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DNS Manager — Zones

PUQcloud Panel

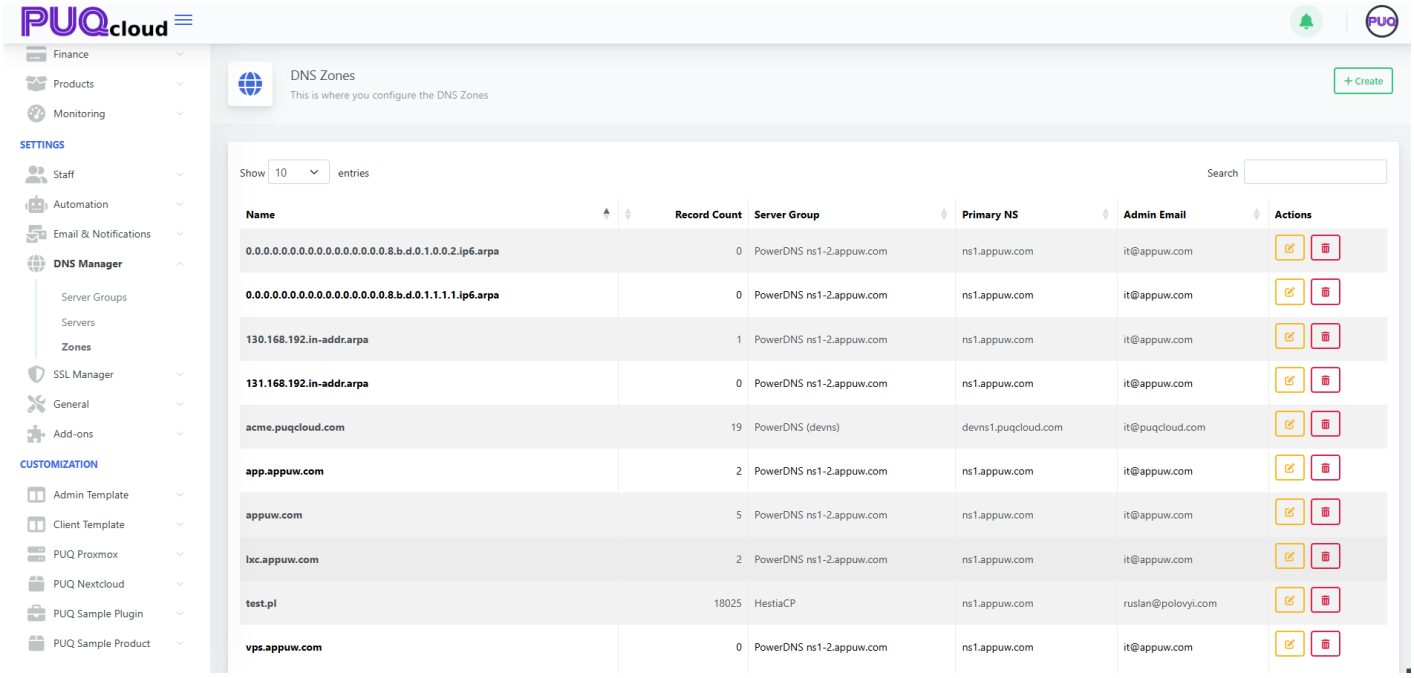
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1) What a Zone is and how it works

A **DNS Zone** is the set of DNS records for a domain (e.g., `example.com`) or a **reverse** domain (`in-addr.arpa`, `ip6.arpa`).
In PUQcloud, every zone is assigned to exactly one **Server Group**, and that group has one or more real DNS servers attached. As a result:

- When you create or change records in **Zones**, PUQcloud writes those changes to **all servers in the selected group**.
- Zone-level meta (e.g., **Primary NS**, **NS Domains**, **SOA fields**) is stored with the zone and deployed to the group's servers.

Path: Settings → DNS Manager → Zones



2) The Zones list & actions

The list shows all zones, how many records each has, which **Server Group** it belongs to, the **Primary NS** (SOA MNAME), and the **Admin Email** (SOA RNAME).

