Step By Step Payload and DB Check:

1. Add A record:

```
{
 "hostname": "www.example.com",
 "type": "A",
 "value": ["192.168.1.1"],
 "ttl_seconds": 3600
}
```

{ "message": "Record added", "hostname": "www.example.com" }

```
dns_db=# select * from dns_records;
    hostname      | type |        value        |      timestamp_created      | ttl_seconds | id
------------------+------+---------------------+-----------------------------+-------------+-----
 www.example.com  | A    | "[\"192.168.1.1\"]" | 2025-05-04 21:47:48.474965  |        3600 | 195
(1 row)
```

2. Add AAAA Record

```
{
 "hostname": "ipv6.example.com",
 "type": "AAAA",
 "value": ["2001:0db8:85a3:0000:0000:8a2e:0370:7334"],
 "ttl_seconds": 3600
}
```

{ "message": "Record added", "hostname": "ipv6.example.com" }

```
dns_db=# select * from dns_records;
    hostname      | type |              value                 |      timestamp_created      | ttl_seconds | id
------------------+------+------------------------------------+-----------------------------+-------------+-----
 www.example.com  | A    | "[\"192.168.1.1\"]"                | 2025-05-04 21:47:48.474965  |        3600 | 195
 ipv6.example.com | AAAA | "[\"2001:db8:85a3::8a2e:370:7334\"]"| 2025-05-04 21:48:45.472514  |        3600 | 196
(2 rows)
```

3. Add CNAME Record:

```
{
 "hostname": "blog.example.com",
 "type": "CNAME",
 "value": "www.example.com",
 "ttl_seconds": 3600
}
```

{ "message": "Record added", "hostname": "blog.example.com" }

```
dns_db=# select * from dns_records;
     hostname      | type |                value                |     timestamp_created      | ttl_seconds | id
-------------------+------+-------------------------------------+----------------------------+-------------+-----
 www.example.com   | A    | "[\"192.168.1.1\"]"                 | 2025-05-04 21:47:48.474965 |        3600 | 195
 ipv6.example.com  | AAAA | "[\"2001:db8:85a3::8a2e:370:7334\"]" | 2025-05-04 21:48:45.472514 |        3600 | 196
 blog.example.com  | CNAME| "\"www.example.com\""               | 2025-05-04 21:49:32.004977 |        3600 | 197
(3 rows)
```

4. Add MX Record:
    {
     "hostname": "example.com",
     "type": "MX",
     "value": {
       "priority": 10,
       "host": "mail.example.com"
     },
     "ttl_seconds": 3600
    }

{ "message": "Record added", "hostname": "example.com" }

```
dns_db=# select * from dns_records;
     hostname      | type |                      value                      |     timestamp_created      | ttl_seconds | id
-------------------+------+-------------------------------------------------+----------------------------+-------------+-----
 www.example.com   | A    | "[\"192.168.1.1\"]"                             | 2025-05-04 21:47:48.474965 |        3600 | 195
 ipv6.example.com  | AAAA | "[\"2001:db8:85a3::8a2e:370:7334\"]"             | 2025-05-04 21:48:45.472514 |        3600 | 196
 blog.example.com  | CNAME| "\"www.example.com\""                           | 2025-05-04 21:49:32.004977 |        3600 | 197
 example.com       | MX   | "{\"priority\": 10, \"host\": \"mail.example.com\"}" | 2025-05-04 21:50:06.270781 |        3600 | 198
(4 rows)
```

5. Add TXT Record:
    {
     "hostname": "sample.example.com",
     "type": "TXT",
     "value": ["v=spf1 include:_spf.example.com ~all"],
     "ttl_seconds": 3600
    }

