
Status	Active

Tags

No tags assigned

1.0-127.0.0.10.example.com [PTR]

+ Add CNAME

Created 2025-06-12 17:02 · Updated 2025-06-12 17:02

Record	
Name	1
Zone	0-127.0.0.10.example.com
Type	PTR
Value	rfc1.zone1.example.com.
TTL	—
Address Records	rfc1.zone1.example.com
Status	Active

CNAME			
NAME	ZONE	TYPE	VALUE
1	0.0.10.in-addr.arpa	CNAME	1.0-127.0.0.10.example.com.

Vielen Dank! Fragen?



<https://github.com/peteeckel/netbox-plugin-dns>



pete@netbox-dns.org

Immer noch nicht genügend Links?

FOSDEM 2025: NetBox DNS – Single Source of Truth for DNS

JPMens: Netbox, DNS, and a pinch of OctoDNS

JPMens: DNSSEC Policy and Key template support in NetBox DNS

sys4: DNSSEC-Schlüsselrotation mit NetBox DNS