Per-row actions:

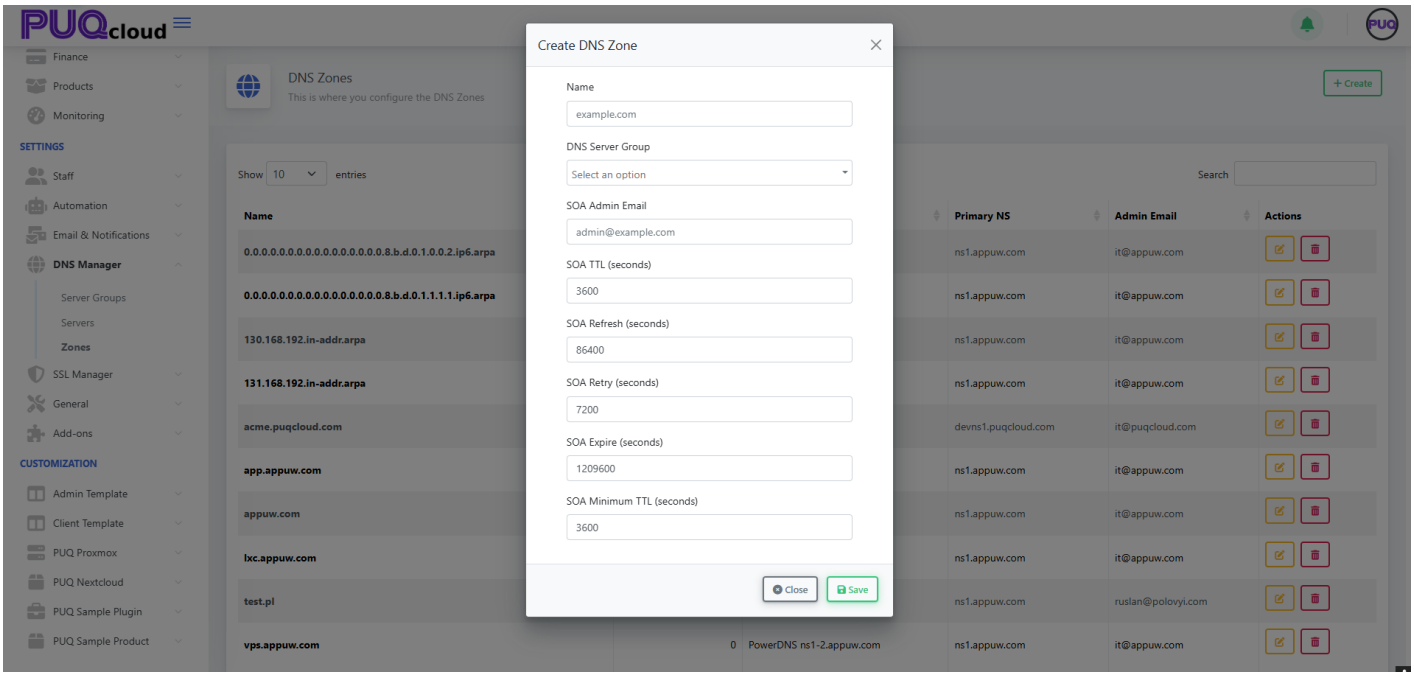
- **Edit** — open the zone editor
- **Delete** — remove the zone

Top-right: **+ Create** to add a new zone.

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3) Create a zone

Click **+ Create** and fill the form.



Field reference

Field	Description	Tip
Name	Zone name. For forward zones use `example.com`. For reverse: IPv4 uses `x.y.z.in-addr.arpa`, IPv6 uses the `…ip6.arpa` nibble format.	Use correct reverse notation.
DNS Server Group	Which group of servers will host this zone	Choose the group you prepared (e.g., *PowerDNS ns1-2* or *PowerDNS (devns)* for the ACME tech zone).
SOA Admin Email	Email in SOA (RNAME, with a dot instead of `@`)	Commonly `hostmaster@domain.tld`.
SOA TTL (seconds)	TTL for the SOA record	`3600` is a safe default.
SOA Refresh	Slave refresh interval	`86400` (24h) typical.