{ "message": "Record added", "hostname": "sample.example.com" }

```
dns_db=# select * from dns_records;
      hostname      | type  |                          value                         |       timestamp_created       | ttl_seconds | id
--------------------+-------+--------------------------------------------------------+-------------------------------+-------------+-----
 www.example.com    | A     | "[\"192.168.1.1\"]"                                    | 2025-05-04 21:47:48.474965    |        3600 | 195
 ipv6.example.com   | AAAA  | "[\"2001:db8:85a3::8a2e:370:7334\"]"                   | 2025-05-04 21:48:45.472514    |        3600 | 196
 blog.example.com   | CNAME | "\"www.example.com\""                                  | 2025-05-04 21:49:32.004977    |        3600 | 197
 example.com        | MX    | "{\"priority\": 10, \"host\": \"mail.example.com\"}"   | 2025-05-04 21:50:06.270781    |        3600 | 198
 sample.example.com | TXT   | "[\"v=spf1 include:_spf.example.com ~all\"]"           | 2025-05-04 21:51:32.420567    |        3600 | 199
(5 rows)
```

6. Add 2 more A records:
   {

   "hostname": "www.example.com",

   "type": "A",

   "value": ["192.168.1.2","1.1.1.1"],

   "ttl_seconds": 3600

   }
   { "message": "Record added", "hostname": "www.example.com" }

```
dns_db=# select * from dns_records;
      hostname      | type  |                          value                         |       timestamp_created       | ttl_seconds | id
--------------------+-------+--------------------------------------------------------+-------------------------------+-------------+-----
 www.example.com    | A     | "[\"192.168.1.1\"]"                                    | 2025-05-04 21:47:48.474965    |        3600 | 195
 ipv6.example.com   | AAAA  | "[\"2001:db8:85a3::8a2e:370:7334\"]"                   | 2025-05-04 21:48:45.472514    |        3600 | 196
 blog.example.com   | CNAME | "\"www.example.com\""                                  | 2025-05-04 21:49:32.004977    |        3600 | 197
 example.com        | MX    | "{\"priority\": 10, \"host\": \"mail.example.com\"}"   | 2025-05-04 21:50:06.270781    |        3600 | 198
 sample.example.com | TXT   | "[\"v=spf1 include:_spf.example.com ~all\"]"           | 2025-05-04 21:51:32.420567    |        3600 | 199
 www.example.com    | A     | "[\"192.168.1.2\", \"1.1.1.1\"]"                       | 2025-05-04 21:53:04.832266    |        3600 | 200
(6 rows)
```

7. List Records:
   example.com
   { "hostname": "example.com", "records": [{ "type": "MX", "value": { "priority": 10,
   "host": "mail.example.com" } }] }

   list : www.example.com:
   { "hostname": "www.example.com", "records": [{ "type": "A", "value": "192.168.1.1" },
   { "type": "A", "value": ["192.168.1.2", "1.1.1.1"] }] }

List: not.available

{ "detail": "No records found for hostname" }

8. Resolve IP:

yz.example.com
{ "detail": "Record not found or expired" }

```
dns_db=# select * from dns_records;
      hostname      | type  |                      value                      |     timestamp_created     | ttl_seconds | id
--------------------+-------+-------------------------------------------------+---------------------------+-------------+-----
 www.example.com    | A     | "[\"192.168.1.1\"]"                             | 2025-05-04 21:47:48.474965 |        3600 | 195
 ipv6.example.com   | AAAA  | "[\"2001:db8:85a3::8a2e:370:7334\"]"            | 2025-05-04 21:48:45.472514 |        3600 | 196
 blog.example.com   | CNAME | "\"www.example.com\""                           | 2025-05-04 21:49:32.004977 |        3600 | 197
 example.com        | MX    | "{\"priority\": 10, \"host\": \"mail.example.com\"}" | 2025-05-04 21:50:06.270781 |        3600 | 198
 sample.example.com | TXT   | "[\"v=spf1 include:_spf.example.com ~all\"]"    | 2025-05-04 21:51:32.420567 |        3600 | 199
 www.example.com    | A     | "[\"192.168.1.2\", \"1.1.1.1\"]"                | 2025-05-04 21:53:04.832266 |        3600 | 200
(6 rows)
```

blog.example.com:

{ "hostname": "blog.example.com", "resolvedIps": ["192.168.1.1", "192.168.1.2", "1.1.1.1"], "recordType": "CNAME", "pointsTo": "www.example.com" }

9. Delete record:

DELETE /api/dns/{hostname} Delete Dns Record

Parameters   Cancel

Name   Description

hostname * required
string
(path)   www.example.com

type * required
string   A   ⌄
(query)

value * required
string   1.1.1.1
(query)

x-api-key * required
string   supersecret
(header)

                    Execute   Clear

Responses

Curl

curl -X 'DELETE' \
  'http://localhost:8000/api/dns/www.example.com?type=A&value=1.1.1.1' \
  -H 'accept: application/json' \
  -H 'x-api-key: supersecret'

Request URL

http://localhost:8000/api/dns/www.example.com?type=A&value=1.1.1.1

Server response

Code   Details

200   Response body

            {
              "message": "Value 1.1.1.1 removed from record"
            }   Download

            Response headers

            content-length: 47
            content-type: application/json
            date: Sun,04 May 2025 21:59:31 GMT
            server: uvicorn

Responses

DB:

dns_db=# select * from dns_records;
     hostname | type | value | timestamp_created | ttl_seconds | id
-------------------+-------+---+----------------------------+-------------+-----
 www.example.com | A | "[\"192.168.1.1\"]" | 2025-05-04 21:47:48.474965 | 3600 | 195
 ipv6.example.com | AAAA | "[\"2001:db8:85a3::8a2e:370:7334\"]" | 2025-05-04 21:48:45.472514 | 3600 | 196
 blog.example.com | CNAME | "\"www.example.com\"" | 2025-05-04 21:49:32.004977 | 3600 | 197
 example.com | MX | "{\"priority\": 10, \"host\": \"mail.example.com\"}" | 2025-05-04 21:50:06.270781 | 3600 | 198
 sample.example.com| TXT | "[\"v=spf1 include:_spf.example.com ~all\"]" | 2025-05-04 21:51:32.420567 | 3600 | 199
 www.example.com | A | "[\"192.168.1.2\"]" | 2025-05-04 21:53:04.832266 | 3600 | 200
(6 rows)

Bulk Import:

contents of file:

[

 {

```json
        "hostname": "example.com",
        "type": "A",
        "value": ["192.168.1.1"],
        "ttl_seconds": 3600
    },
    {
        "hostname": "example2.com",
        "type": "CNAME",
        "value": "example.com",
        "ttl_seconds": 3600
    },
    {
        "hostname": "invalidhostname",
        "type": "A",
        "value": ["999.999.999.999"],
        "ttl_seconds": 3600
    },
    {
        "hostname": "example3.com",
        "type": "MX",
        "value": {
            "priority": 10,
            "host": "mail.example3.com"
        },
        "ttl_seconds": 3600
    },
    {
        "hostname": "example4.com",
        "type": "A",
        "value": ["192.168.1.2"],
        "ttl_seconds": 3600
    },
    {
        "action": "delete",
        "hostname": "example.com",
        "type": "A",
        "value": "192.168.1.1"
    },
    {
        "hostname": "example5.com",
        "type": "TXT",
        "value": ["v=spf1 include:_spf.example.com ~all"],
        "ttl_seconds": 3600
    },
```
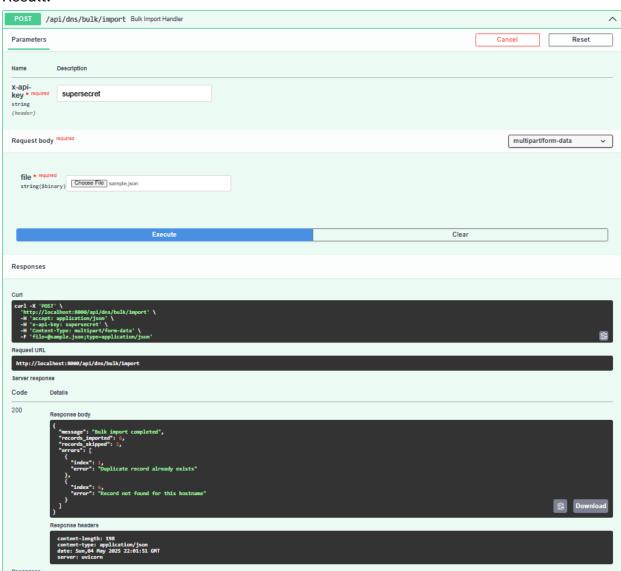
```
  {
    "hostname": "example6.com",
    "type": "A",
    "value": ["192.168.1.3"]
  }
]
```