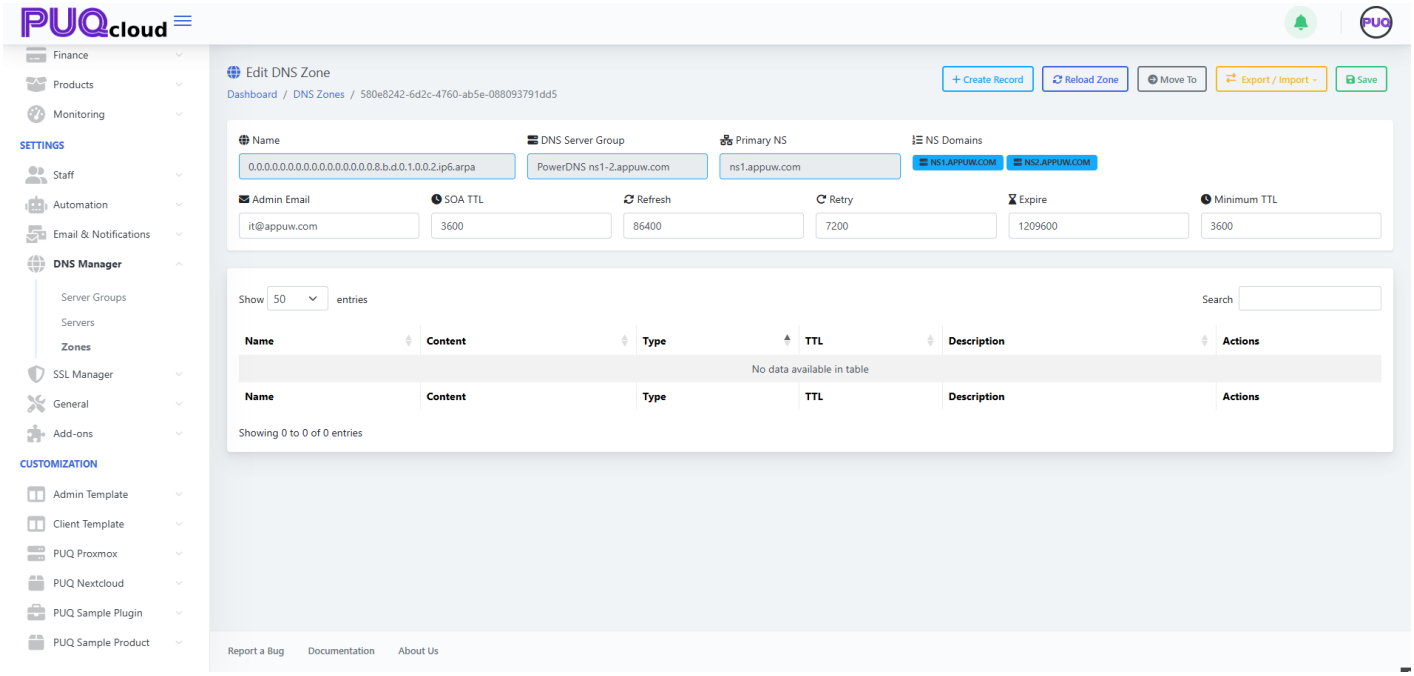
Field	Description	Tip
SOA Retry	Retry interval if refresh fails	`7200` (2h).
SOA Expire	When slaves consider zone expired	`1209600` (14 days).
SOA Minimum TTL	Negative caching (minimum TTL)	`3600`.

Click **Save** to create the zone.

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4) Edit a zone

Opening a zone leads to **Edit DNS Zone**.



What you see

- **Name** — zone name (read-only for some reverse templates).
- **DNS Server Group** — which group serves this zone.
- **Primary NS** — SOA MNAME (main NS).
- **NS Domains** — authoritative nameserver hostnames shown as badges. These should match your actual registrar delegation.
- **SOA** fields — TTL, Refresh, Retry, Expire, Minimum TTL.
- **Records table** — the list of all records in this zone.

Top actions

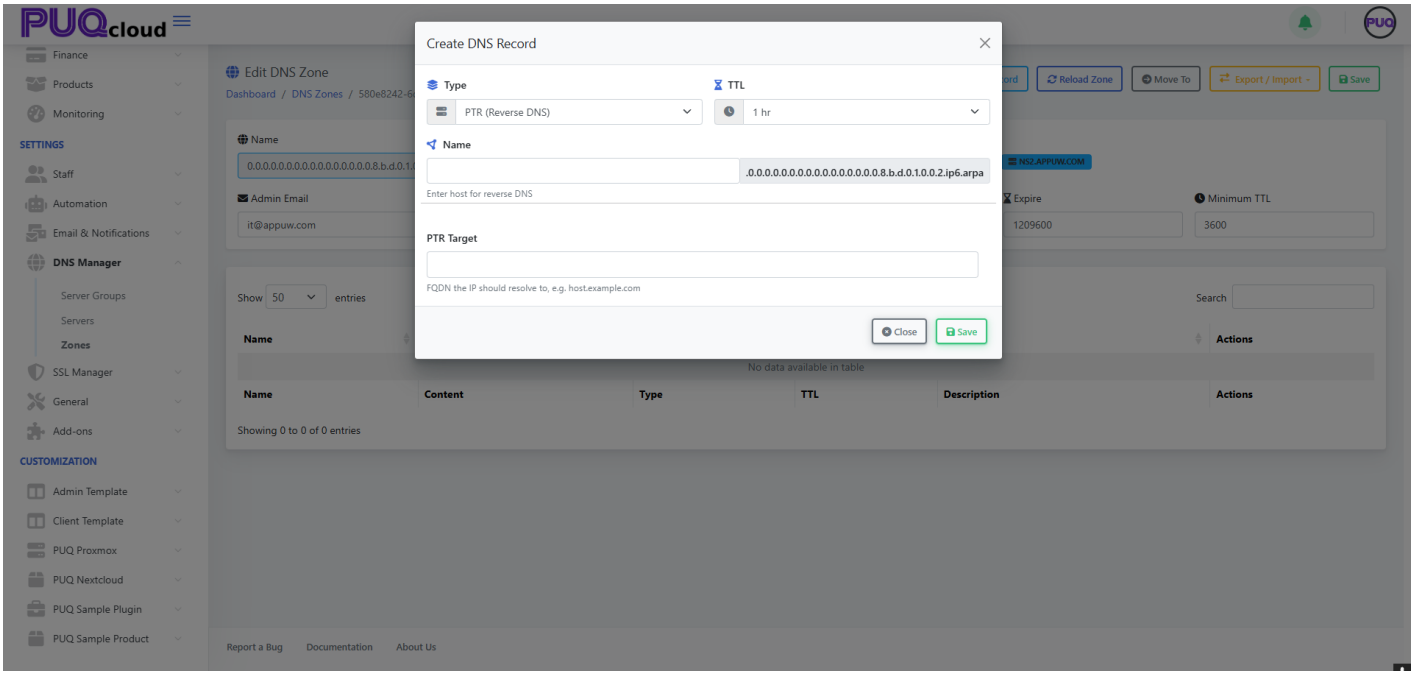
- **+ Create Record** — add A/AAAA/CNAME/TXT/MX/SRV/NS/PTR etc.
- **Reload Zone** — force-sync this zone across all servers in the group.
- **Move To** — move the zone to another **Server Group** (useful for migrations).
- **Export / Import** — export to/import from a standard zone format (PowerDNS/BIND-