Result:

POST /api/dns/bulk/import Bulk Import Handler   ⌃

Parameters   Cancel   Reset

Name   Description

x-api-
key * required   supersecret
string
(header)

Request body required   multipart/form-data ⌄

        file * required
        string($binary)   Choose File sample.json

                        Execute   Clear

Responses

Curl

```
curl -X 'POST' \
  'http://localhost:8000/api/dns/bulk/import' \
  -H 'accept: application/json' \
  -H 'x-api-key: supersecret' \
  -H 'Content-Type: multipart/form-data' \
  -F 'file=@sample.json;type=application/json'
```

Request URL

```
http://localhost:8000/api/dns/bulk/import
```

Server response

Code   Details

200   Response body
```
{
  "message": "Bulk import completed",
  "records_imported": 6,
  "records_skipped": 3,
  "errors": [
    {
      "index": 1,
      "error": "Duplicate record already exists"
    },
    {
      "index": 6,
      "error": "Record not found for this hostname"
    }
  ]
}
```
                                                          Download

          Response headers
```
content-length: 198
content-type: application/json
date: Sun,04 May 2025 22:01:51 GMT
server: uvicorn
```

Responses

DB:

```
----------------------+--------+----------------------------------------------------+---------------------------+--------+-----
www.example.com       | A      | "[\"192.168.1.1\"]"                                | 2025-05-04 21:47:48.474965 |   3600 | 195
ipv6.example.com      | AAAA   | "[\"2001:db8:85a3::8a2e:370:7334\"]"               | 2025-05-04 21:48:45.472514 |   3600 | 196
blog.example.com      | CNAME  | "\"www.example.com\""                              | 2025-05-04 21:49:32.004977 |   3600 | 197
example.com           | MX     | "{\"priority\": 10, \"host\": \"mail.example.com\"}" | 2025-05-04 21:50:06.270781 |   3600 | 198
sample.example.com    | TXT    | "[\"v=spf1 include:_spf.example.com ~all\"]"       | 2025-05-04 21:51:32.420567 |   3600 | 199
www.example.com       | A      | "[\"192.168.1.2\"]"                                | 2025-05-04 21:53:04.832266 |   3600 | 200
example2.com          | CNAME  | "\"example.com\""                                  | 2025-05-04 22:01:52.659873 |   3600 | 201
invalidhostname       | A      | "[\"999.999.999.999\"]"                            | 2025-05-04 22:01:52.711219 |   3600 | 202
example3.com          | MX     | "\"{'priority': 10, 'host': 'mail.example3.com'}\"" | 2025-05-04 22:01:52.771593 |   3600 | 203
example4.com          | A      | "[\"192.168.1.2\"]"                                | 2025-05-04 22:01:52.814935 |   3600 | 204
example5.com          | TXT    | "[\"v=spf1 include:_spf.example.com ~all\"]"       | 2025-05-04 22:01:52.880325 |   3600 | 205
example6.com          | A      | "[\"192.168.1.3\"]"                                | 2025-05-04 22:01:52.944252 |   3600 | 206
(12 rows)
```

Bulk Export:

[

```json
{
   "hostname": "www.example.com",
   "type": "A",
   "value": "[\"192.168.1.1\"]",
   "ttl_seconds": 3600,
   "timestamp_created": "2025-05-04T21:47:48.474965"
},
{
   "hostname": "ipv6.example.com",
   "type": "AAAA",
   "value": "[\"2001:db8:85a3::8a2e:370:7334\"]",
   "ttl_seconds": 3600,
   "timestamp_created": "2025-05-04T21:48:45.472514"
},
{
   "hostname": "blog.example.com",
   "type": "CNAME",
   "value": "\"www.example.com\"",
   "ttl_seconds": 3600,
   "timestamp_created": "2025-05-04T21:49:32.004977"
},
{
   "hostname": "example.com",
   "type": "MX",
   "value": "{\"priority\": 10, \"host\": \"mail.example.com\"}",
   "ttl_seconds": 3600,
   "timestamp_created": "2025-05-04T21:50:06.270781"
},
{
   "hostname": "sample.example.com",
   "type": "TXT",
```

```json
      "value": "[\"v=spf1 include:_spf.example.com ~all\"]",
      "ttl_seconds": 3600,
      "timestamp_created": "2025-05-04T21:51:32.420567"
    },
    {
      "hostname": "www.example.com",
      "type": "A",
      "value": "[\"192.168.1.2\"]",
      "ttl_seconds": 3600,
      "timestamp_created": "2025-05-04T21:53:04.832266"
    },
    {
      "hostname": "example2.com",
      "type": "CNAME",
      "value": "\"example.com\"",
      "ttl_seconds": 3600,
      "timestamp_created": "2025-05-04T22:01:52.659873"
    },
    {
      "hostname": "invalidhostname",
      "type": "A",
      "value": "[\"999.999.999.999\"]",
      "ttl_seconds": 3600,
      "timestamp_created": "2025-05-04T22:01:52.711219"
    },
    {
      "hostname": "example3.com",
      "type": "MX",
      "value": "\"{'priority': 10, 'host': 'mail.example3.com'}\"",
      "ttl_seconds": 3600,
      "timestamp_created": "2025-05-04T22:01:52.771593"
    },
    {
      "hostname": "example4.com",
      "type": "A",
      "value": "[\"192.168.1.2\"]",
      "ttl_seconds": 3600,
      "timestamp_created": "2025-05-04T22:01:52.814935"
    },
    {
      "hostname": "example5.com",
      "type": "TXT",
      "value": "[\"v=spf1 include:_spf.example.com ~all\"]",
      "ttl_seconds": 3600,
```

```
        "timestamp_created": "2025-05-04T22:01:52.880325"
    },
    {
        "hostname": "example6.com",
        "type": "A",
        "value": "[\"192.168.1.3\"]",
        "ttl_seconds": 3600,
        "timestamp_created": "2025-05-04T22:01:52.944252"
    }
]
```

Curl

```
curl -X 'GET' \
  'http://localhost:8000/api/dns/bulk/export' \
  -H 'accept: application/json' \
  -H 'x-api-key: supersecret'
```

Request URL

```
http://localhost:8000/api/dns/bulk/export
```

Server response

Code	Details
200	Response body

```
{
    "hostname": "example3.com",
    "type": "MX",
    "value": "\"{'priority': 10, 'host': 'mail.example3.com'}\"",
    "ttl_seconds": 3600,
    "timestamp_created": "2025-05-04T22:01:52.771593"
},
{
    "hostname": "example4.com",
    "type": "A",
    "value": "[\"192.168.1.2\"]",
    "ttl_seconds": 3600,
    "timestamp_created": "2025-05-04T22:01:52.814935"
},
{
    "hostname": "example5.com",
    "type": "TXT",
    "value": "[\"v=spf1 include:_spf.example.com ~all\"]",
    "ttl_seconds": 3600,
    "timestamp_created": "2025-05-04T22:01:52.880325"
},
{
    "hostname": "example6.com",
    "type": "A",
    "value": "[\"192.168.1.3\"]",
    "ttl_seconds": 3600,
    "timestamp_created": "2025-05-04T22:01:52.944252"
}
]
```

Download

Response headers

```
content-length: 1796
content-type: application/json
date: Sun,04 May 2025 22:04:04 GMT
server: uvicorn
```

Responses

Code	Description	Links