compatible).
- **Save** — save changes to the zone **properties** (record edits have their own save flow in the record modal).

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5) Add records

Click **+ Create Record**.



Common record types

- **A / AAAA** — IPv4/IPv6 address mappings (e.g., `www → 203.0.113.10`).
- **CNAME** — alias (e.g., `www → @` or `example.com`).
- **TXT** — free-form text (SPF, DKIM, ACME challenges).
- **MX** — mail exchangers with priority.
- **SRV** — service records (VoIP, LDAP, etc.).
- **NS** — delegate sub-zones to other nameservers.
- **PTR** — reverse mapping (IP to hostname) for reverse zones.

Examples (forward)

- `@` → A → `203.0.113.10`
- `www` → CNAME → `@`

Example (mail)

- `@` → MX (10) → `mx1.example.com.`
- `@` → TXT → `v=spf1 include:spf.example.net -all`

Reverse example (PTR)

In `0.168.192.in-addr.arpa`:

- `130` → PTR → `host130.example.com.`

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6) ACME / SSL with a technical zone

For DNS-01 challenges, SSL Manager commonly uses a **technical zone** (e.g., `acme.yourdomain.tld`) hosted by a dedicated **Server Group** (e.g., *PowerDNS (devns)*). The workflow:

1. In the **target** zone (the zone for which you want a cert), create a **CNAME**: `_acme-challenge.yourdomain.tld → _acme-challenge.yourdomain.tld.acme.yourdomain.tld.`
2. During issuance, SSL Manager automatically creates/updates the **TXT** in the **tech zone** (via PowerDNS/Hestia modules).
3. The CA queries `_acme-challenge` on the target zone, **follows the CNAME** into the tech zone, and reads the TXT.
4. Once validated, the certificate becomes **ACTIVE** (see **SSL Certificates** guide).

> Ensure the tech group's **NS Domains** are really authoritative and are properly delegated at the registrar.

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7) Export / Import

- **Export** — download the zone in a PowerDNS/BIND-compatible format (great for backups and migrations).
- **Import** — upload a zone file to quickly populate records. After import, verify records and click **Reload Zone**.

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8) Best practices

- Use **TTL 300–600s** while actively changing/migrating; raise later for stability.
- Keep **≥2 NS** in the serving group (prefer distinct regions/ASNs).
- For **ACME**, keep a **separate tech zone** and **separate group**.
- Always **Export** before bulk edits.
- After changing a zone's **Server Group**, use **Move To** and then **Reload Zone**.
- Regularly verify delegation (`dig NS yourdomain.tld`) and key records resolution from multiple locations.

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9) Troubleshooting

Symptom	Likely cause	Fix
Public resolvers can’t see your changes	Registrar delegation wrong or **NS Domains** don’t match real NS	Correct delegation, align **NS Domains**, wait for TTL
Different answers on NS1 vs NS2	One node out of sync or offline	**Reload Zone**, check server health, review logs
ACME DNS-01 fails	Missing/wrong CNAME to tech zone; caching	Validate with `dig`, fix CNAME/TXT, wait for TTL
Zone import errors	Incompatible format or invalid entries	Fix offending lines, re-import

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